

# 2012 MIHA Regional Report

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

December 2014



# Acknowledgements

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## Editors

Christine Rinki, MPH, Heather Forquer, MPH, Melanie Dove, ScD, MPH, and Michael P. Curtis, PhD

## Contributors

Jennifer Troyan, MPH, Carina Saraiva, MPH, Kathryn Martin, PhD, Nannie Song, MPH

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, Monisha Shah, MPH, and Susan Egerter, PhD. Data collection was conducted by Quantum Market Research, Oakland, California.

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# Table of Contents

## Introduction

## Map of MIHA Regions

## Regional Snapshots

Central Coast Region  
Greater Sacramento Region  
Los Angeles County  
North/Mountain Region  
Orange County  
San Diego County  
San Francisco Bay Area  
San Joaquin Valley  
Southeastern California

## Regional Comparisons for Selected MIHA Indicators

Folic acid use before pregnancy	Postpartum birth control use
Obesity before pregnancy	Usual source of pre-pregnancy health care
Excessive weight gain during pregnancy	Initiated prenatal care in the 1st trimester
Food insecurity during pregnancy	Had a dental visit during pregnancy
Intimate partner violence during pregnancy	Needed but could not afford care postpartum
Prenatal depressive symptoms	Uninsured before pregnancy
Postpartum depressive symptoms	Medi-Cal during pregnancy
Job loss during pregnancy	Uninsured postpartum
Moved due to problems paying rent/mortgage	Infant on Medi-Cal
Binge drinking before pregnancy	Participated in WIC during pregnancy
Smoking during pregnancy	Food stamps during pregnancy
Back to sleep	Speaks non-English language at home
Exclusive breastfeeding	Income 0-100% of Federal Poverty Guideline
Mistimed or unwanted pregnancy	Income 0-200% of Federal Poverty Guideline

## Statewide Snapshots

By Maternal Age  
By Race/Ethnicity  
By Income  
By Prenatal Health Insurance  
By Education

## Appendices

Technical Definition of Indicators  
Weighting Methods in the MIHA Survey



# 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 2012 the statewide sample size was 6,810 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 county-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 methodology used in 2012 are in the appendix.



# MIHA Regions of California, 2012







# Regional Snapshots

*“Pregnancy is one of the best things that has happened to me. I had a rough pregnancy but things have gotten better. I have no regrets.”*

— MIHA 2012 Respondent





# MIHA Snapshot, Central Coast Region, 2012

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	♦	10.1	7.2 - 13.1	2,900	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	♦	16.2	12.8 - 19.6	4,700	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	♦	90.8	88.4 - 93.2	26,100	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	♦	9.8	7.1 - 12.6	2,800	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	✗	12.4	9.3 - 15.5	3,500	8.5	7.5 - 9.6	41,200
Asthma	♦	7.9	5.4 - 10.5	2,200	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✗	28.6	24.6 - 32.6	8,200	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	24.8	20.5 - 29.0	6,300	24.1	22.2 - 26.0	111,600
Obese before pregnancy	♦	21.1	16.9 - 25.2	5,300	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	17.1	13.0 - 21.1	3,600	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	♦	44.6	39.3 - 50.0	9,300	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	✗	24.3	20.3 - 28.3	7,000	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	♦	7.8	5.6 - 10.1	2,200	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	♦	17.1	13.8 - 20.5	4,900	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	✗	19.8	16.2 - 23.4	5,700	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	5.2	2.8 - 7.6	1,500	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	♦	6.9	4.6 - 9.1	1,900	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	20.4	16.6 - 24.3	5,800	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	15.4	11.9 - 19.0	4,400	14.3	12.8 - 15.8	69,500
Became separated or divorced	♦	6.9	4.4 - 9.4	2,000	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	♦	5.7	3.6 - 7.7	1,600	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	♦	9.4	6.9 - 11.9	2,700	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	♦	6.2	4.1 - 8.3	1,800	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	♦	4.1	2.3 - 5.9	1,200	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	♦	12.8	9.6 - 16.1	3,600	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	♦	20.2	16.5 - 23.9	5,700	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	♦	30.6	26.5 - 34.7	8,700	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	✓	8.6	6.2 - 11.0	2,500	12.9	11.3 - 14.4	63,500
Postpartum birth control use	♦	91.6	89.0 - 94.2	23,800	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	♦	78.6	74.8 - 82.4	22,200	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	✓	94.8	92.8 - 96.7	26,900	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	✓	67.9	63.9 - 71.9	19,300	62.0	59.9 - 64.2	298,800
Breastfeeding practices							
Any breastfeeding, 1 month after delivery	✓	87.4	84.4 - 90.4	24,400	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	✓	53.4	48.8 - 58.0	14,500	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	✓	71.4	66.9 - 75.9	15,300	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	✓	34.2	29.2 - 39.1	7,100	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, Central Coast Region, 2012

Maternal and Infant Health Assessment (MIHA) Survey

↑ 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 and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	♦	68.1	63.9 - 72.3	19,600	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	♦	88.9	86.0 - 91.8	25,300	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	♦	43.1	38.6 - 47.6	12,400	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	♦	90.5	87.9 - 93.1	25,900	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	↑	19.4	15.8 - 23.0	5,500	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	♦	58.4	54.0 - 62.9	16,400	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	♦	24.7	20.7 - 28.6	7,000	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	♦	22.6	18.8 - 26.4	6,400	24.5	22.7 - 26.3	120,700
Uninsured	↑	29.8	25.8 - 33.9	8,400	24.7	22.9 - 26.4	121,500
Private	♦	42.8	38.4 - 47.3	12,100	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	♦	53.8	49.3 - 58.3	15,400	49.8	48.2 - 51.5	246,200
Uninsured	♦	1.5	0.6 - 2.3	400	1.7	1.2 - 2.1	8,200
Private	↓	35.8	31.5 - 40.1	10,300	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	♦	30.8	26.6 - 35.0	8,700	34.6	32.8 - 36.5	169,700
Uninsured	↑	25.4	21.4 - 29.4	7,200	16.7	15.2 - 18.1	81,600
Private	↓	40.1	35.6 - 44.5	11,300	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	♦	53.2	48.6 - 57.7	15,000	49.2	47.4 - 51.0	237,400
Healthy Families	↑	9.5	6.7 - 12.3	2,700	5.1	4.2 - 6.1	24,800
Uninsured	♦	1.3	0.4 - 2.1	400	2.4	1.5 - 3.3	11,800
Private	↓	33.1	28.9 - 37.3	9,400	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	7.2	5.0 - 9.5	2,100	7.0	5.8 - 8.2	34,500
20-34	♦	75.9	72.1 - 79.7	21,900	74.0	72.0 - 76.1	366,900
35+	♦	16.8	13.5 - 20.2	4,800	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↑	24.6	20.9 - 28.4	7,100	18.2	16.4 - 19.9	89,700
Unmarried	♦	41.2	36.7 - 45.7	11,800	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	↑	61.8	57.5 - 66.1	17,700	50.1	48.2 - 52.0	242,700
Black	↓	1.1	0.9 - 1.3	300	5.8	5.2 - 6.5	28,300
White	♦	31.4	27.3 - 35.5	9,000	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	↓	5.2	3.2 - 7.2	1,500	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	♦	41.7	37.3 - 46.2	12,000	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	↑	36.2	31.9 - 40.5	10,300	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	♦	48.0	43.3 - 52.8	12,800	43.4	41.5 - 45.3	198,900
101-200%	♦	17.5	14.1 - 20.9	4,700	18.6	16.9 - 20.3	85,200
>200%	♦	34.4	30.0 - 38.9	9,200	38.0	36.2 - 39.8	174,200

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of Central Coast Region was 717. Percent (%), 95% confidence interval (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 and the region in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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	♦	7.0	4.6 - 9.4	2,000	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	♦	14.1	10.0 - 18.3	4,100	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	✓	95.2	93.4 - 97.1	27,800	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	✗	16.3	11.7 - 20.9	4,700	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	♦	8.5	5.3 - 11.8	2,400	8.5	7.5 - 9.6	41,200
Asthma	✗	11.4	7.6 - 15.2	3,300	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	♦	34.7	29.5 - 40.0	10,100	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	21.8	17.4 - 26.1	6,100	24.1	22.2 - 26.0	111,600
Obese before pregnancy	♦	17.7	13.9 - 21.5	5,000	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	15.8	11.0 - 20.5	3,800	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	♦	42.9	36.8 - 48.9	10,400	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	♦	14.7	11.1 - 18.3	4,300	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	♦	7.4	4.8 - 10.0	2,200	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	♦	14.0	10.0 - 18.0	4,100	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	♦	13.9	10.4 - 17.4	4,000	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	2.5	1.1 - 3.8	700	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	♦	9.6	6.6 - 12.7	2,800	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	19.0	14.9 - 23.1	5,500	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	14.0	10.3 - 17.8	4,000	14.3	12.8 - 15.8	69,500
Became separated or divorced	♦	7.3	4.5 - 10.1	2,100	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	♦	6.1	3.4 - 8.7	1,800	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	♦	14.1	10.7 - 17.4	4,100	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	♦	9.4	6.7 - 12.2	2,700	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	♦	6.5	4.3 - 8.8	1,900	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	♦	15.6	12.0 - 19.3	4,500	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	♦	21.8	17.5 - 26.2	6,300	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	♦	32.6	27.7 - 37.5	9,400	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	✓	9.0	5.9 - 12.1	2,600	12.9	11.3 - 14.4	63,500
Postpartum birth control use	♦	89.5	85.7 - 93.2	23,700	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	♦	77.5	72.7 - 82.2	22,100	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	♦	92.1	89.4 - 94.7	26,400	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	✓	68.9	63.9 - 73.9	19,800	62.0	59.9 - 64.2	298,800
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery	♦	83.4	79.6 - 87.2	23,500	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	✓	47.9	42.3 - 53.5	13,600	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	♦	67.2	61.4 - 72.9	14,900	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	♦	31.1	25.4 - 36.8	6,900	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, Greater Sacramento Region, 2012

Maternal and Infant Health Assessment (MIHA) Survey

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

		Greater Sacramento Region			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	♦	73.4	68.8 - 78.0	21,400	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	♦	85.9	82.0 - 89.7	24,700	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	♦	43.2	38.0 - 48.4	12,600	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	♦	89.4	86.4 - 92.5	26,100	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	♦	15.3	11.5 - 19.1	4,400	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	♦	51.3	46.8 - 55.8	14,800	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	♦	29.0	24.6 - 33.5	8,400	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	♦	29.0	24.3 - 33.8	8,400	24.5	22.7 - 26.3	120,700
Uninsured	↓	20.0	16.0 - 23.9	5,800	24.7	22.9 - 26.4	121,500
Private	♦	48.8	44.0 - 53.6	14,100	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	♦	47.5	42.7 - 52.4	13,800	49.8	48.2 - 51.5	246,200
Uninsured	♦	1.8	0.4 - 3.1	500	1.7	1.2 - 2.1	8,200
Private	♦	47.4	42.6 - 52.3	13,800	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	♦	35.3	30.7 - 39.9	10,300	34.6	32.8 - 36.5	169,700
Uninsured	♦	15.3	11.5 - 19.2	4,500	16.7	15.2 - 18.1	81,600
Private	♦	47.3	42.7 - 52.0	13,800	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	♦	50.9	46.0 - 55.8	14,600	49.2	47.4 - 51.0	237,400
Healthy Families	♦	4.3	2.3 - 6.3	1,200	5.1	4.2 - 6.1	24,800
Uninsured	♦	2.4	0.6 - 4.2	700	2.4	1.5 - 3.3	11,800
Private	♦	40.5	35.7 - 45.4	11,600	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	6.4	3.8 - 8.9	1,900	7.0	5.8 - 8.2	34,500
20-34	♦	77.2	72.3 - 82.2	22,600	74.0	72.0 - 76.1	366,900
35+	♦	16.4	11.9 - 20.9	4,800	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↓	10.3	7.4 - 13.2	3,000	18.2	16.4 - 19.9	89,700
Unmarried	♦	37.2	32.4 - 41.9	10,800	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	↓	28.7	24.1 - 33.3	8,300	50.1	48.2 - 52.0	242,700
Black	↑	8.6	7.2 - 9.9	2,500	5.8	5.2 - 6.5	28,300
White	↑	45.4	40.4 - 50.4	13,200	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	♦	16.4	11.5 - 21.4	4,800	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	↓	29.3	24.3 - 34.4	8,600	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	↓	23.3	18.6 - 28.0	6,700	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	♦	40.3	35.4 - 45.2	11,100	43.4	41.5 - 45.3	198,900
101-200%	♦	21.0	16.3 - 25.8	5,800	18.6	16.9 - 20.3	85,200
>200%	♦	38.7	34.0 - 43.4	10,700	38.0	36.2 - 39.8	174,200

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of Greater Sacramento Region was 572. Percent (%), 95% confidence interval (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 and the region in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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	♦	7.3	4.0 - 10.6	9,300	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	♦	18.0	13.1 - 22.9	23,300	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	♦	92.7	89.1 - 96.2	120,100	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	♦	9.7	5.9 - 13.5	12,400	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	✓	3.7	1.4 - 6.0	4,700	8.5	7.5 - 9.6	41,200
Asthma	♦	5.1	2.0 - 8.2	6,400	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	♦	32.7	26.6 - 38.8	42,400	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	24.1	18.4 - 29.8	28,600	24.1	22.2 - 26.0	111,600
Obese before pregnancy	♦	16.7	11.7 - 21.7	19,800	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	14.8	9.2 - 20.3	14,800	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	♦	36.4	28.7 - 44.1	36,400	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	♦	19.7	14.3 - 25.0	25,200	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	♦	9.4	5.0 - 13.9	12,200	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	♦	16.6	11.2 - 22.1	21,500	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	♦	15.8	10.7 - 21.0	20,500	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	4.0	1.6 - 6.4	5,000	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	♦	6.7	3.3 - 10.1	8,600	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	16.1	11.2 - 20.9	20,500	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	13.5	9.0 - 18.1	17,200	14.3	12.8 - 15.8	69,500
Became separated or divorced	♦	5.7	2.4 - 9.0	7,300	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	♦	4.8	1.5 - 8.2	6,200	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	♦	11.6	7.2 - 15.9	14,800	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	♦	8.7	4.7 - 12.7	11,100	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	♦	4.4	1.3 - 7.6	5,700	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	♦	10.7	7.0 - 14.4	13,500	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	♦	21.3	15.9 - 26.8	26,900	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	♦	33.6	26.9 - 40.2	43,400	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	♦	15.2	10.2 - 20.2	19,700	12.9	11.3 - 14.4	63,500
Postpartum birth control use	♦	87.3	81.8 - 92.8	99,700	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	✗	70.7	64.2 - 77.1	88,300	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	♦	91.1	86.7 - 95.4	113,500	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	✗	56.0	49.4 - 62.6	69,800	62.0	59.9 - 64.2	298,800
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery	♦	81.9	76.4 - 87.3	100,700	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	✗	35.0	28.4 - 41.5	42,700	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	♦	60.8	53.1 - 68.4	62,200	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	✗	21.4	15.3 - 27.4	22,000	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, Los Angeles County, 2012

Maternal and Infant Health Assessment (MIHA) Survey

↑ 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 and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	♦	71.3	65.3 - 77.4	92,500	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	♦	87.5	82.9 - 92.0	112,000	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	♦	40.1	33.5 - 46.8	52,000	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	♦	89.1	85.0 - 93.2	113,600	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	♦	15.3	10.1 - 20.5	19,300	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	↑	63.6	59.3 - 67.8	80,400	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	♦	25.9	20.2 - 31.7	33,300	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	♦	26.2	20.3 - 32.2	33,700	24.5	22.7 - 26.3	120,700
Uninsured	♦	26.1	20.5 - 31.7	33,500	24.7	22.9 - 26.4	121,500
Private	♦	45.6	40.3 - 50.9	58,600	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	↑	53.9	48.8 - 58.9	69,500	49.8	48.2 - 51.5	246,200
Uninsured		*			1.7	1.2 - 2.1	8,200
Private	♦	41.2	36.3 - 46.2	53,200	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	↑	39.3	33.5 - 45.2	49,900	34.6	32.8 - 36.5	169,700
Uninsured	♦	15.4	10.7 - 20.1	19,500	16.7	15.2 - 18.1	81,600
Private	♦	42.9	37.9 - 47.9	54,400	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	♦	51.3	45.8 - 56.7	64,100	49.2	47.4 - 51.0	237,400
Healthy Families	♦	4.9	1.8 - 8.0	6,100	5.1	4.2 - 6.1	24,800
Uninsured	♦	3.6	0.4 - 6.8	4,500	2.4	1.5 - 3.3	11,800
Private	♦	39.9	34.9 - 44.9	49,900	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	7.0	3.1 - 10.9	9,000	7.0	5.8 - 8.2	34,500
20-34	♦	71.9	65.8 - 78.1	93,200	74.0	72.0 - 76.1	366,900
35+	♦	21.1	15.8 - 26.4	27,300	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↑	22.7	17.1 - 28.4	29,400	18.2	16.4 - 19.9	89,700
Unmarried	↑	48.0	42.2 - 53.9	62,200	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	↑	58.9	53.3 - 64.5	75,000	50.1	48.2 - 52.0	242,700
Black	↑	7.8	5.4 - 10.2	9,900	5.8	5.2 - 6.5	28,300
White	↓	18.0	13.1 - 22.9	22,900	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	♦	15.3	10.4 - 20.2	19,400	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	↑	45.9	39.3 - 52.5	59,500	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	♦	33.2	27.0 - 39.4	42,500	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	↑	50.0	44.3 - 55.8	58,200	43.4	41.5 - 45.3	198,900
101-200%	♦	17.4	12.3 - 22.6	20,200	18.6	16.9 - 20.3	85,200
>200%	↓	32.5	27.2 - 37.9	37,800	38.0	36.2 - 39.8	174,200

\* Data are not presented because fewer than 10 women reported. † In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of Los Angeles County was 436. Percent (%), 95% confidence interval (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 and the county in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

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# MIHA Snapshot, North/Mountain Region, 2012

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	♦	6.5	2.9 - 10.2	800	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	♦	14.7	9.6 - 19.8	1,900	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	✓	96.1	93.7 - 98.6	12,600	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	♦	10.0	5.8 - 14.3	1,300	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	✗	14.1	8.9 - 19.3	1,800	8.5	7.5 - 9.6	41,200
Asthma	✗	14.9	9.4 - 20.5	1,900	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✗	26.7	20.3 - 33.2	3,500	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	27.5	20.6 - 34.3	3,500	24.1	22.2 - 26.0	111,600
Obese before pregnancy	♦	21.1	14.8 - 27.4	2,700	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	14.2	8.5 - 20.0	1,500	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	✗	51.6	43.8 - 59.5	5,600	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	♦	19.4	13.4 - 25.4	2,500	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	♦	10.7	6.3 - 15.1	1,400	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	♦	15.1	10.0 - 20.3	2,000	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	♦	16.7	11.1 - 22.2	2,200	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	5.2	1.9 - 8.5	700	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	♦	11.4	6.3 - 16.5	1,500	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	15.6	10.2 - 20.9	2,000	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	19.2	13.1 - 25.3	2,500	14.3	12.8 - 15.8	69,500
Became separated or divorced	♦	6.9	3.5 - 10.3	900	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	♦	3.8	1.1 - 6.6	500	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	✗	29.3	22.3 - 36.2	3,800	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	✗	24.4	17.9 - 30.9	3,200	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	✗	16.5	10.8 - 22.2	2,200	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	✗	20.1	13.9 - 26.2	2,600	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	♦	24.9	18.6 - 31.2	3,300	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	♦	30.7	23.8 - 37.6	4,000	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	♦	14.9	9.8 - 20.1	1,900	12.9	11.3 - 14.4	63,500
Postpartum birth control use	♦	91.6	87.3 - 96.0	11,200	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	♦	71.1	64.5 - 77.8	9,200	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	♦	92.1	88.1 - 96.1	11,900	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	✓	73.9	67.3 - 80.5	9,500	62.0	59.9 - 64.2	298,800
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery	♦	84.7	79.2 - 90.3	11,000	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	✓	58.7	51.3 - 66.0	7,500	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	✓	73.5	66.1 - 80.9	7,700	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	✓	38.1	30.0 - 46.2	3,900	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, North/Mountain Region, 2012

Maternal and Infant Health Assessment (MIHA) Survey

↑ 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 and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	♦	67.3	60.3 - 74.3	8,800	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	♦	84.2	78.8 - 89.7	10,900	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	♦	44.7	37.4 - 52.1	5,800	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	♦	87.4	82.5 - 92.3	11,400	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	♦	13.1	8.1 - 18.2	1,700	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	↑	63.8	56.6 - 71.0	8,200	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	♦	25.3	18.9 - 31.7	3,300	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	♦	29.1	22.5 - 35.7	3,800	24.5	22.7 - 26.3	120,700
Uninsured	♦	28.5	21.7 - 35.3	3,700	24.7	22.9 - 26.4	121,500
Private	↓	35.7	28.6 - 42.9	4,700	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	↑	62.3	55.0 - 69.5	8,100	49.8	48.2 - 51.5	246,200
Uninsured	*				1.7	1.2 - 2.1	8,200
Private	↓	27.6	20.8 - 34.3	3,600	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	↑	43.7	36.4 - 51.0	5,700	34.6	32.8 - 36.5	169,700
Uninsured	♦	15.9	10.4 - 21.4	2,100	16.7	15.2 - 18.1	81,600
Private	↓	35.8	28.7 - 43.0	4,700	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	↑	61.2	53.9 - 68.5	7,900	49.2	47.4 - 51.0	237,400
Healthy Families	♦	4.6	1.6 - 7.6	600	5.1	4.2 - 6.1	24,800
Uninsured	*				2.4	1.5 - 3.3	11,800
Private	↓	29.0	22.2 - 35.9	3,800	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	7.8	4.4 - 11.2	1,000	7.0	5.8 - 8.2	34,500
20-34	♦	79.9	74.1 - 85.8	10,400	74.0	72.0 - 76.1	366,900
35+	↓	12.3	7.2 - 17.4	1,600	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↓	11.8	6.8 - 16.7	1,500	18.2	16.4 - 19.9	89,700
Unmarried	♦	40.8	33.6 - 48.1	5,300	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	↓	22.5	16.5 - 28.5	2,900	50.1	48.2 - 52.0	242,700
Black	↓	1.2	0.8 - 1.6	200	5.8	5.2 - 6.5	28,300
White	↑	69.0	62.6 - 75.5	8,900	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	↓	3.7	0.7 - 6.6	500	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	↓	12.8	7.6 - 17.9	1,700	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	↓	10.8	5.9 - 15.6	1,400	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	♦	45.1	37.6 - 52.7	5,700	43.4	41.5 - 45.3	198,900
101-200%	↑	24.9	18.3 - 31.5	3,100	18.6	16.9 - 20.3	85,200
>200%	↓	30.0	22.9 - 37.0	3,800	38.0	36.2 - 39.8	174,200

\* Data are not presented because fewer than 10 women reported. † In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of North/Mountain Region was 243. Percent (%), 95% confidence interval (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 and the region in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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	♦	8.9	4.4 - 13.5	3,300	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	♦	17.1	10.6 - 23.7	6,400	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	♦	90.8	87.4 - 94.2	34,100	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	♦	10.6	5.8 - 15.3	3,900	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	♦	10.5	4.7 - 16.4	3,900	8.5	7.5 - 9.6	41,200
Asthma	♦	8.6	4.3 - 12.9	3,100	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	♦	39.2	31.4 - 47.0	14,600	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	20.8	14.2 - 27.4	7,400	24.1	22.2 - 26.0	111,600
Obese before pregnancy	✓	12.7	8.3 - 17.1	4,500	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	20.0	12.2 - 27.7	6,100	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	♦	43.7	35.0 - 52.4	13,300	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	♦	20.6	15.7 - 25.6	7,700	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	♦	9.4	5.5 - 13.3	3,500	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	♦	13.9	8.9 - 18.9	5,200	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	♦	18.2	12.2 - 24.2	6,800	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	2.6	0.3 - 4.8	900	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	♦	5.6	2.4 - 8.7	2,000	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	21.6	15.2 - 28.1	7,900	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	15.4	10.7 - 20.1	5,700	14.3	12.8 - 15.8	69,500
Became separated or divorced	♦	9.2	4.9 - 13.5	3,400	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	♦	7.7	3.6 - 11.8	2,900	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	♦	7.7	4.0 - 11.4	2,900	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	✓	3.7	1.4 - 6.0	1,400	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	♦	3.2	1.1 - 5.4	1,200	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	♦	12.3	6.7 - 17.9	4,600	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	♦	18.6	11.6 - 25.5	6,900	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	♦	28.3	21.9 - 34.8	10,600	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	♦	11.3	7.4 - 15.1	4,200	12.9	11.3 - 14.4	63,500
Postpartum birth control use	♦	89.5	84.7 - 94.3	28,300	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	♦	80.3	74.6 - 85.9	29,300	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	♦	95.5	92.7 - 98.3	34,200	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	♦	60.5	53.0 - 68.1	21,700	62.0	59.9 - 64.2	298,800
Breastfeeding practices							
Any breastfeeding, 1 month after delivery	✓	91.2	87.7 - 94.7	32,300	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	♦	39.2	31.3 - 47.1	13,800	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	✓	76.8	68.5 - 85.1	20,500	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	♦	31.5	22.7 - 40.2	8,300	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, Orange County, 2012

Maternal and Infant Health Assessment (MIHA) Survey

↑ 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 and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	↑	78.4	73.2 - 83.5	29,400	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	♦	89.9	85.2 - 94.6	33,500	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	♦	43.4	35.8 - 51.0	16,200	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	♦	90.1	86.2 - 94.1	33,800	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	♦	16.6	11.4 - 21.7	6,000	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	↓	46.3	41.3 - 51.2	17,000	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	↓	14.7	10.6 - 18.8	5,500	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	↓	18.0	13.2 - 22.8	6,700	24.5	22.7 - 26.3	120,700
Uninsured	♦	23.7	18.9 - 28.6	8,900	24.7	22.9 - 26.4	121,500
Private	↑	56.9	51.8 - 62.0	21,300	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	↓	41.6	36.6 - 46.6	15,600	49.8	48.2 - 51.5	246,200
Uninsured	*				1.7	1.2 - 2.1	8,200
Private	↑	55.2	50.3 - 60.2	20,700	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	↓	27.9	22.2 - 33.5	10,300	34.6	32.8 - 36.5	169,700
Uninsured	♦	15.1	11.0 - 19.1	5,600	16.7	15.2 - 18.1	81,600
Private	↑	55.4	49.7 - 61.2	20,600	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	♦	47.4	41.3 - 53.5	17,400	49.2	47.4 - 51.0	237,400
Healthy Families	♦	3.6	1.5 - 5.7	1,300	5.1	4.2 - 6.1	24,800
Uninsured	↓	0.7	0.0 - 1.7	300	2.4	1.5 - 3.3	11,800
Private	♦	46.5	40.2 - 52.8	17,000	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	5.5	2.5 - 8.5	2,100	7.0	5.8 - 8.2	34,500
20-34	♦	72.1	63.8 - 80.5	27,100	74.0	72.0 - 76.1	366,900
35+	♦	22.4	14.0 - 30.7	8,400	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	♦	14.2	9.8 - 18.6	5,300	18.2	16.4 - 19.9	89,700
Unmarried	♦	35.4	28.4 - 42.4	13,300	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	♦	47.8	40.9 - 54.6	17,600	50.1	48.2 - 52.0	242,700
Black	↓	1.3	0.9 - 1.6	500	5.8	5.2 - 6.5	28,300
White	♦	30.4	22.4 - 38.4	11,200	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	↑	20.5	14.3 - 26.7	7,600	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	↑	46.8	39.3 - 54.2	17,500	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	♦	36.1	29.5 - 42.7	13,300	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	♦	37.7	31.9 - 43.5	13,400	43.4	41.5 - 45.3	198,900
101-200%	♦	15.1	10.0 - 20.2	5,400	18.6	16.9 - 20.3	85,200
>200%	↑	47.2	40.7 - 53.8	16,800	38.0	36.2 - 39.8	174,200

\* Data are not presented because fewer than 10 women reported. † In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of Orange County was 387. Percent (%), 95% confidence interval (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 and the county in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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	♦	10.5	6.5 - 14.4	4,500	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	♦	14.7	9.9 - 19.5	6,400	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	♦	94.8	91.8 - 97.8	41,100	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	♦	9.8	5.5 - 14.1	4,200	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	♦	9.0	4.6 - 13.3	3,800	8.5	7.5 - 9.6	41,200
Asthma	♦	8.3	4.2 - 12.3	3,500	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	♦	37.6	30.7 - 44.5	16,300	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	26.9	20.4 - 33.5	11,000	24.1	22.2 - 26.0	111,600
Obese before pregnancy	♦	15.5	10.6 - 20.4	6,400	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	19.2	13.0 - 25.4	6,700	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	♦	48.5	40.3 - 56.7	16,800	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	♦	15.1	10.9 - 19.4	6,600	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	♦	7.4	4.0 - 10.9	3,200	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	♦	15.0	10.2 - 19.8	6,500	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	♦	14.2	9.2 - 19.3	6,200	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	4.4	1.7 - 7.0	1,900	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	♦	6.5	3.3 - 9.6	2,800	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	15.4	10.4 - 20.5	6,600	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	13.6	8.8 - 18.5	5,800	14.3	12.8 - 15.8	69,500
Became separated or divorced	♦	7.3	3.9 - 10.7	3,100	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	♦	3.7	1.7 - 5.6	1,600	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	♦	14.9	10.1 - 19.7	6,500	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	♦	9.7	5.7 - 13.7	4,200	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	♦	6.1	3.0 - 9.1	2,600	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	✗	21.0	14.9 - 27.1	9,100	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	✗	27.0	20.7 - 33.3	11,700	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	♦	31.4	25.1 - 37.8	13,600	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	♦	10.5	6.3 - 14.7	4,500	12.9	11.3 - 14.4	63,500
Postpartum birth control use	♦	88.2	83.1 - 93.2	33,900	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	✓	82.3	77.1 - 87.6	34,800	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	♦	95.3	92.7 - 98.0	40,900	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	♦	67.1	60.5 - 73.7	28,800	62.0	59.9 - 64.2	298,800
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery	♦	87.4	83.0 - 91.9	37,000	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	♦	46.1	38.7 - 53.5	19,100	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	♦	70.9	63.5 - 78.3	22,300	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	♦	30.0	21.9 - 38.0	9,200	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, San Diego County, 2012

Maternal and Infant Health Assessment (MIHA) Survey

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

		San Diego County			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	♦	74.7	69.2 - 80.3	32,600	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	↑	92.2	89.0 - 95.3	39,600	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	↑	51.9	44.9 - 59.0	22,600	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	♦	86.7	82.0 - 91.5	37,200	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	♦	11.2	7.6 - 14.8	4,700	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	↓	44.4	40.4 - 48.4	18,900	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	↓	18.6	14.6 - 22.7	8,100	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	↓	16.1	12.1 - 20.1	7,000	24.5	22.7 - 26.3	120,700
Uninsured	♦	21.7	17.0 - 26.3	9,400	24.7	22.9 - 26.4	121,500
Private	↑	52.8	47.3 - 58.2	22,900	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	↓	36.2	31.7 - 40.7	15,800	49.8	48.2 - 51.5	246,200
Uninsured	*				1.7	1.2 - 2.1	8,200
Private	↑	50.4	45.0 - 55.7	21,900	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	↓	20.8	16.2 - 25.4	9,100	34.6	32.8 - 36.5	169,700
Uninsured	♦	16.9	13.3 - 20.5	7,400	16.7	15.2 - 18.1	81,600
Private	↑	52.6	47.3 - 57.9	22,900	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	↓	34.9	29.9 - 39.8	14,900	49.2	47.4 - 51.0	237,400
Healthy Families	♦	5.4	2.5 - 8.3	2,300	5.1	4.2 - 6.1	24,800
Uninsured	♦	2.3	0.7 - 4.0	1,000	2.4	1.5 - 3.3	11,800
Private	↑	48.6	43.0 - 54.2	20,800	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	5.6	2.8 - 8.4	2,500	7.0	5.8 - 8.2	34,500
20-34	♦	75.3	68.9 - 81.8	32,800	74.0	72.0 - 76.1	366,900
35+	♦	19.0	12.9 - 25.1	8,300	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↓	12.1	8.2 - 16.0	5,200	18.2	16.4 - 19.9	89,700
Unmarried	↓	32.6	26.6 - 38.6	14,000	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	♦	44.4	37.8 - 51.0	18,600	50.1	48.2 - 52.0	242,700
Black	♦	5.2	3.9 - 6.5	2,200	5.8	5.2 - 6.5	28,300
White	↑	37.1	30.1 - 44.2	15,500	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	♦	12.9	7.7 - 18.0	5,400	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	♦	34.7	27.9 - 41.4	15,100	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	♦	28.8	22.3 - 35.3	12,300	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	↓	34.1	28.5 - 39.7	13,900	43.4	41.5 - 45.3	198,900
101-200%	♦	19.8	14.2 - 25.4	8,100	18.6	16.9 - 20.3	85,200
>200%	↑	46.1	39.9 - 52.2	18,700	38.0	36.2 - 39.8	174,200

\* Data are not presented because fewer than 10 women reported. † In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of San Diego County was 416. Percent (%), 95% confidence interval (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 and the county in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

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# MIHA Snapshot, San Francisco Bay Area, 2012

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	✓	6.9	5.3 - 8.5	5,900	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	✓	12.6	10.4 - 14.8	10,900	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	♦	92.3	90.4 - 94.1	79,500	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	✗	13.7	11.5 - 15.9	11,700	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	♦	10.1	8.2 - 12.0	8,600	8.5	7.5 - 9.6	41,200
Asthma	♦	8.8	7.0 - 10.5	7,400	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✓	38.3	35.1 - 41.6	33,100	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	22.4	19.6 - 25.1	18,400	24.1	22.2 - 26.0	111,600
Obese before pregnancy	✓	15.5	13.2 - 17.7	12,700	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	16.7	13.9 - 19.6	11,700	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	♦	40.1	36.4 - 43.7	28,100	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	✓	14.3	12.1 - 16.5	12,300	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	♦	7.2	5.5 - 8.9	6,200	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	✓	13.1	10.8 - 15.3	11,300	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	♦	14.1	11.6 - 16.5	12,100	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	3.1	2.0 - 4.1	2,600	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	✓	5.8	4.3 - 7.3	4,900	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	15.8	13.4 - 18.2	13,400	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	13.8	11.4 - 16.1	11,700	14.3	12.8 - 15.8	69,500
Became separated or divorced	✓	6.2	4.8 - 7.6	5,200	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	♦	5.1	3.6 - 6.7	4,400	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	✓	8.3	6.8 - 9.9	7,200	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	✓	6.1	4.7 - 7.5	5,200	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	♦	4.5	3.3 - 5.7	3,900	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	♦	13.9	11.6 - 16.1	11,900	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	✗	23.8	21.1 - 26.5	20,400	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	✓	25.3	22.4 - 28.1	21,800	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	♦	10.7	8.7 - 12.6	9,200	12.9	11.3 - 14.4	63,500
Postpartum birth control use	✓	92.2	90.3 - 94.1	69,400	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	✓	81.7	79.2 - 84.3	68,900	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	✓	94.6	93.1 - 96.0	79,800	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	✓	70.9	67.9 - 74.0	59,900	62.0	59.9 - 64.2	298,800
<b>Breastfeeding practices</b>							
Any breastfeeding, 1 month after delivery	✓	88.8	86.8 - 90.7	74,300	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	✓	48.2	44.8 - 51.7	39,300	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	✓	75.6	72.5 - 78.7	49,600	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	✓	33.4	29.7 - 37.0	21,300	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, San Francisco Bay Area, 2012

Maternal and Infant Health Assessment (MIHA) Survey

↑ 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 and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	↑	77.0	74.3 - 79.7	66,400	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	♦	90.0	88.1 - 91.8	76,200	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	↑	52.2	48.9 - 55.5	45,100	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	↑	92.1	90.3 - 93.8	79,500	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	↓	12.0	10.0 - 14.0	10,100	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	↓	36.7	34.4 - 38.9	30,900	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	↓	15.0	13.0 - 16.9	12,900	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	↓	17.6	15.5 - 19.7	15,100	24.5	22.7 - 26.3	120,700
Uninsured	↓	17.0	14.9 - 19.0	14,600	24.7	22.9 - 26.4	121,500
Private	↑	60.4	57.7 - 63.1	51,900	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	↓	34.8	32.5 - 37.2	30,000	49.8	48.2 - 51.5	246,200
Uninsured	♦	1.4	0.7 - 2.0	1,200	1.7	1.2 - 2.1	8,200
Private	↑	59.2	56.5 - 61.9	51,000	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	↓	24.1	21.8 - 26.3	20,600	34.6	32.8 - 36.5	169,700
Uninsured	↓	12.8	10.9 - 14.6	11,000	16.7	15.2 - 18.1	81,600
Private	↑	59.5	56.8 - 62.2	51,000	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	↓	34.3	31.7 - 36.8	28,900	49.2	47.4 - 51.0	237,400
Healthy Families	♦	4.5	3.2 - 5.9	3,800	5.1	4.2 - 6.1	24,800
Uninsured	♦	2.4	1.5 - 3.2	2,000	2.4	1.5 - 3.3	11,800
Private	↑	56.1	53.3 - 58.9	47,300	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	↓	4.0	2.9 - 5.1	3,500	7.0	5.8 - 8.2	34,500
20-34	↓	70.1	67.0 - 73.2	60,600	74.0	72.0 - 76.1	366,900
35+	↑	25.9	22.9 - 28.9	22,400	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↓	11.8	10.0 - 13.6	10,100	18.2	16.4 - 19.9	89,700
Unmarried	↓	32.9	30.3 - 35.5	28,300	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	↓	32.3	29.5 - 35.0	26,300	50.1	48.2 - 52.0	242,700
Black	♦	6.5	5.7 - 7.2	5,300	5.8	5.2 - 6.5	28,300
White	♦	31.7	28.7 - 34.8	25,800	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	↑	29.1	25.8 - 32.4	23,700	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	↑	47.4	44.1 - 50.7	40,900	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	↑	35.8	32.5 - 39.0	29,800	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	↓	27.4	25.1 - 29.7	22,100	43.4	41.5 - 45.3	198,900
101-200%	↓	15.1	12.8 - 17.4	12,200	18.6	16.9 - 20.3	85,200
>200%	↑	57.5	54.7 - 60.2	46,400	38.0	36.2 - 39.8	174,200

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of San Francisco Bay Area was 1,758. Percent (%), 95% confidence interval (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 and the region in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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	✗	11.1	9.0 - 13.2	7,000	8.8	7.6 - 9.9	42,900
Prior delivery by c-section	♦	17.0	14.5 - 19.5	10,900	16.1	14.5 - 17.7	79,600
<b>Health Status</b>							
In good to excellent health before pregnancy	✗	90.1	88.3 - 92.0	57,900	92.2	91.1 - 93.4	456,300
Chronic conditions before or during pregnancy							
Diabetes or gestational diabetes	♦	13.0	10.7 - 15.2	8,200	11.3	10.0 - 12.7	55,400
Hypertension, preeclampsia or eclampsia	♦	9.3	7.4 - 11.3	5,800	8.5	7.5 - 9.6	41,200
Asthma	✗	10.1	8.2 - 12.1	6,300	8.0	6.9 - 9.1	38,700
<b>Nutrition and Weight</b>							
Daily folic acid use, month before pregnancy	✗	29.6	26.6 - 32.5	18,900	34.0	31.9 - 36.1	168,100
Overweight before pregnancy	♦	24.3	21.3 - 27.3	14,600	24.1	22.2 - 26.0	111,600
Obese before pregnancy	✗	27.6	24.5 - 30.7	16,500	18.3	16.6 - 19.9	84,600
Inadequate weight gain during pregnancy	♦	17.7	14.4 - 20.9	8,200	16.5	14.7 - 18.4	63,800
Excessive weight gain during pregnancy	✗	47.3	43.5 - 51.2	22,100	42.5	40.0 - 45.1	164,200
Food insecurity during pregnancy	✗	23.6	20.9 - 26.4	15,100	18.6	16.9 - 20.3	91,600
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>							
Physical or psychological IPV during pregnancy	✗	11.3	9.3 - 13.3	7,200	8.8	7.5 - 10.2	43,400
Prenatal depressive symptoms	✗	23.2	20.4 - 26.0	14,900	16.4	14.7 - 18.1	81,200
Postpartum depressive symptoms	✗	19.5	16.8 - 22.1	12,400	16.0	14.3 - 17.6	78,800
<b>Hardships and Support during Pregnancy</b>							
Homeless or did not have a regular place to sleep	♦	3.9	2.7 - 5.1	2,500	3.7	3.0 - 4.5	18,100
Moved due to problems paying rent or mortgage	✗	10.8	8.8 - 12.8	6,800	7.5	6.4 - 8.6	36,600
Woman or partner lost job	♦	17.9	15.4 - 20.4	11,200	17.3	15.7 - 18.9	84,200
Woman or partner had pay or hours cut back	♦	15.9	13.6 - 18.1	9,900	14.3	12.8 - 15.8	69,500
Became separated or divorced	✗	12.6	10.3 - 14.9	8,000	7.9	6.8 - 9.0	38,600
Had no practical or emotional support	✗	8.4	6.5 - 10.2	5,400	5.5	4.4 - 6.5	26,900
<b>Substance Use</b>							
Any smoking, 3 months before pregnancy	♦	12.3	10.1 - 14.6	7,900	11.9	10.6 - 13.3	58,700
Any smoking, 1st or 3rd trimester	♦	8.7	6.9 - 10.4	5,500	8.3	7.1 - 9.6	41,000
Any smoking, postpartum	♦	6.6	5.1 - 8.2	4,200	5.7	4.7 - 6.6	27,800
Any binge drinking, 3 months before pregnancy	♦	15.2	12.8 - 17.5	9,700	13.9	12.5 - 15.3	68,000
Any alcohol use, 1st or 3rd trimester	✓	17.1	14.6 - 19.6	11,000	20.9	19.1 - 22.6	102,000
<b>Pregnancy Intention and Family Planning</b>							
Mistimed or unwanted pregnancy	♦	34.1	31.0 - 37.2	21,800	30.9	28.8 - 33.0	152,500
Unsure of pregnancy intentions	♦	14.3	12.1 - 16.6	9,200	12.9	11.3 - 14.4	63,500
Postpartum birth control use	♦	90.9	88.8 - 93.0	53,100	89.8	88.1 - 91.5	395,800
<b>Infant Sleep and Breastfeeding</b>							
Placed infant on back to sleep	✗	71.6	68.6 - 74.7	45,000	76.1	74.1 - 78.1	366,400
Intended to breastfeed, before birth	✗	86.9	84.6 - 89.2	54,800	92.2	90.9 - 93.5	444,100
Intended to breastfeed exclusively, before birth	✗	53.2	49.8 - 56.5	33,500	62.0	59.9 - 64.2	298,800
Breastfeeding practices							
Any breastfeeding, 1 month after delivery	✗	71.1	67.9 - 74.3	43,800	82.7	81.0 - 84.4	393,200
Exclusive breastfeeding, 1 month after delivery	✗	36.8	33.6 - 40.0	22,200	41.9	39.7 - 44.1	196,500
Any breastfeeding, 3 months after delivery	✗	52.8	49.0 - 56.6	25,400	64.9	62.4 - 67.5	245,000
Exclusive breastfeeding, 3 months after delivery	✗	22.1	19.1 - 25.1	10,400	26.5	24.3 - 28.7	98,600



# MIHA Snapshot, San Joaquin Valley, 2012

Maternal and Infant Health Assessment (MIHA) Survey

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

		San Joaquin Valley			California		
		%	95% CI	Population Estimate	%	95% CI	Population Estimate
<b>Health Care Utilization and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	♦	69.7	66.6 - 72.7	44,700	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	♦	87.2	85.0 - 89.4	55,100	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	↓	32.7	29.7 - 35.7	20,900	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	↓	84.1	81.5 - 86.6	53,700	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	♦	15.9	13.5 - 18.4	10,000	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	↑	71.8	69.4 - 74.1	45,400	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	↑	40.2	37.0 - 43.4	25,600	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	↑	37.0	33.8 - 40.1	23,700	24.5	22.7 - 26.3	120,700
Uninsured	♦	27.4	24.4 - 30.5	17,600	24.7	22.9 - 26.4	121,500
Private	↓	33.3	30.4 - 36.1	21,300	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	↑	66.7	63.9 - 69.4	42,700	49.8	48.2 - 51.5	246,200
Uninsured	♦	1.0	0.4 - 1.6	600	1.7	1.2 - 2.1	8,200
Private	↓	29.4	26.8 - 32.1	18,900	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	↑	48.5	45.4 - 51.7	30,800	34.6	32.8 - 36.5	169,700
Uninsured	♦	18.6	15.9 - 21.2	11,800	16.7	15.2 - 18.1	81,600
Private	↓	30.4	27.6 - 33.1	19,300	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	↑	64.4	61.5 - 67.3	40,700	49.2	47.4 - 51.0	237,400
Healthy Families	♦	5.8	4.1 - 7.5	3,700	5.1	4.2 - 6.1	24,800
Uninsured	♦	2.1	1.2 - 2.9	1,300	2.4	1.5 - 3.3	11,800
Private	↓	26.0	23.5 - 28.6	16,400	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	↑	10.5	8.4 - 12.6	6,800	7.0	5.8 - 8.2	34,500
20-34	↑	77.4	74.6 - 80.3	49,700	74.0	72.0 - 76.1	366,900
35+	↓	12.0	9.9 - 14.2	7,700	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↑	22.1	19.4 - 24.8	14,100	18.2	16.4 - 19.9	89,700
Unmarried	↑	51.1	47.9 - 54.4	32,600	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	↑	60.8	57.9 - 63.7	38,700	50.1	48.2 - 52.0	242,700
Black	↓	4.7	3.9 - 5.6	3,000	5.8	5.2 - 6.5	28,300
White	↓	25.5	23.0 - 28.0	16,200	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	↓	8.1	6.2 - 10.1	5,200	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	↓	32.3	29.1 - 35.5	20,700	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	♦	29.0	25.9 - 32.0	18,400	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	↑	56.3	53.0 - 59.5	33,900	43.4	41.5 - 45.3	198,900
101-200%	↑	21.7	18.8 - 24.7	13,100	18.6	16.9 - 20.3	85,200
>200%	↓	22.0	19.6 - 24.5	13,300	38.0	36.2 - 39.8	174,200

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of San Joaquin Valley was 1,442. Percent (%), 95% confidence interval (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 and the region in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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	✗	11.4	8.5 - 14.4	7,100	8.8	7.6 - 9.9	42,900	
Prior delivery by c-section	♦	17.3	13.9 - 20.7	10,900	16.1	14.5 - 17.7	79,600	
<b>Health Status</b>								
In good to excellent health before pregnancy	♦	91.0	88.5 - 93.6	57,200	92.2	91.1 - 93.4	456,300	
Chronic conditions before or during pregnancy								
Diabetes or gestational diabetes	♦	10.1	7.4 - 12.8	6,200	11.3	10.0 - 12.7	55,400	
Hypertension, preeclampsia or eclampsia	✗	11.0	8.1 - 13.9	6,700	8.5	7.5 - 9.6	41,200	
Asthma	♦	7.4	5.1 - 9.7	4,600	8.0	6.9 - 9.1	38,700	
<b>Nutrition and Weight</b>								
Daily folic acid use, month before pregnancy	♦	33.4	29.1 - 37.7	21,000	34.0	31.9 - 36.1	168,100	
Overweight before pregnancy	♦	26.4	22.4 - 30.3	15,600	24.1	22.2 - 26.0	111,600	
Obese before pregnancy	♦	19.6	16.0 - 23.3	11,700	18.3	16.6 - 19.9	84,600	
Inadequate weight gain during pregnancy	♦	15.5	11.9 - 19.1	7,500	16.5	14.7 - 18.4	63,800	
Excessive weight gain during pregnancy	♦	46.1	41.1 - 51.2	22,200	42.5	40.0 - 45.1	164,200	
Food insecurity during pregnancy	♦	17.4	14.1 - 20.7	10,900	18.6	16.9 - 20.3	91,600	
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>								
Physical or psychological IPV during pregnancy	♦	8.4	6.1 - 10.8	5,300	8.8	7.5 - 10.2	43,400	
Prenatal depressive symptoms	♦	17.3	14.1 - 20.4	10,900	16.4	14.7 - 18.1	81,200	
Postpartum depressive symptoms	♦	14.2	11.2 - 17.2	8,900	16.0	14.3 - 17.6	78,800	
<b>Hardships and Support during Pregnancy</b>								
Homeless or did not have a regular place to sleep	♦	3.8	2.1 - 5.5	2,300	3.7	3.0 - 4.5	18,100	
Moved due to problems paying rent or mortgage	♦	8.6	6.2 - 11.0	5,300	7.5	6.4 - 8.6	36,600	
Woman or partner lost job	♦	18.4	15.0 - 21.7	11,300	17.3	15.7 - 18.9	84,200	
Woman or partner had pay or hours cut back	♦	13.6	10.7 - 16.5	8,400	14.3	12.8 - 15.8	69,500	
Became separated or divorced	✗	10.6	7.9 - 13.3	6,500	7.9	6.8 - 9.0	38,600	
Had no practical or emotional support	♦	4.0	2.3 - 5.8	2,500	5.5	4.4 - 6.5	26,900	
<b>Substance Use</b>								
Any smoking, 3 months before pregnancy	♦	14.3	11.3 - 17.3	8,900	11.9	10.6 - 13.3	58,700	
Any smoking, 1st or 3rd trimester	♦	9.2	6.8 - 11.7	5,800	8.3	7.1 - 9.6	41,000	
Any smoking, postpartum	✗	8.0	5.7 - 10.3	5,000	5.7	4.7 - 6.6	27,800	
Any binge drinking, 3 months before pregnancy	♦	13.7	10.7 - 16.6	8,500	13.9	12.5 - 15.3	68,000	
Any alcohol use, 1st or 3rd trimester	✓	15.8	12.6 - 18.9	9,800	20.9	19.1 - 22.6	102,000	
<b>Pregnancy Intention and Family Planning</b>								
Mistimed or unwanted pregnancy	♦	30.7	26.7 - 34.6	19,200	30.9	28.8 - 33.0	152,500	
Unsure of pregnancy intentions	♦	15.5	12.3 - 18.7	9,700	12.9	11.3 - 14.4	63,500	
Postpartum birth control use	♦	90.8	88.1 - 93.4	52,700	89.8	88.1 - 91.5	395,800	
<b>Infant Sleep and Breastfeeding</b>								
Placed infant on back to sleep	♦	76.5	72.7 - 80.2	46,700	76.1	74.1 - 78.1	366,400	
Intended to breastfeed, before birth	♦	91.5	89.0 - 94.0	55,800	92.2	90.9 - 93.5	444,100	
Intended to breastfeed exclusively, before birth	♦	60.1	55.7 - 64.5	36,700	62.0	59.9 - 64.2	298,800	
<b>Breastfeeding practices</b>								
Any breastfeeding, 1 month after delivery	✗	76.3	72.4 - 80.2	46,200	82.7	81.0 - 84.4	393,200	
Exclusive breastfeeding, 1 month after delivery	♦	40.0	35.5 - 44.5	23,800	41.9	39.7 - 44.1	196,500	
Any breastfeeding, 3 months after delivery	✗	55.3	50.3 - 60.3	27,200	64.9	62.4 - 67.5	245,000	
Exclusive breastfeeding, 3 months after delivery	✗	19.7	15.6 - 23.7	9,400	26.5	24.3 - 28.7	98,600	



# MIHA Snapshot, Southeastern California, 2012

Maternal and Infant Health Assessment (MIHA) Survey

↑ 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 and Public Program Participation</b>							
Had a usual source of pre-pregnancy care	↓	65.6	61.5 - 69.8	41,300	72.0	70.1 - 74.0	356,600
Initiated prenatal care in 1st trimester †	↓	84.7	81.4 - 87.9	52,700	88.0	86.6 - 89.4	430,000
Had a dental visit during pregnancy	↓	33.0	28.9 - 37.1	20,700	42.1	40.0 - 44.3	208,300
Had a postpartum medical visit	↓	84.6	81.4 - 87.8	53,300	88.3	87.0 - 89.7	434,500
Mom or infant needed but couldn't afford care postpartum	♦	16.1	12.9 - 19.3	9,800	14.8	13.2 - 16.4	71,500
Participated in WIC during pregnancy	↑	60.8	58.1 - 63.5	37,900	55.6	54.1 - 57.1	269,800
Received CalFresh (food stamps) during pregnancy	♦	28.2	24.5 - 31.9	17,800	24.7	23.0 - 26.5	121,900
<b>Health Insurance Coverage</b>							
Pre-pregnancy insurance							
Medi-Cal	♦	25.3	21.7 - 29.0	15,900	24.5	22.7 - 26.3	120,700
Uninsured	↑	31.1	27.2 - 35.0	19,600	24.7	22.9 - 26.4	121,500
Private	↓	38.9	35.4 - 42.4	24,500	47.0	45.2 - 48.7	231,300
Prenatal insurance							
Medi-Cal	↑	55.9	52.5 - 59.4	35,200	49.8	48.2 - 51.5	246,200
Uninsured	↑	3.7	2.1 - 5.3	2,300	1.7	1.2 - 2.1	8,200
Private	↓	34.1	30.7 - 37.4	21,400	43.5	41.8 - 45.1	214,800
Maternal postpartum insurance							
Medi-Cal	↑	38.6	34.7 - 42.5	24,300	34.6	32.8 - 36.5	169,700
Uninsured	↑	20.2	16.8 - 23.7	12,700	16.7	15.2 - 18.1	81,600
Private	↓	36.5	33.0 - 40.1	23,000	45.1	43.4 - 46.8	221,000
Infant health insurance							
Medi-Cal	↑	56.0	52.4 - 59.6	34,000	49.2	47.4 - 51.0	237,400
Healthy Families	♦	5.0	3.1 - 7.0	3,100	5.1	4.2 - 6.1	24,800
Uninsured	♦	2.5	1.3 - 3.8	1,500	2.4	1.5 - 3.3	11,800
Private	↓	32.9	29.5 - 36.4	20,000	40.7	39.0 - 42.4	196,200
<b>Maternal Demographics</b>							
Age							
15-19	♦	9.2	6.5 - 11.9	5,800	7.0	5.8 - 8.2	34,500
20-34	♦	77.1	73.2 - 80.9	48,600	74.0	72.0 - 76.1	366,900
35+	↓	13.8	10.7 - 16.9	8,700	19.0	17.2 - 20.8	94,100
Did not complete high school (or GED)	↑	22.0	18.2 - 25.7	13,800	18.2	16.4 - 19.9	89,700
Unmarried	♦	43.3	39.1 - 47.4	27,100	41.7	39.7 - 43.6	205,400
Race/Ethnicity							
Hispanic	↑	60.0	56.2 - 63.8	37,600	50.1	48.2 - 52.0	242,700
Black	↑	7.2	6.1 - 8.3	4,500	5.8	5.2 - 6.5	28,300
White	♦	25.9	22.3 - 29.4	16,200	28.7	26.9 - 30.5	139,000
Asian/Pacific Islander	↓	6.3	3.7 - 8.8	3,900	14.8	13.2 - 16.5	71,900
Nativity and Language							
Born outside the U.S.	↓	29.9	25.7 - 34.0	18,800	39.3	37.2 - 41.5	194,800
Speaks non-English language at home	↓	24.6	20.8 - 28.5	15,500	30.8	28.8 - 32.8	150,100
Income as a percent of the Federal Poverty Guideline							
0-100%	↑	47.9	43.9 - 51.9	27,800	43.4	41.5 - 45.3	198,900
101-200%	♦	21.8	18.1 - 25.6	12,700	18.6	16.9 - 20.3	85,200
>200%	↓	30.3	26.8 - 33.7	17,600	38.0	36.2 - 39.8	174,200

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

Notes: MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. The sample size of Southeastern California was 839. Percent (%), 95% confidence interval (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 and the region in 2012. 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. See the Technical Document for information on weighting, comparability to prior years and technical 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

*“I was not able to see a lactation consultant until my baby was five days old. That greatly affected my breastfeeding success.”*

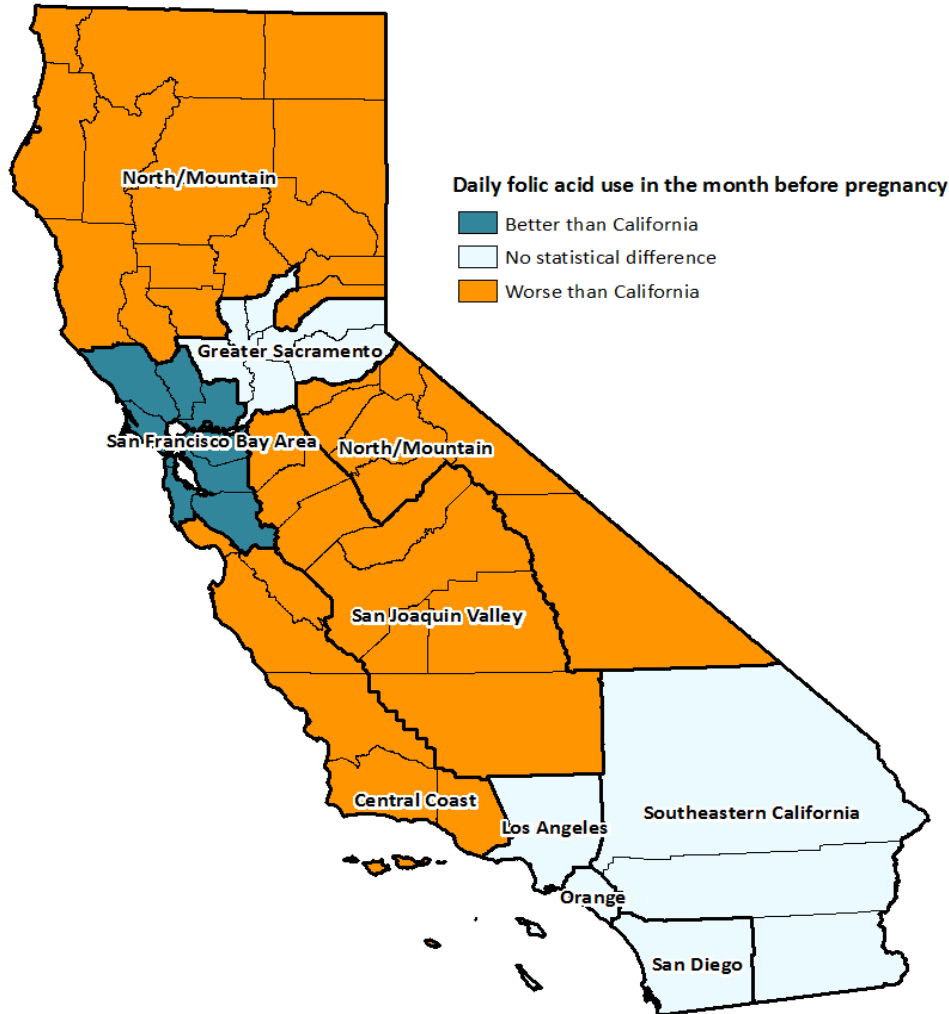
— MIHA 2012 Respondent





# MIHA Regional Comparison 2012

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	34.0	31.9 - 36.1	168,100
Central Coast Region	✖ 28.6	24.6 - 32.6	8,200
Greater Sacramento Region	◇ 34.7	29.5 - 40.0	10,100
Los Angeles County	◇ 32.7	26.6 - 38.8	42,400
North/Mountain Region	✖ 26.7	20.3 - 33.2	3,500
Orange County	◇ 39.2	31.4 - 47.0	14,600
San Diego County	◇ 37.6	30.7 - 44.5	16,300
San Francisco Bay Area	✔ 38.3	35.1 - 41.6	33,100
San Joaquin Valley	✖ 29.6	26.6 - 32.5	18,900
Southeastern California	◇ 33.4	29.1 - 37.7	21,000

- ✔ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

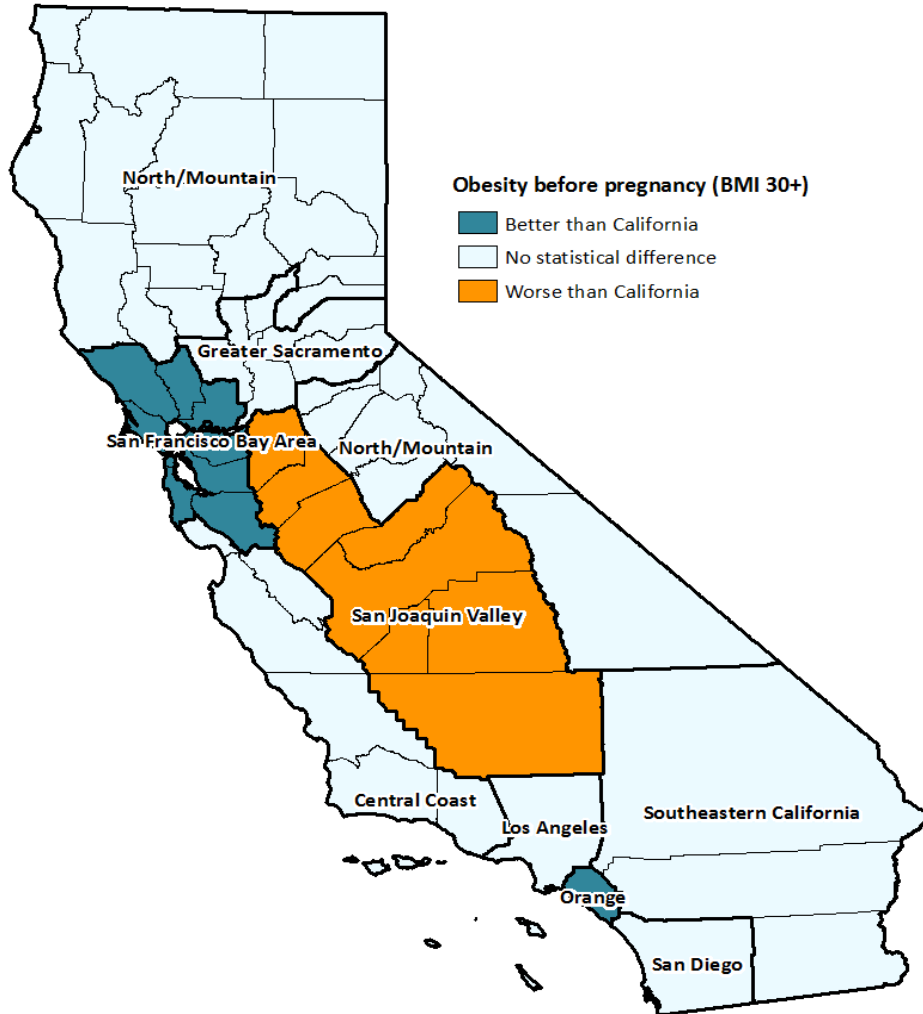
### Counties in Each Region

Monterey, San Benito, San Louis 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 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Obesity before pregnancy (BMI 30+)

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		18.3	16.6	- 19.9	84,600
Central Coast Region	♦	21.1	16.9	- 25.2	5,300
Greater Sacramento Region	♦	17.7	13.9	- 21.5	5,000
Los Angeles County	♦	16.7	11.7	- 21.7	19,800
North/Mountain Region	♦	21.1	14.8	- 27.4	2,700
Orange County	✓	12.7	8.3	- 17.1	4,500
San Diego County	♦	15.5	10.6	- 20.4	6,400
San Francisco Bay Area	✓	15.5	13.2	- 17.7	12,700
San Joaquin Valley	✗	27.6	24.5	- 30.7	16,500
Southeastern California	♦	19.6	16.0	- 23.3	11,700

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

### Counties in Each Region

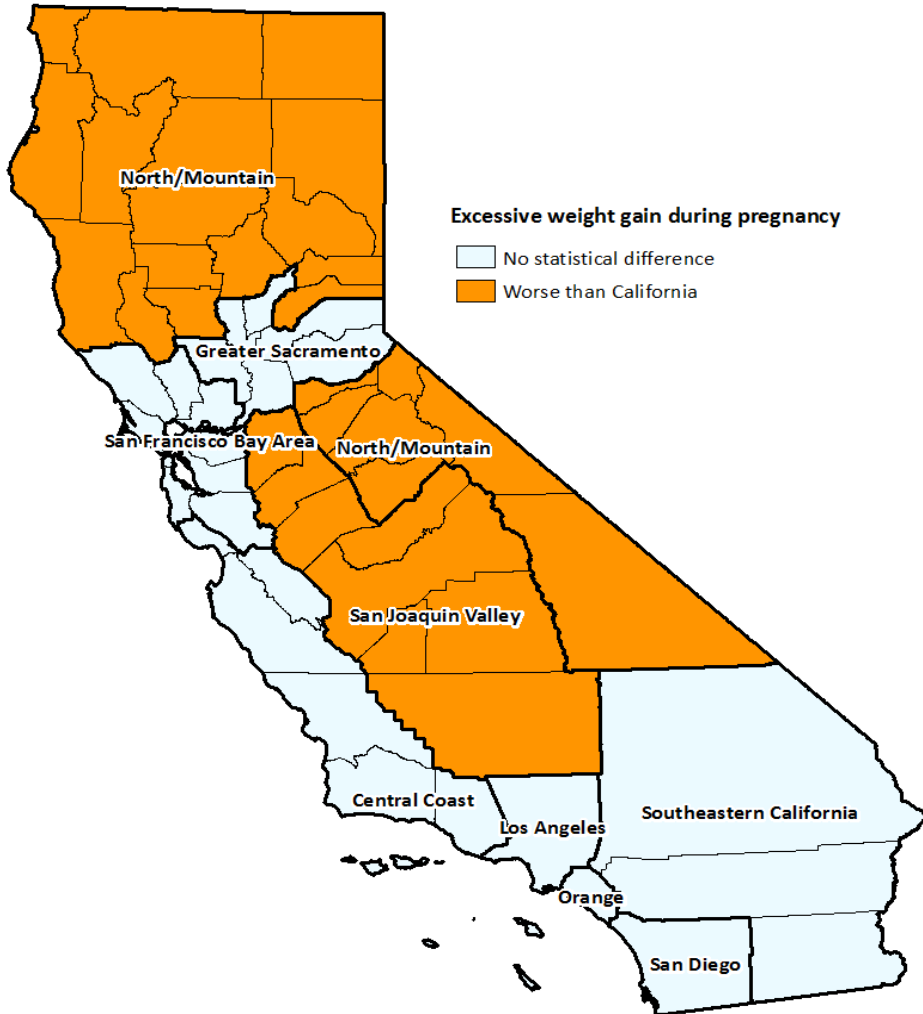
Monterey, San Benito, San Louis Obispo, Santa Barbara, Santa Cruz, Ventura  
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Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma  
Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare  
Imperial, Riverside, San Bernardino





# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Excessive weight gain during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	42.5	40.0 - 45.1	164,200
Central Coast Region	♦ 44.6	39.3 - 50.0	9,300
Greater Sacramento Region	♦ 42.9	36.8 - 48.9	10,400
Los Angeles County	♦ 36.4	28.7 - 44.1	36,400
North/Mountain Region	* 51.6	43.8 - 59.5	5,600
Orange County	♦ 43.7	35.0 - 52.4	13,300
San Diego County	♦ 48.5	40.3 - 56.7	16,800
San Francisco Bay Area	♦ 40.1	36.4 - 43.7	28,100
San Joaquin Valley	* 47.3	43.5 - 51.2	22,100
Southeastern California	♦ 46.1	41.1 - 51.2	22,200

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

### Counties in Each Region

Monterey, San Benito, San Louis 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  
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Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare  
Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Food insecurity during pregnancy

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		18.6	16.9	- 20.3	91,600
Central Coast Region	✘	24.3	20.3	- 28.3	7,000
Greater Sacramento Region	◇	14.7	11.1	- 18.3	4,300
Los Angeles County	◇	19.7	14.3	- 25.0	25,200
North/Mountain Region	◇	19.4	13.4	- 25.4	2,500
Orange County	◇	20.6	15.7	- 25.6	7,700
San Diego County	◇	15.1	10.9	- 19.4	6,600
San Francisco Bay Area	✓	14.3	12.1	- 16.5	12,300
San Joaquin Valley	✘	23.6	20.9	- 26.4	15,100
Southeastern California	◇	17.4	14.1	- 20.7	10,900

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

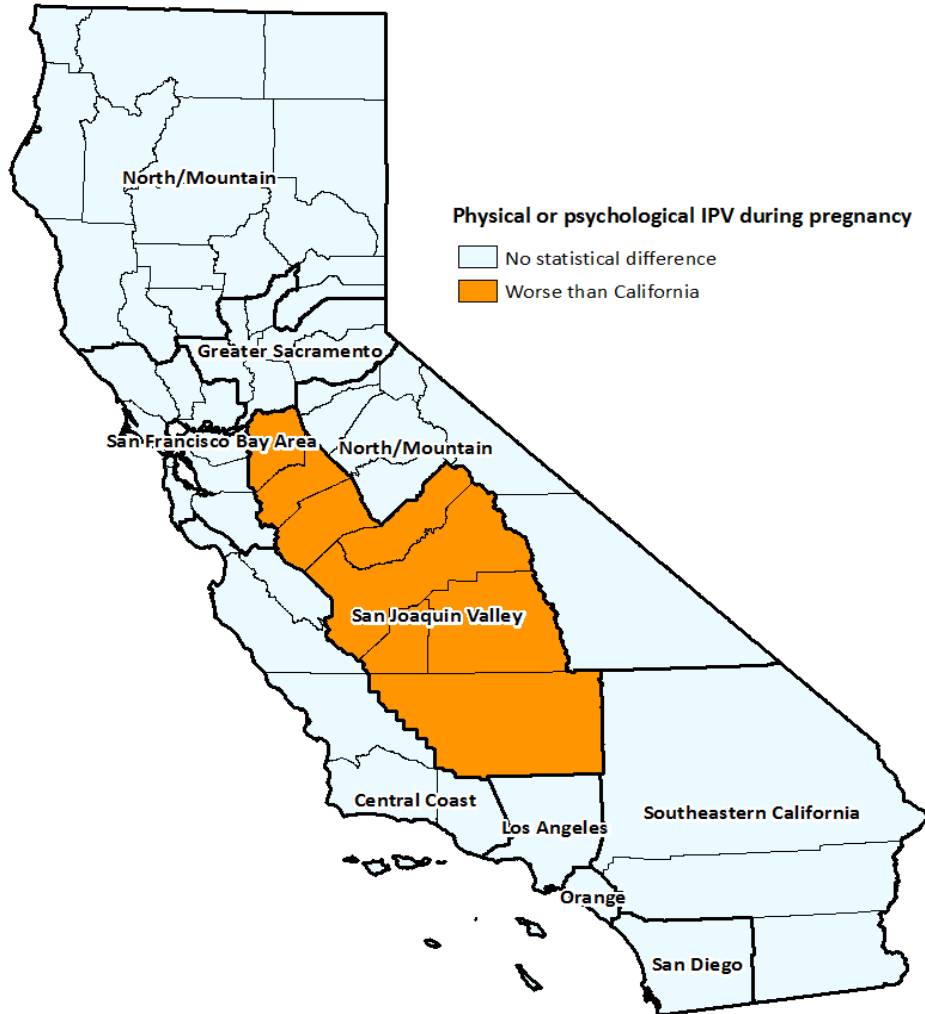
### Counties in Each Region

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Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare  
Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

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	8.8	7.5 - 10.2	43,400
Central Coast Region	♦ 7.8	5.6 - 10.1	2,200
Greater Sacramento Region	♦ 7.4	4.8 - 10.0	2,200
Los Angeles County	♦ 9.4	5.0 - 13.9	12,200
North/Mountain Region	♦ 10.7	6.3 - 15.1	1,400
Orange County	♦ 9.4	5.5 - 13.3	3,500
San Diego County	♦ 7.4	4.0 - 10.9	3,200
San Francisco Bay Area	♦ 7.2	5.5 - 8.9	6,200
San Joaquin Valley	* 11.3	9.3 - 13.3	7,200
Southeastern California	♦ 8.4	6.1 - 10.8	5,300

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Louis 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

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 Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Prenatal depressive symptoms

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		16.4	14.7	- 18.1	81,200
Central Coast Region	♦	17.1	13.8	- 20.5	4,900
Greater Sacramento Region	♦	14.0	10.0	- 18.0	4,100
Los Angeles County	♦	16.6	11.2	- 22.1	21,500
North/Mountain Region	♦	15.1	10.0	- 20.3	2,000
Orange County	♦	13.9	8.9	- 18.9	5,200
San Diego County	♦	15.0	10.2	- 19.8	6,500
San Francisco Bay Area	✓	13.1	10.8	- 15.3	11,300
San Joaquin Valley	✗	23.2	20.4	- 26.0	14,900
Southeastern California	♦	17.3	14.1	- 20.4	10,900

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

### Counties in Each Region

Monterey, San Benito, San Louis 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  
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Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Postpartum depressive symptoms

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	16.0	14.3 - 17.6	78,800
Central Coast Region	✖ 19.8	16.2 - 23.4	5,700
Greater Sacramento Region	◇ 13.9	10.4 - 17.4	4,000
Los Angeles County	◇ 15.8	10.7 - 21.0	20,500
North/Mountain Region	◇ 16.7	11.1 - 22.2	2,200
Orange County	◇ 18.2	12.2 - 24.2	6,800
San Diego County	◇ 14.2	9.2 - 19.3	6,200
San Francisco Bay Area	◇ 14.1	11.6 - 16.5	12,100
San Joaquin Valley	✖ 19.5	16.8 - 22.1	12,400
Southeastern California	◇ 14.2	11.2 - 17.2	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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

### Counties in Each Region

Monterey, San Benito, San Louis 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  
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Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare  
Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Woman or partner lost job during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	17.3	15.7 - 18.9	84,200
Central Coast Region	♦ 20.4	16.6 - 24.3	5,800
Greater Sacramento Region	♦ 19.0	14.9 - 23.1	5,500
Los Angeles County	♦ 16.1	11.2 - 20.9	20,500
North/Mountain Region	♦ 15.6	10.2 - 20.9	2,000
Orange County	♦ 21.6	15.2 - 28.1	7,900
San Diego County	♦ 15.4	10.4 - 20.5	6,600
San Francisco Bay Area	♦ 15.8	13.4 - 18.2	13,400
San Joaquin Valley	♦ 17.9	15.4 - 20.4	11,200
Southeastern California	♦ 18.4	15.0 - 21.7	11,300

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

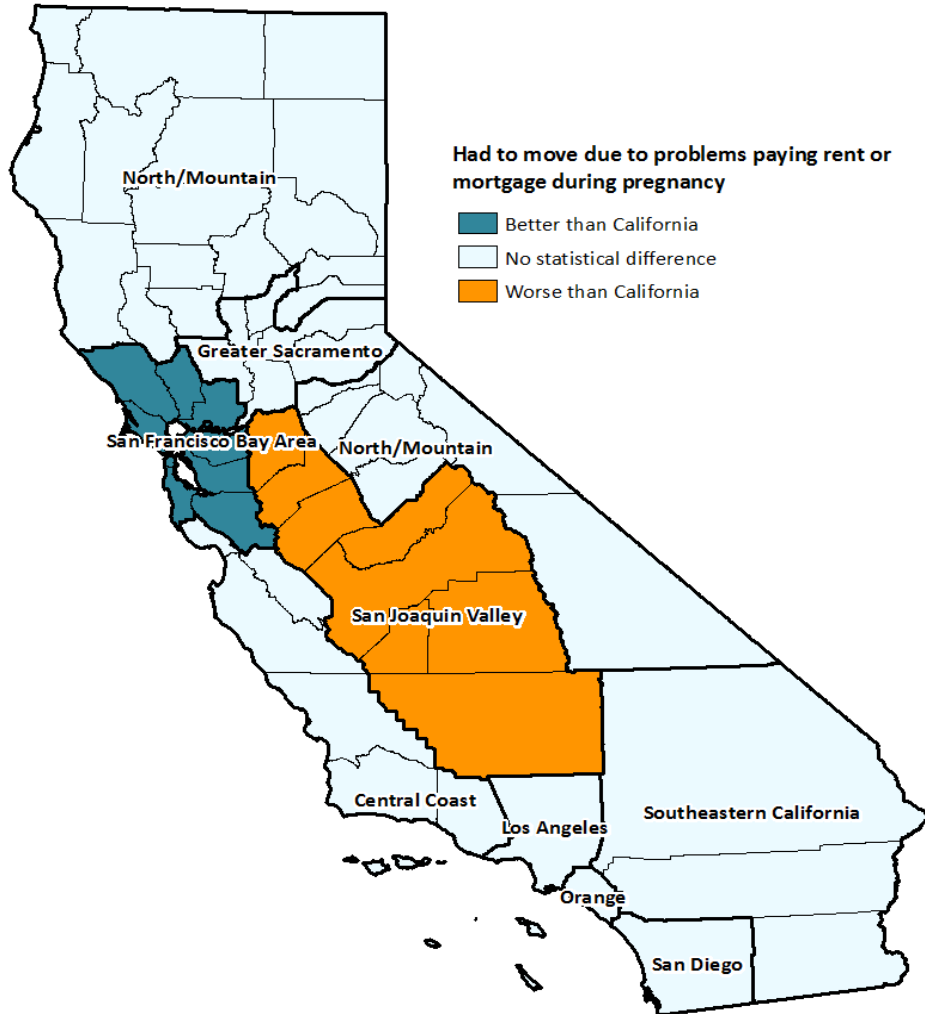
MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Louis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, 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

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# MIHA Regional Comparison 2012

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		7.5	6.4	- 8.6	36,600
Central Coast Region	♦	6.9	4.6	- 9.1	1,900
Greater Sacramento Region	♦	9.6	6.6	- 12.7	2,800
Los Angeles County	♦	6.7	3.3	- 10.1	8,600
North/Mountain Region	♦	11.4	6.3	- 16.5	1,500
Orange County	♦	5.6	2.4	- 8.7	2,000
San Diego County	♦	6.5	3.3	- 9.6	2,800
San Francisco Bay Area	✓	5.8	4.3	- 7.3	4,900
San Joaquin Valley	✗	10.8	8.8	- 12.8	6,800
Southeastern California	♦	8.6	6.2	- 11.0	5,300

✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical 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 Louis 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 2012

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	13.9	12.5 - 15.3	68,000
Central Coast Region	♦ 12.8	9.6 - 16.1	3,600
Greater Sacramento Region	♦ 15.6	12.0 - 19.3	4,500
Los Angeles County	♦ 10.7	7.0 - 14.4	13,500
North/Mountain Region	* 20.1	13.9 - 26.2	2,600
Orange County	♦ 12.3	6.7 - 17.9	4,600
San Diego County	* 21.0	14.9 - 27.1	9,100
San Francisco Bay Area	♦ 13.9	11.6 - 16.1	11,900
San Joaquin Valley	♦ 15.2	12.8 - 17.5	9,700
Southeastern California	♦ 13.7	10.7 - 16.6	8,500

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Louis 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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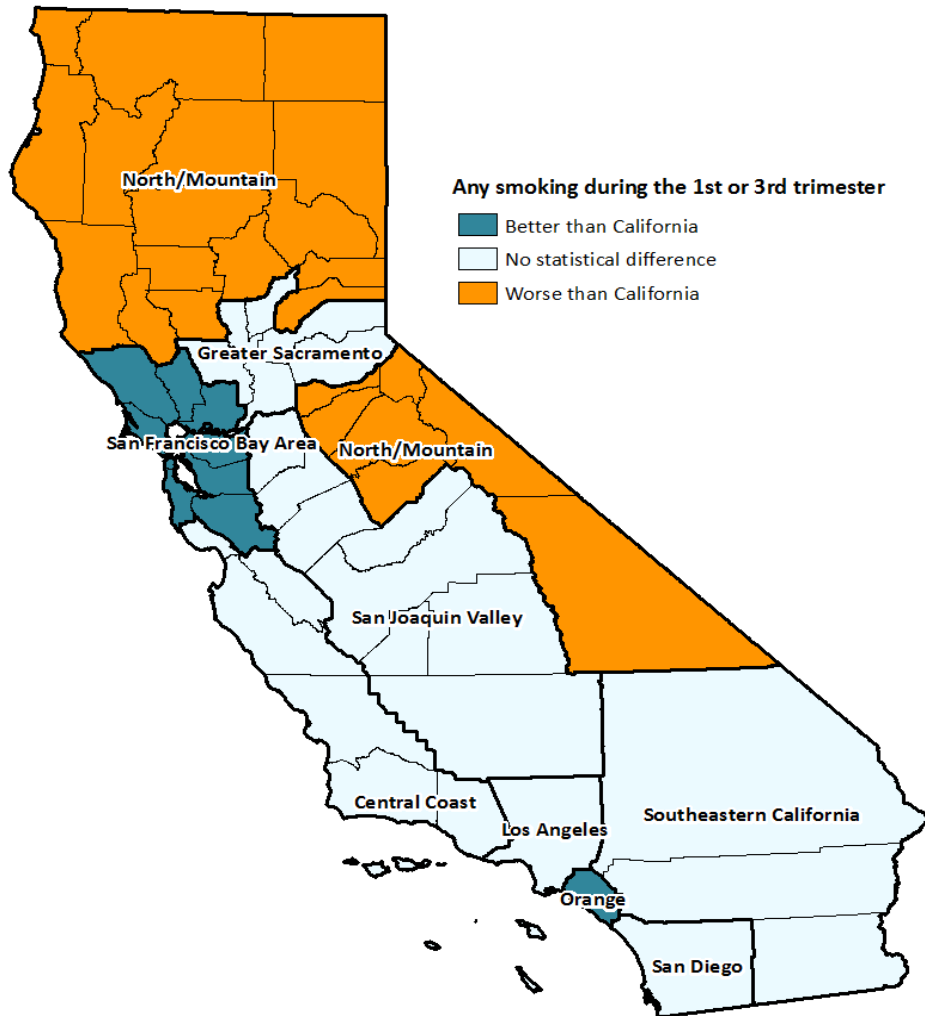
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# MIHA Regional Comparison 2012

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		8.3	7.1	- 9.6	41,000
Central Coast Region	♦	6.2	4.1	- 8.3	1,800
Greater Sacramento Region	♦	9.4	6.7	- 12.2	2,700
Los Angeles County	♦	8.7	4.7	- 12.7	11,100
North/Mountain Region	✖	24.4	17.9	- 30.9	3,200
Orange County	✓	3.7	1.4	- 6.0	1,400
San Diego County	♦	9.7	5.7	- 13.7	4,200
San Francisco Bay Area	✓	6.1	4.7	- 7.5	5,200
San Joaquin Valley	♦	8.7	6.9	- 10.4	5,500
Southeastern California	♦	9.2	6.8	- 11.7	5,800

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

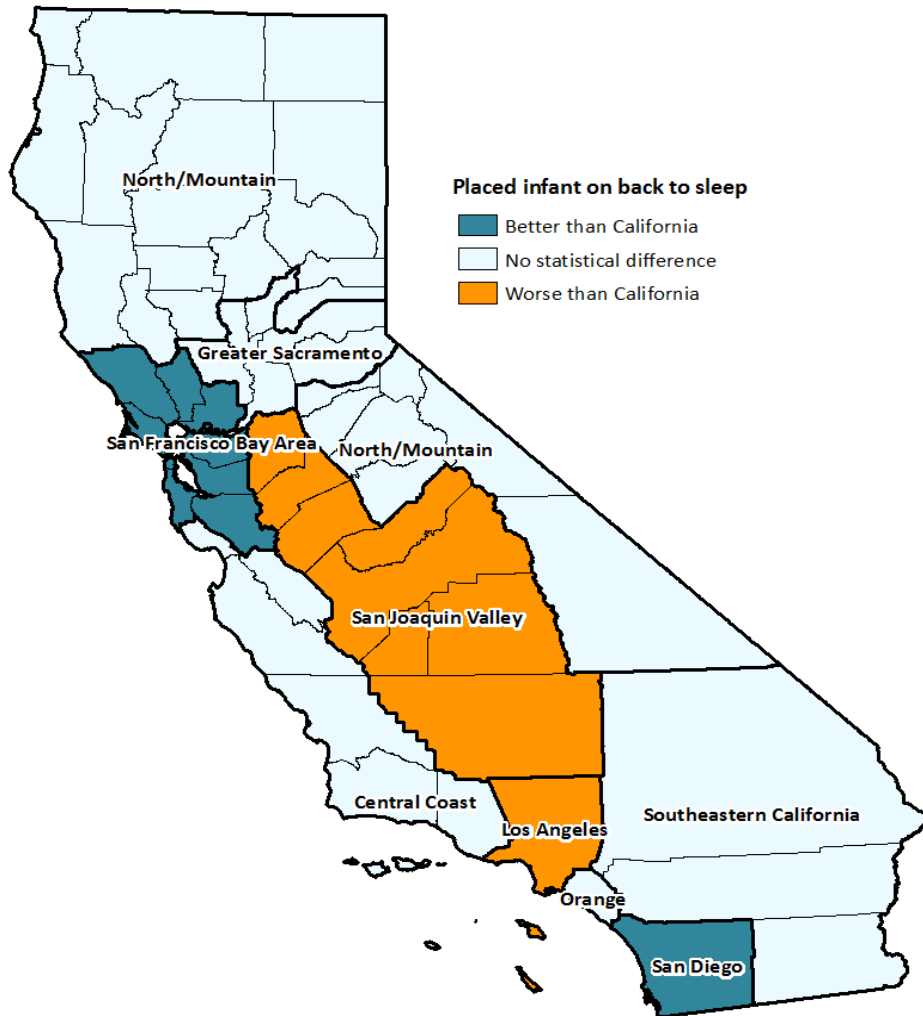
### Counties in Each Region

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Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Placed infant on back to sleep

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		76.1	74.1	- 78.1	366,400
Central Coast Region	♦	78.6	74.8	- 82.4	22,200
Greater Sacramento Region	♦	77.5	72.7	- 82.2	22,100
Los Angeles County	✘	70.7	64.2	- 77.1	88,300
North/Mountain Region	♦	71.1	64.5	- 77.8	9,200
Orange County	♦	80.3	74.6	- 85.9	29,300
San Diego County	✔	82.3	77.1	- 87.6	34,800
San Francisco Bay Area	✔	81.7	79.2	- 84.3	68,900
San Joaquin Valley	✘	71.6	68.6	- 74.7	45,000
Southeastern California	♦	76.5	72.7	- 80.2	46,700

- ✔ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

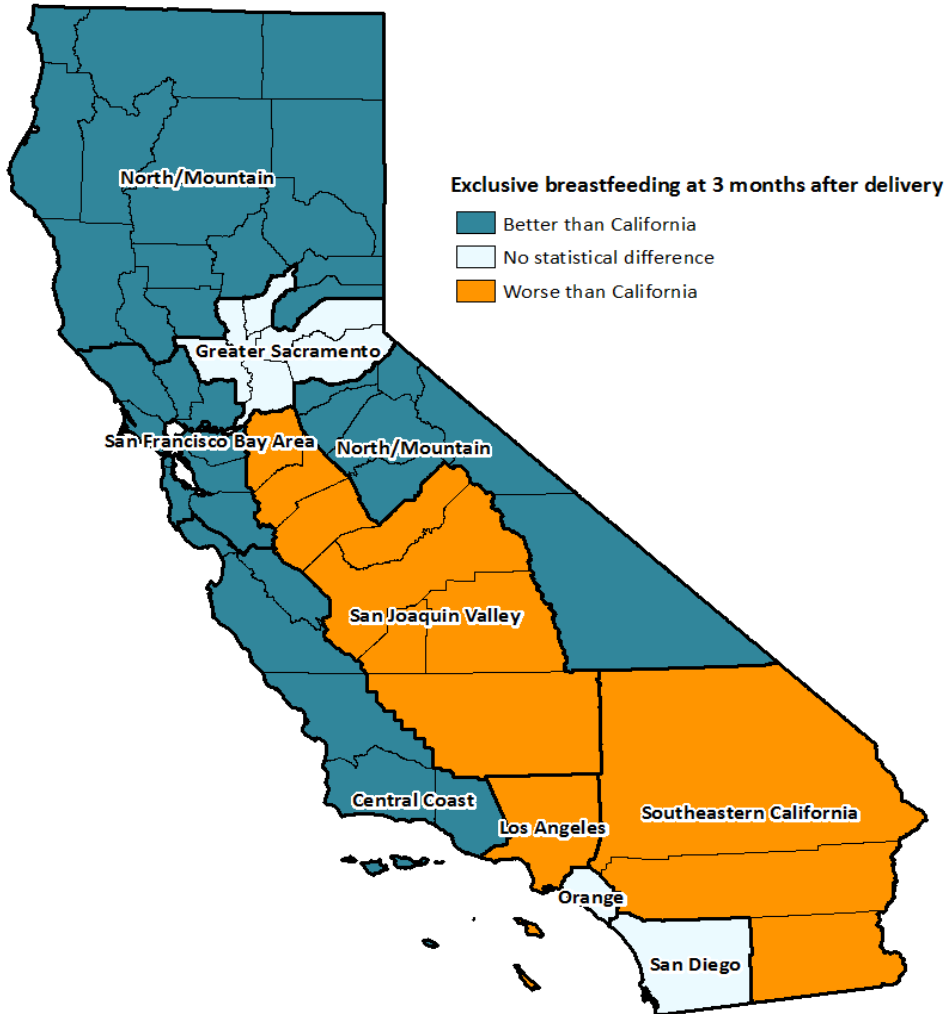
### Counties in Each Region

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# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Exclusive breastfeeding at 3 months after delivery

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		26.5	24.3	- 28.7	98,600
Central Coast Region	✓	34.2	29.2	- 39.1	7,100
Greater Sacramento Region	◇	31.1	25.4	- 36.8	6,900
Los Angeles County	✗	21.4	15.3	- 27.4	22,000
North/Mountain Region	✓	38.1	30.0	- 46.2	3,900
Orange County	◇	31.5	22.7	- 40.2	8,300
San Diego County	◇	30.0	21.9	- 38.0	9,200
San Francisco Bay Area	✓	33.4	29.7	- 37.0	21,300
San Joaquin Valley	✗	22.1	19.1	- 25.1	10,400
Southeastern California	✗	19.7	15.6	- 23.7	9,400

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

### Counties in Each Region

Monterey, San Benito, San Louis Obispo, Santa Barbara, Santa Cruz, Ventura  
El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba  
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# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Mistimed or unwanted pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	30.9	28.8 - 33.0	152,500
Central Coast Region	♦ 30.6	26.5 - 34.7	8,700
Greater Sacramento Region	♦ 32.6	27.7 - 37.5	9,400
Los Angeles County	♦ 33.6	26.9 - 40.2	43,400
North/Mountain Region	♦ 30.7	23.8 - 37.6	4,000
Orange County	♦ 28.3	21.9 - 34.8	10,600
San Diego County	♦ 31.4	25.1 - 37.8	13,600
San Francisco Bay Area	✓ 25.3	22.4 - 28.1	21,800
San Joaquin Valley	♦ 34.1	31.0 - 37.2	21,800
Southeastern California	♦ 30.7	26.7 - 34.6	19,200

- ✓ 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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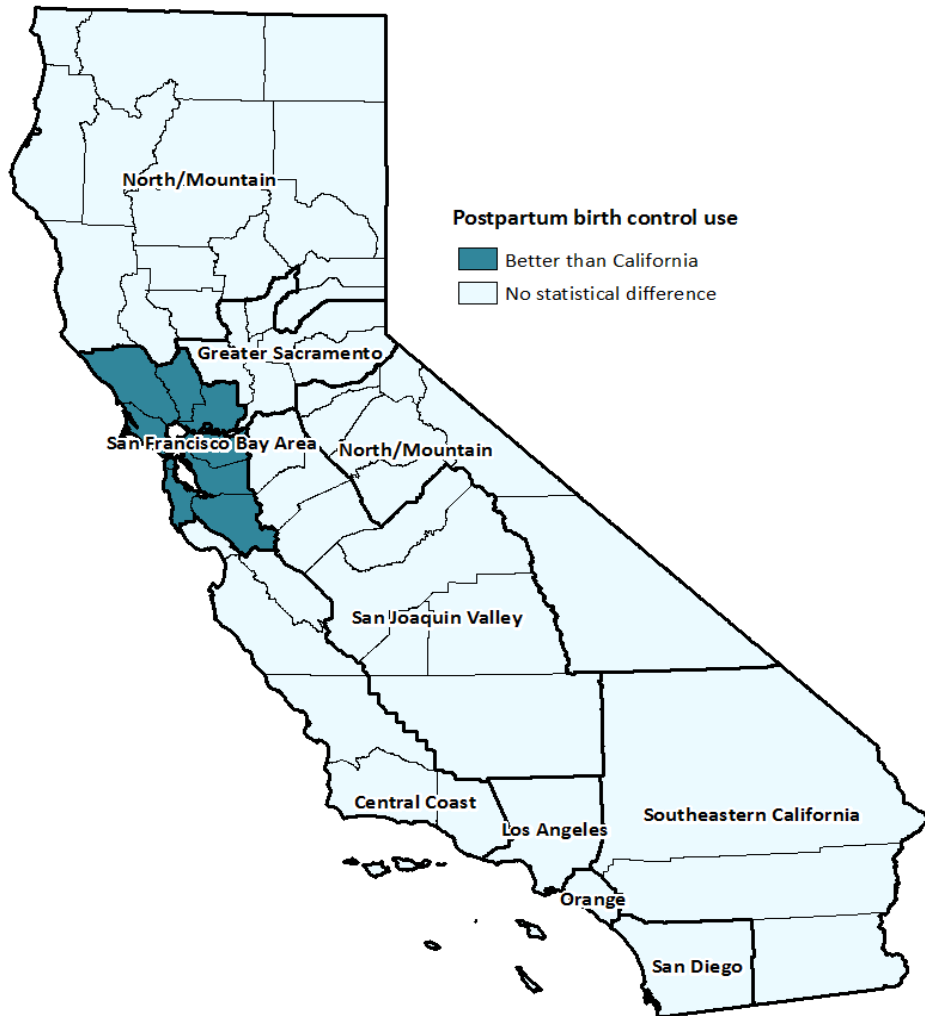
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# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Postpartum birth control use

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	89.8	88.1 - 91.5	395,800
Central Coast Region	♦ 91.6	89.0 - 94.2	23,800
Greater Sacramento Region	♦ 89.5	85.7 - 93.2	23,700
Los Angeles County	♦ 87.3	81.8 - 92.8	99,700
North/Mountain Region	♦ 91.6	87.3 - 96.0	11,200
Orange County	♦ 89.5	84.7 - 94.3	28,300
San Diego County	♦ 88.2	83.1 - 93.2	33,900
San Francisco Bay Area	✓ 92.2	90.3 - 94.1	69,400
San Joaquin Valley	♦ 90.9	88.8 - 93.0	53,100
Southeastern California	♦ 90.8	88.1 - 93.4	52,700

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

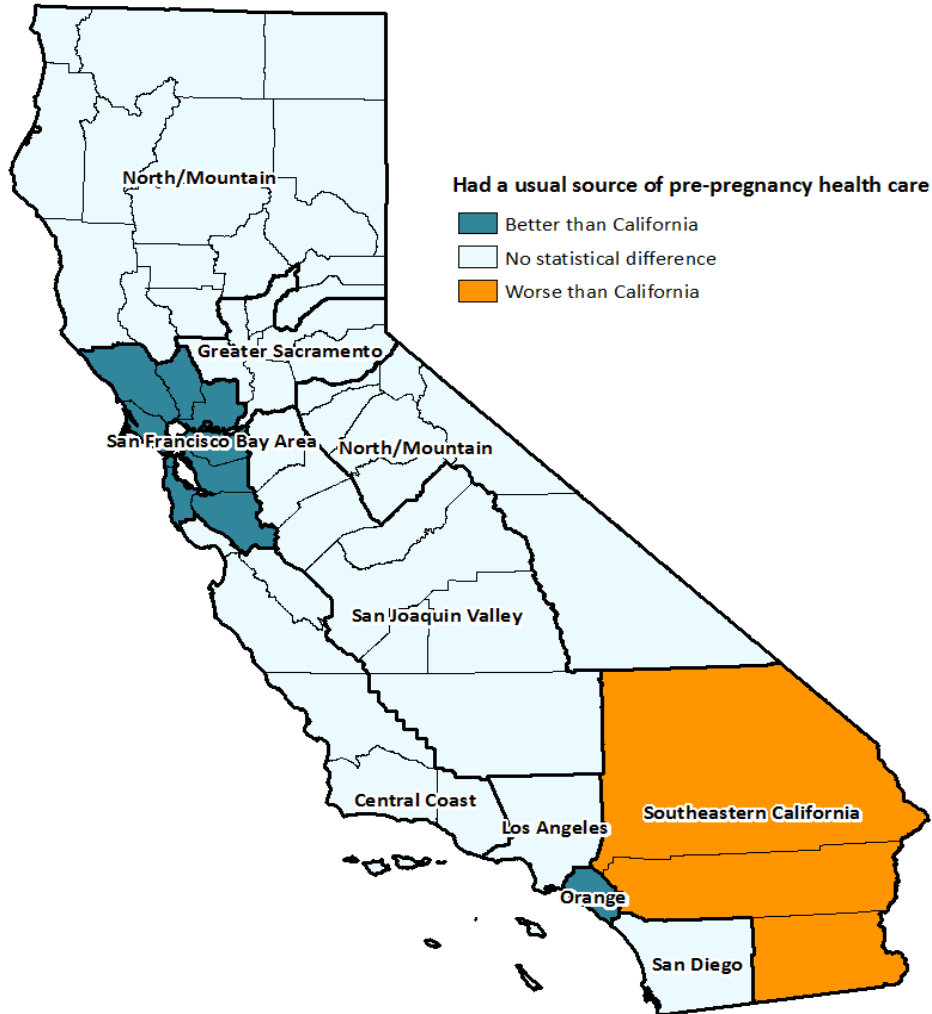
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# MIHA Regional Comparison 2012

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		72.0	70.1	- 74.0	356,600
Central Coast Region	♦	68.1	63.9	- 72.3	19,600
Greater Sacramento Region	♦	73.4	68.8	- 78.0	21,400
Los Angeles County	♦	71.3	65.3	- 77.4	92,500
North/Mountain Region	♦	67.3	60.3	- 74.3	8,800
Orange County	✓	78.4	73.2	- 83.5	29,400
San Diego County	♦	74.7	69.2	- 80.3	32,600
San Francisco Bay Area	✓	77.0	74.3	- 79.7	66,400
San Joaquin Valley	♦	69.7	66.6	- 72.7	44,700
Southeastern California	✗	65.6	61.5	- 69.8	41,300

✓ 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

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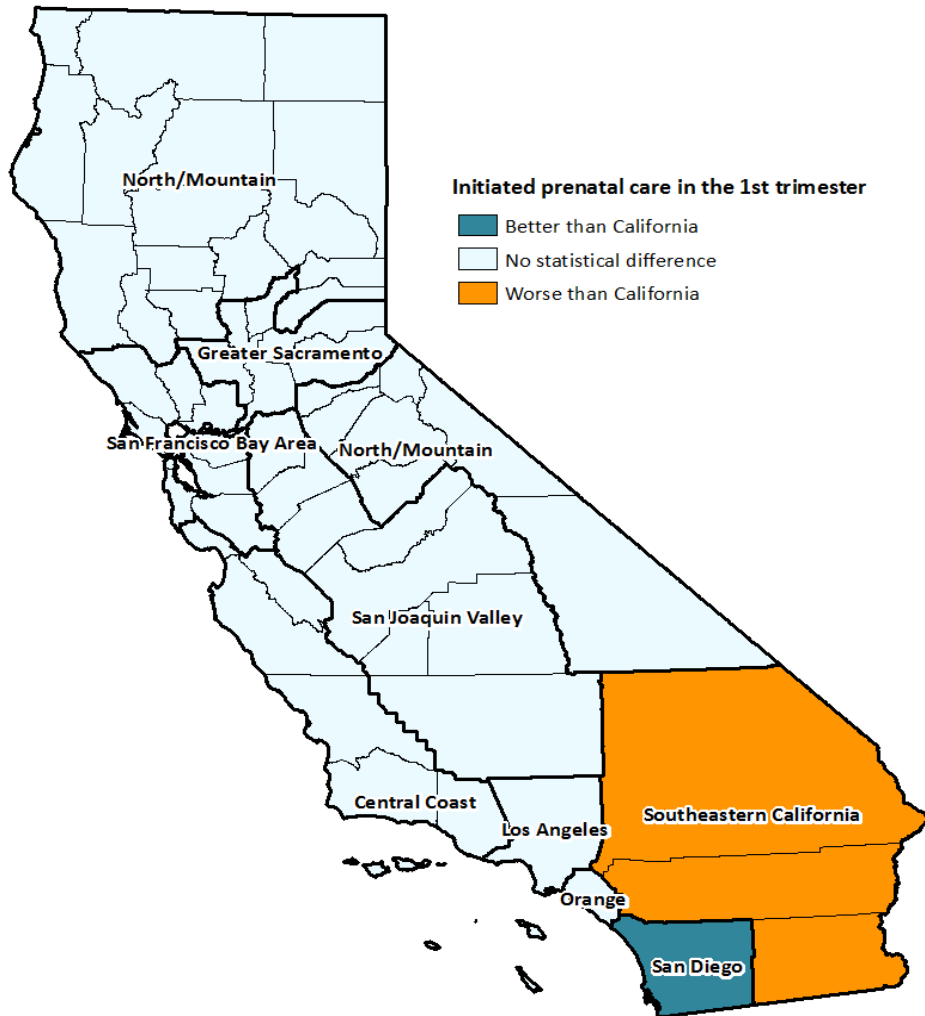
Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Initiated prenatal care in the 1st trimester †

MIHA Region		Percent	95% CI	Population Estimate of Indicator
California		88.0	86.6 - 89.4	430,000
Central Coast Region	♦	88.9	86.0 - 91.8	25,300
Greater Sacramento Region	♦	85.9	82.0 - 89.7	24,700
Los Angeles County	♦	87.5	82.9 - 92.0	112,000
North/Mountain Region	♦	84.2	78.8 - 89.7	10,900
Orange County	♦	89.9	85.2 - 94.6	33,500
San Diego County	✓	92.2	89.0 - 95.3	39,600
San Francisco Bay Area	♦	90.0	88.1 - 91.8	76,200
San Joaquin Valley	♦	87.2	85.0 - 89.4	55,100
Southeastern California	✘	84.7	81.4 - 87.9	52,700

- ✓ 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

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† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

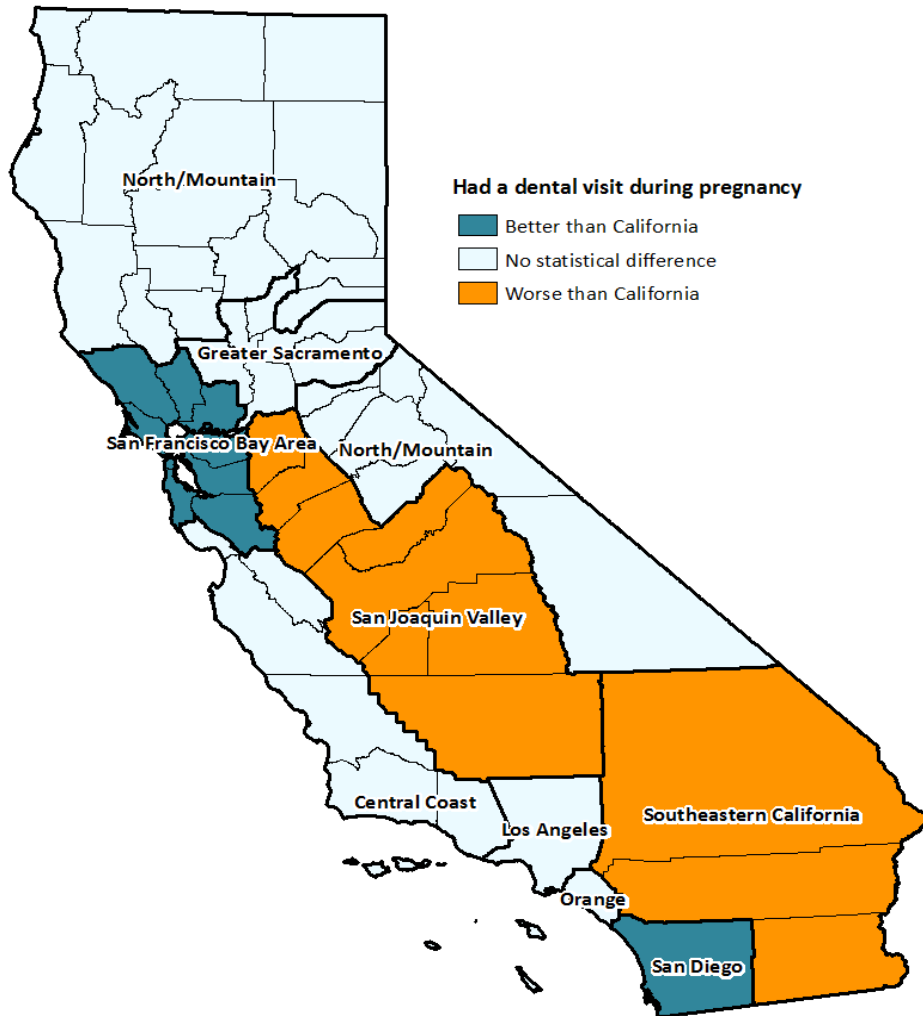
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# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Had a dental visit during pregnancy

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		42.1	40.0	- 44.3	208,300
Central Coast Region	♦	43.1	38.6	- 47.6	12,400
Greater Sacramento Region	♦	43.2	38.0	- 48.4	12,600
Los Angeles County	♦	40.1	33.5	- 46.8	52,000
North/Mountain Region	♦	44.7	37.4	- 52.1	5,800
Orange County	♦	43.4	35.8	- 51.0	16,200
San Diego County	✓	51.9	44.9	- 59.0	22,600
San Francisco Bay Area	✓	52.2	48.9	- 55.5	45,100
San Joaquin Valley	✗	32.7	29.7	- 35.7	20,900
Southeastern California	✗	33.0	28.9	- 37.1	20,700

- ✓ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

### Counties in Each Region

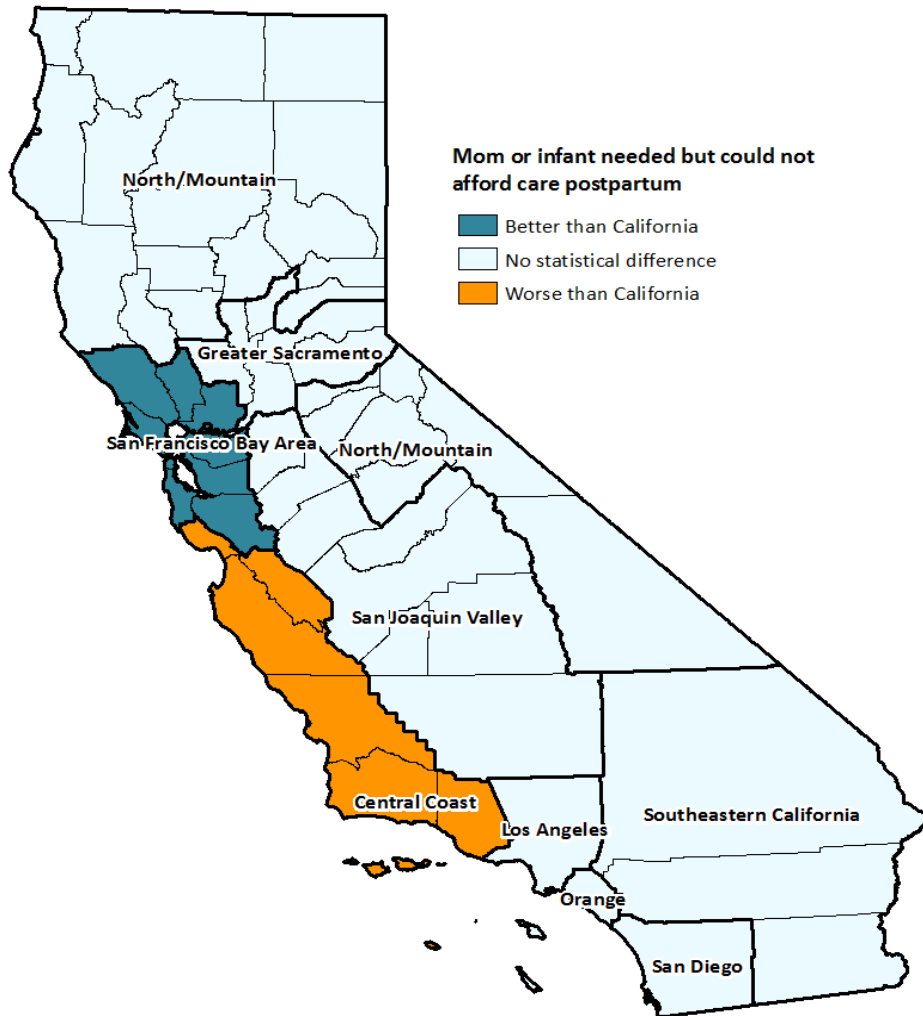
Monterey, San Benito, San Louis Obispo, Santa Barbara, Santa Cruz, Ventura  
El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba  
Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, 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 2012

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	14.8	13.2 - 16.4	71,500
Central Coast Region	✖ 19.4	15.8 - 23.0	5,500
Greater Sacramento Region	◇ 15.3	11.5 - 19.1	4,400
Los Angeles County	◇ 15.3	10.1 - 20.5	19,300
North/Mountain Region	◇ 13.1	8.1 - 18.2	1,700
Orange County	◇ 16.6	11.4 - 21.7	6,000
San Diego County	◇ 11.2	7.6 - 14.8	4,700
San Francisco Bay Area	✔ 12.0	10.0 - 14.0	10,100
San Joaquin Valley	◇ 15.9	13.5 - 18.4	10,000
Southeastern California	◇ 16.1	12.9 - 19.3	9,800

- ✔ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

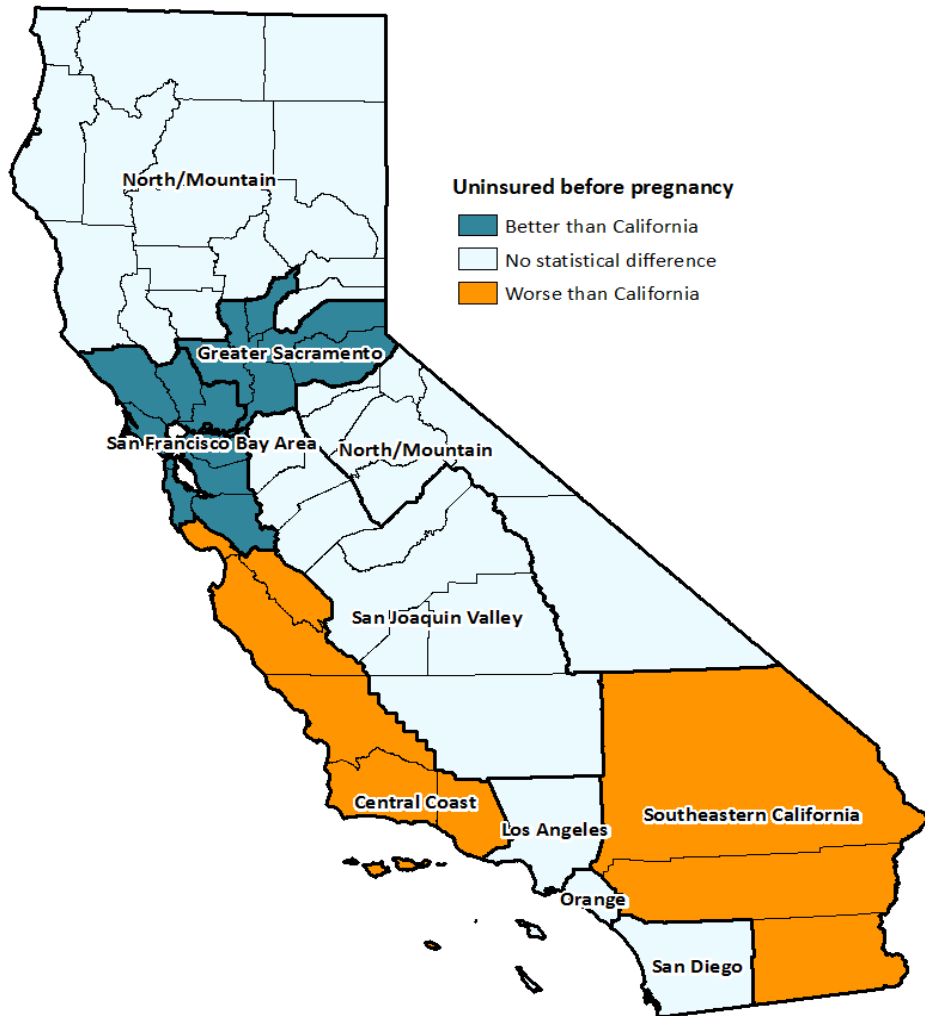
MIHA Regions	Counties in Each Region
Central Coast	Monterey, San Benito, San Louis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Sacramento	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
North/Mountain	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Tuolumne
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MIHA is a 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 Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Uninsured before pregnancy

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		24.7	22.9	- 26.4	121,500
Central Coast Region	✘	29.8	25.8	- 33.9	8,400
Greater Sacramento Region	✔	20.0	16.0	- 23.9	5,800
Los Angeles County	◇	26.1	20.5	- 31.7	33,500
North/Mountain Region	◇	28.5	21.7	- 35.3	3,700
Orange County	◇	23.7	18.9	- 28.6	8,900
San Diego County	◇	21.7	17.0	- 26.3	9,400
San Francisco Bay Area	✔	17.0	14.9	- 19.0	14,600
San Joaquin Valley	◇	27.4	24.4	- 30.5	17,600
Southeastern California	✘	31.1	27.2	- 35.0	19,600

- ✔ 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 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

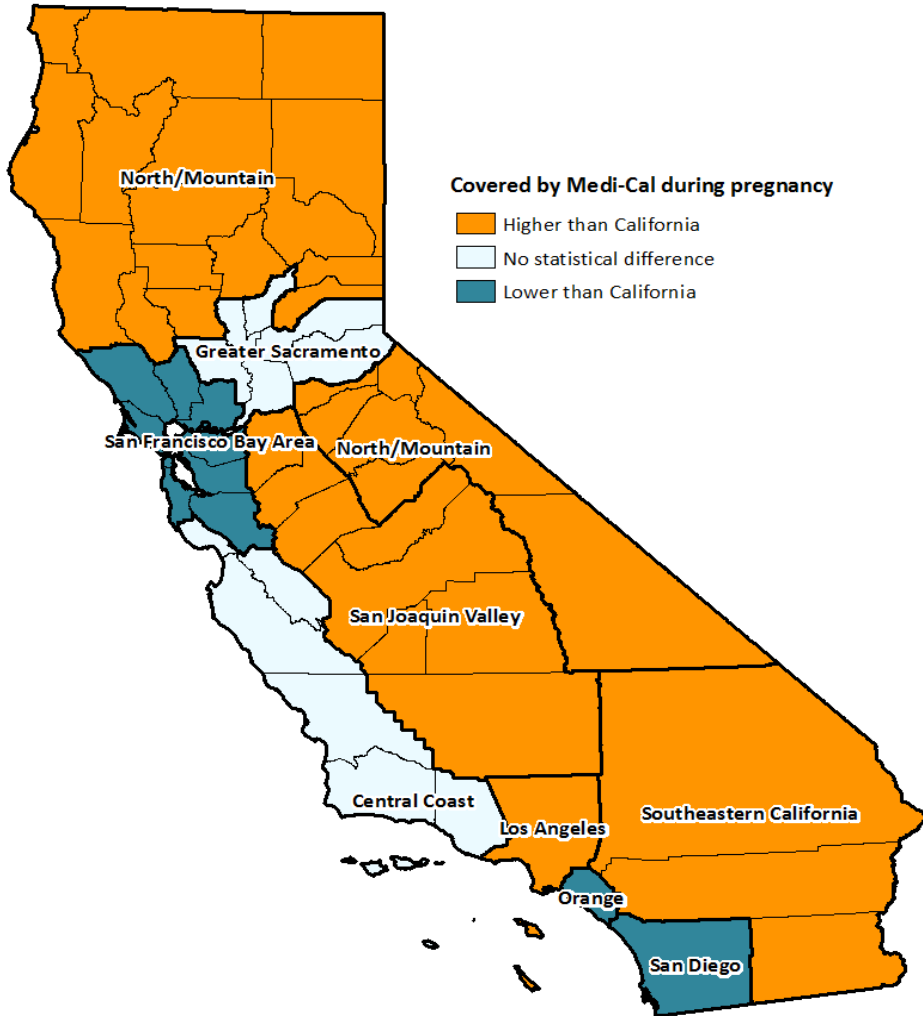
MIHA Regions	Counties in Each Region
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# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Covered by Medi-Cal during pregnancy

MIHA Region		Percent	95% CI	Population Estimate of Indicator
California		49.8	48.2 - 51.5	246,200
Central Coast Region	♦	53.8	49.3 - 58.3	15,400
Greater Sacramento Region	♦	47.5	42.7 - 52.4	13,800
Los Angeles County	↑	53.9	48.8 - 58.9	69,500
North/Mountain Region	↑	62.3	55.0 - 69.5	8,100
Orange County	↓	41.6	36.6 - 46.6	15,600
San Diego County	↓	36.2	31.7 - 40.7	15,800
San Francisco Bay Area	↓	34.8	32.5 - 37.2	30,000
San Joaquin Valley	↑	66.7	63.9 - 69.4	42,700
Southeastern California	↑	55.9	52.5 - 59.4	35,200

- ↓ 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 county and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

### Counties in Each Region

Monterey, San Benito, San Louis 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  
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Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



**Uninsured postpartum**

- Better than California
- No statistical difference
- Worse than California

## Uninsured postpartum

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		16.7	15.2	- 18.1	81,600
Central Coast Region	✖	25.4	21.4	- 29.4	7,200
Greater Sacramento Region	◇	15.3	11.5	- 19.2	4,500
Los Angeles County	◇	15.4	10.7	- 20.1	19,500
North/Mountain Region	◇	15.9	10.4	- 21.4	2,100
Orange County	◇	15.1	11.0	- 19.1	5,600
San Diego County	◇	16.9	13.3	- 20.5	7,400
San Francisco Bay Area	✓	12.8	10.9	- 14.6	11,000
San Joaquin Valley	◇	18.6	15.9	- 21.2	11,800
Southeastern California	✖	20.2	16.8	- 23.7	12,700

- ✓ 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

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### MIHA Regions

Central Coast  
Greater Sacramento  
North/Mountain

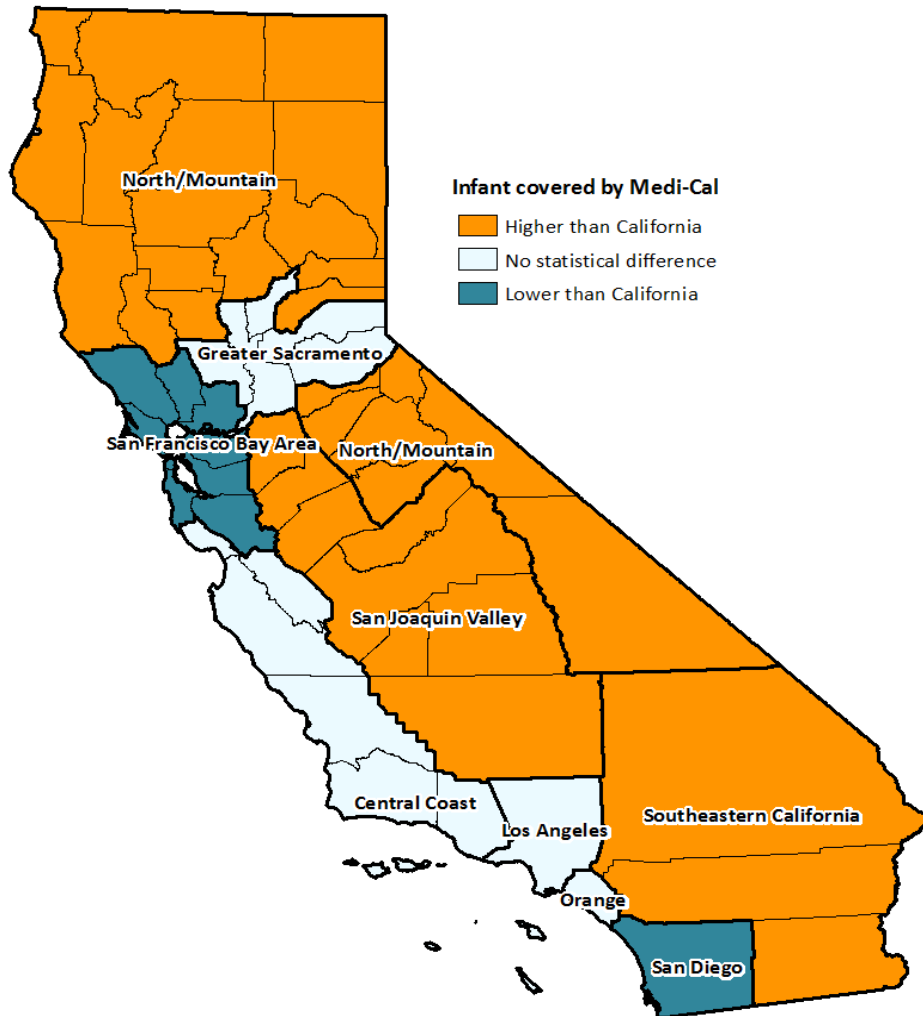
### Counties in Each Region

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Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Infant covered by Medi-Cal

MIHA Region		Percent	95% CI	Population Estimate of Indicator
California		49.2	47.4 - 51.0	237,400
Central Coast Region	♦	53.2	48.6 - 57.7	15,000
Greater Sacramento Region	♦	50.9	46.0 - 55.8	14,600
Los Angeles County	♦	51.3	45.8 - 56.7	64,100
North/Mountain Region	↑	61.2	53.9 - 68.5	7,900
Orange County	♦	47.4	41.3 - 53.5	17,400
San Diego County	↓	34.9	29.9 - 39.8	14,900
San Francisco Bay Area	↓	34.3	31.7 - 36.8	28,900
San Joaquin Valley	↑	64.4	61.5 - 67.3	40,700
Southeastern California	↑	56.0	52.4 - 59.6	34,000

- ↓ 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 county and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical 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 Louis Obispo, Santa Barbara, Santa Cruz, Ventura

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

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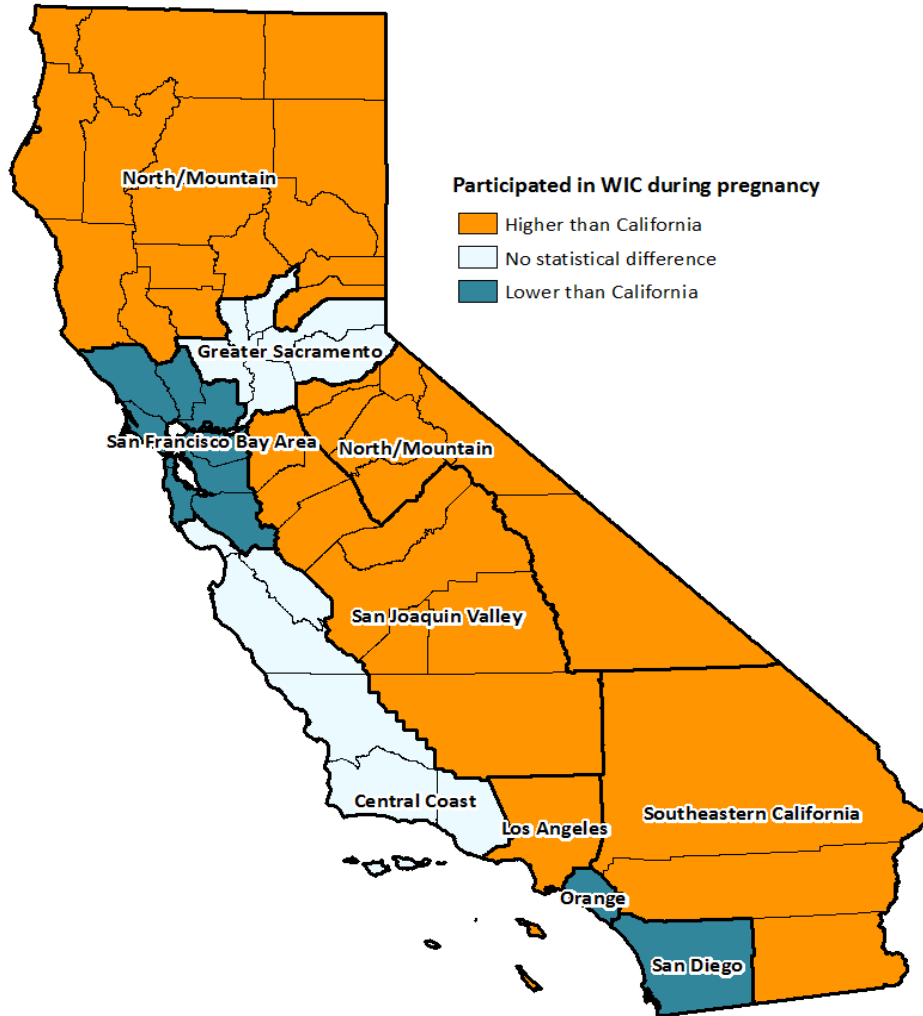
Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Imperial, Riverside, San Bernardino



# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Participated in WIC during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	55.6	54.1 - 57.1	269,800
Central Coast Region	♦ 58.4	54.0 - 62.9	16,400
Greater Sacramento Region	♦ 51.3	46.8 - 55.8	14,800
Los Angeles County	↑ 63.6	59.3 - 67.8	80,400
North/Mountain Region	↑ 63.8	56.6 - 71.0	8,200
Orange County	↓ 46.3	41.3 - 51.2	17,000
San Diego County	↓ 44.4	40.4 - 48.4	18,900
San Francisco Bay Area	↓ 36.7	34.4 - 38.9	30,900
San Joaquin Valley	↑ 71.8	69.4 - 74.1	45,400
Southeastern California	↑ 60.8	58.1 - 63.5	37,900

- ↓ 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 county and the rest of California

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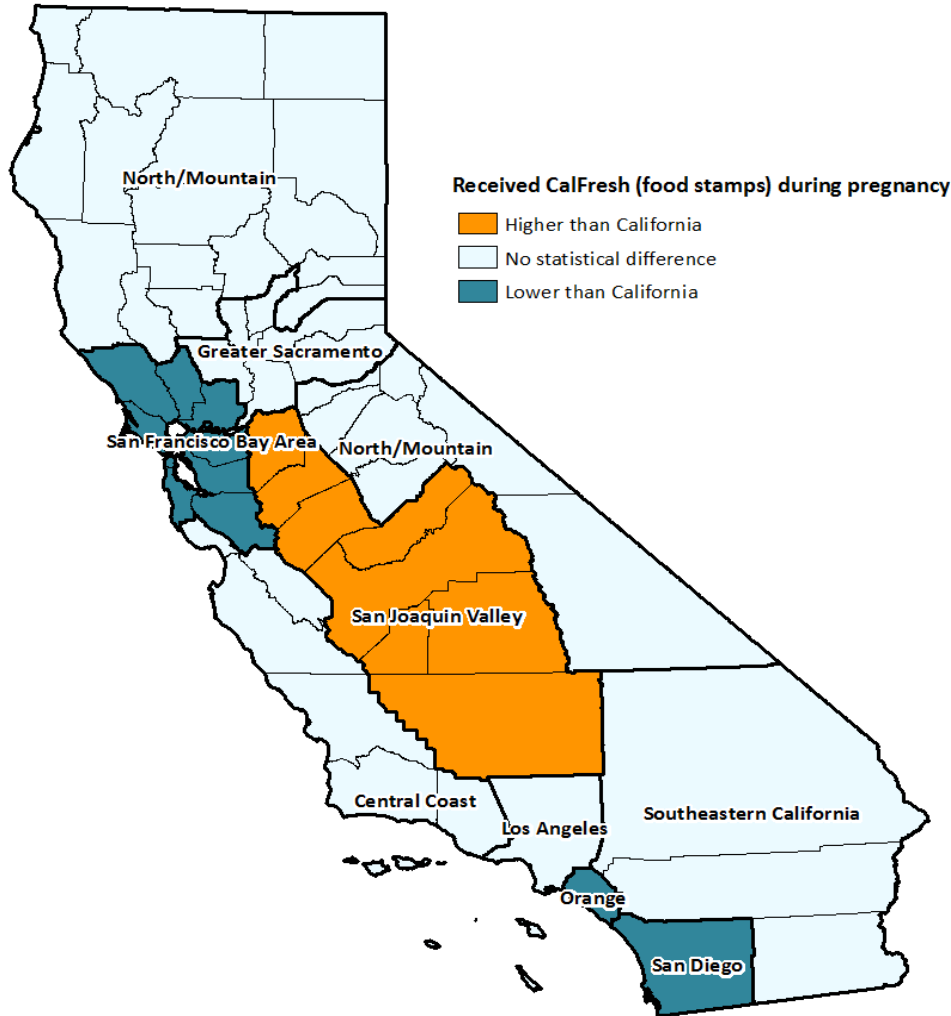
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# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Received CalFresh (food stamps) during pregnancy

MIHA Region	Percent	95% CI	Population Estimate of Indicator
California	24.7	23.0 - 26.5	121,900
Central Coast Region	♦ 24.7	20.7 - 28.6	7,000
Greater Sacramento Region	♦ 29.0	24.6 - 33.5	8,400
Los Angeles County	♦ 25.9	20.2 - 31.7	33,300
North/Mountain Region	♦ 25.3	18.9 - 31.7	3,300
Orange County	↓ 14.7	10.6 - 18.8	5,500
San Diego County	↓ 18.6	14.6 - 22.7	8,100
San Francisco Bay Area	↓ 15.0	13.0 - 16.9	12,900
San Joaquin Valley	↑ 40.2	37.0 - 43.4	25,600
Southeastern California	♦ 28.2	24.5 - 31.9	17,800

- ↓ 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)
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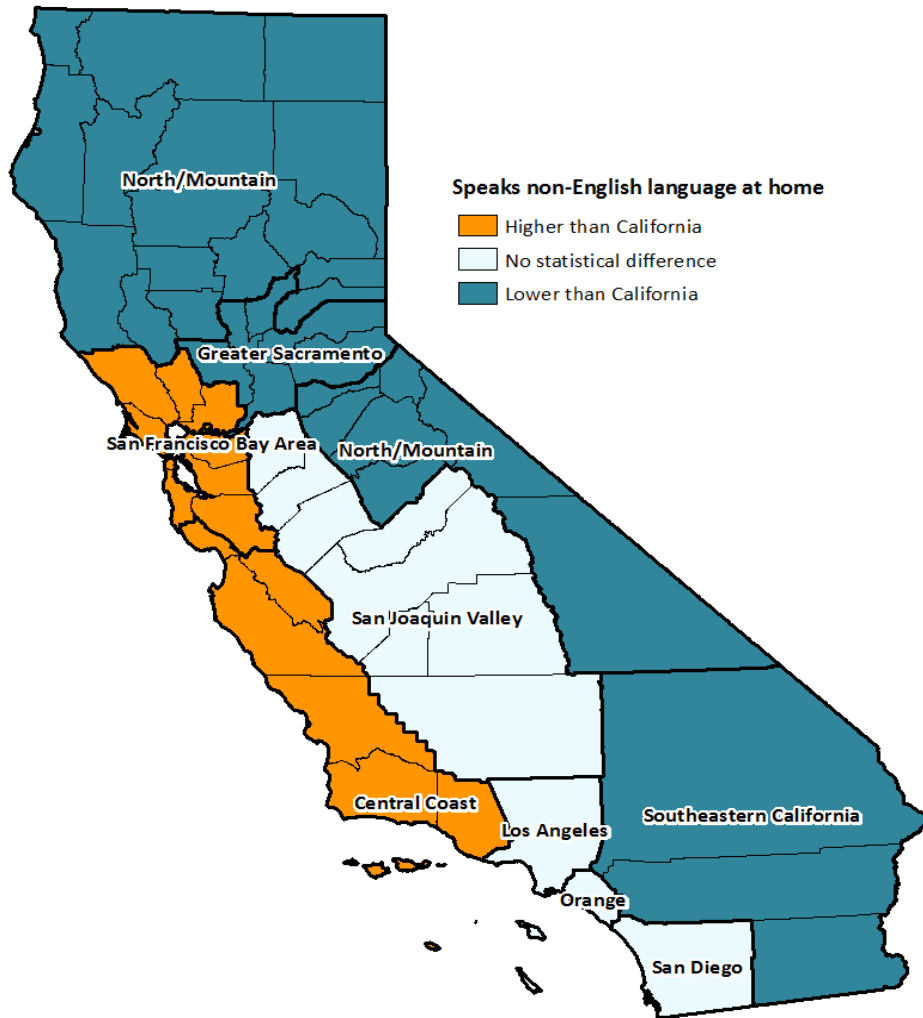
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# MIHA Regional Comparison 2012

Maternal and Infant Health Assessment (MIHA) Survey



## Speaks non-English language at home

MIHA Region		Percent	95% CI		Population Estimate of Indicator
California		30.8	28.8	- 32.8	150,100
Central Coast Region	↑	36.2	31.9	- 40.5	10,300
Greater Sacramento Region	↓	23.3	18.6	- 28.0	6,700
Los Angeles County	♦	33.2	27.0	- 39.4	42,500
North/Mountain Region	↓	10.8	5.9	- 15.6	1,400
Orange County	♦	36.1	29.5	- 42.7	13,300
San Diego County	♦	28.8	22.3	- 35.3	12,300
San Francisco Bay Area	↑	35.8	32.5	- 39.0	29,800
San Joaquin Valley	♦	29.0	25.9	- 32.0	18,400
Southeastern California	↓	24.6	20.8	- 28.5	15,500

↓ 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 county 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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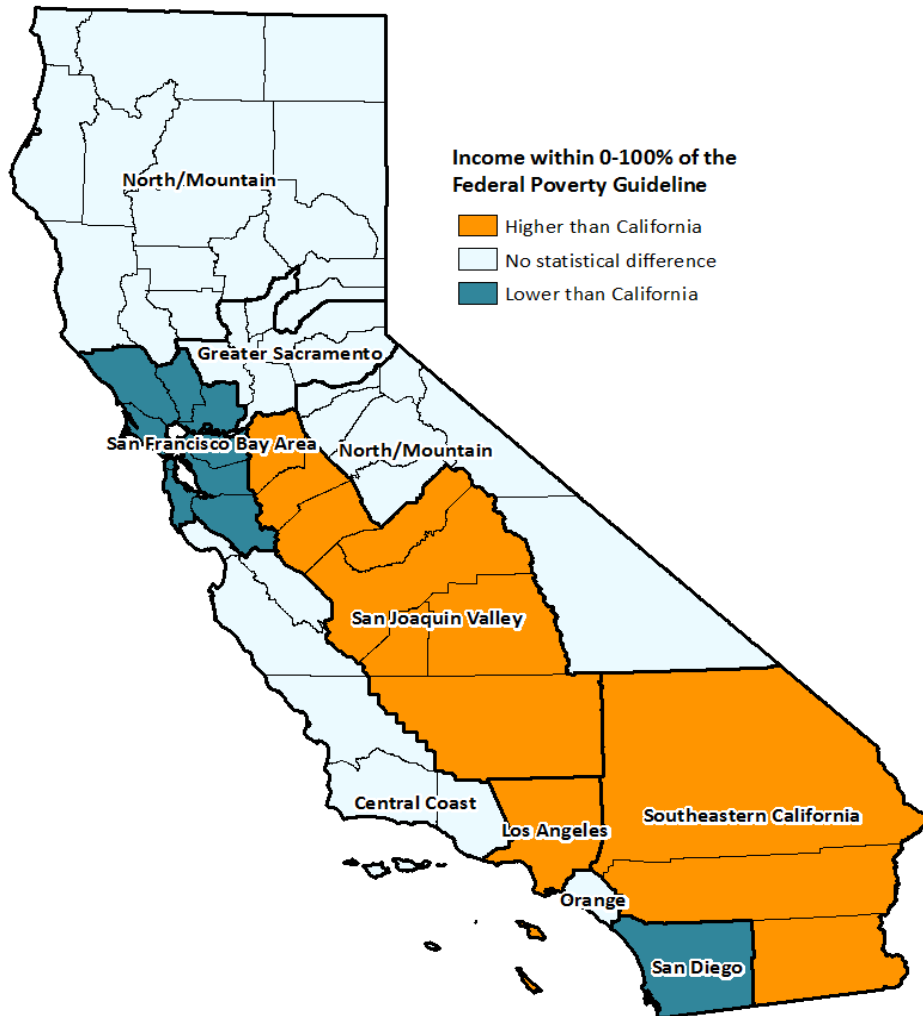
Imperial, Riverside, San Bernardino





# MIHA Regional Comparison 2012

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		43.4	41.5	- 45.3	198,900
Central Coast Region	♦	48.0	43.3	- 52.8	12,800
Greater Sacramento Region	♦	40.3	35.4	- 45.2	11,100
Los Angeles County	↑	50.0	44.3	- 55.8	58,200
North/Mountain Region	♦	45.1	37.6	- 52.7	5,700
Orange County	♦	37.7	31.9	- 43.5	13,400
San Diego County	↓	34.1	28.5	- 39.7	13,900
San Francisco Bay Area	↓	27.4	25.1	- 29.7	22,100
San Joaquin Valley	↑	56.3	53.0	- 59.5	33,900
Southeastern California	↑	47.9	43.9	- 51.9	27,800

- ↓ 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 county and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

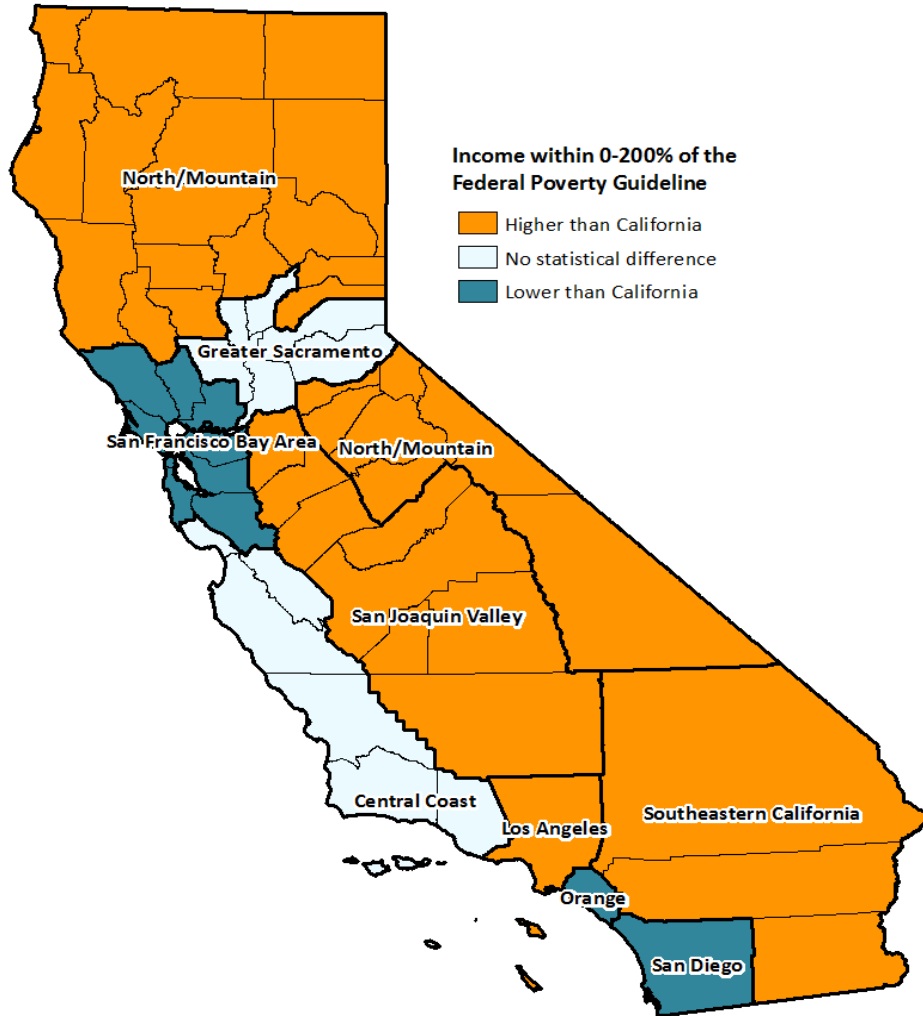
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San Joaquin Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare
Southeastern California	Imperial, Riverside, San Bernardino

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 Regional Comparison 2012

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		62.0	60.2	- 63.8	284,100
Central Coast Region	♦	65.6	61.1	- 70.0	17,500
Greater Sacramento Region	♦	61.3	56.6	- 66.0	16,900
Los Angeles County	↑	67.5	62.1	- 72.8	78,400
North/Mountain Region	↑	70.0	63.0	- 77.1	8,800
Orange County	↓	52.8	46.2	- 59.3	18,800
San Diego County	↓	53.9	47.8	- 60.1	21,900
San Francisco Bay Area	↓	42.5	39.8	- 45.3	34,300
San Joaquin Valley	↑	78.0	75.5	- 80.4	47,100
Southeastern California	↑	69.7	66.3	- 73.2	40,400

↓ 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 county and the rest of California

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 and the region in 2012. See the Technical Document for information on weighting, comparability to prior years and technical 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 Louis 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

# Statewide Snapshots

*“WIC has really helped me a lot and they're very friendly, they make me feel at home and I feel I can talk to them about anything.”*

— MIHA 2012 Respondent





# MIHA Snapshot, California by Maternal Age, 2012

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		495,500	7.0	5.8 - 8.2	34,500	74.0	72.0 - 76.1	366,900	19.0	17.2 - 20.8	94,100
<b>Prior Poor Birth Outcomes</b>												
Prior low birth weight or preterm delivery	8.8	7.6 - 9.9	42,900	4.8	2.1 - 7.5	1,600	8.7	7.3 - 10.1	31,500	10.5	7.8 - 13.2	9,800
Prior delivery by c-section	16.1	14.5 - 17.7	79,600	2.1	0.6 - 3.6	700	15.5	13.7 - 17.4	57,000	23.3	18.8 - 27.8	21,900
<b>Health Status</b>												
In good to excellent health before pregnancy	92.2	91.1 - 93.4	456,300	86.3	79.3 - 93.4	29,800	92.4	91.1 - 93.6	338,500	93.8	91.6 - 96.0	88,000
Chronic conditions before or during pregnancy												
Diabetes or gestational diabetes	11.3	10.0 - 12.7	55,400	4.4	2.2 - 6.7	1,500	10.9	9.4 - 12.4	39,400	15.5	12.0 - 19.1	14,400
Hypertension, preeclampsia or eclampsia	8.5	7.5 - 9.6	41,200	6.5	3.8 - 9.1	2,200	8.3	7.1 - 9.5	29,600	10.2	7.2 - 13.2	9,400
Asthma	8.0	6.9 - 9.1	38,700	14.2	6.9 - 21.5	4,900	8.1	6.9 - 9.4	29,000	5.3	3.6 - 7.0	4,800
<b>Nutrition and Weight</b>												
Daily folic acid use, month before pregnancy	34.0	31.9 - 36.1	168,100	24.3	16.5 - 32.0	8,400	31.8	29.5 - 34.1	116,500	46.1	40.7 - 51.5	43,200
Overweight before pregnancy	24.1	22.2 - 26.0	111,600	20.1	13.7 - 26.5	6,500	24.1	21.9 - 26.3	82,400	25.5	21.1 - 30.0	22,700
Obese before pregnancy	18.3	16.6 - 19.9	84,600	11.4	6.3 - 16.6	3,700	19.7	17.7 - 21.6	67,200	15.4	11.8 - 19.1	13,700
Inadequate weight gain during pregnancy	16.5	14.7 - 18.4	63,800	15.4	9.9 - 20.9	4,000	16.2	14.1 - 18.4	46,100	18.1	13.3 - 23.0	13,700
Excessive weight gain during pregnancy	42.5	40.0 - 45.1	164,200	44.8	33.8 - 55.8	11,700	43.5	40.6 - 46.4	123,600	38.2	32.3 - 44.2	28,900
Food insecurity during pregnancy	18.6	16.9 - 20.3	91,600	33.5	23.9 - 43.1	11,500	17.9	16.0 - 19.8	65,400	15.7	12.1 - 19.3	14,700
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>												
Physical or psychological IPV during pregnancy	8.8	7.5 - 10.2	43,400	25.3	17.0 - 33.6	8,700	7.8	6.3 - 9.3	28,500	6.7	4.2 - 9.3	6,300
Prenatal depressive symptoms	16.4	14.7 - 18.1	81,200	23.9	16.3 - 31.5	8,200	16.8	14.8 - 18.9	61,600	12.1	9.0 - 15.3	11,400
Postpartum depressive symptoms	16.0	14.3 - 17.6	78,800	24.7	15.6 - 33.8	8,500	15.6	13.7 - 17.5	56,900	14.2	10.8 - 17.7	13,300
<b>Hardships and Support during Pregnancy</b>												
Homeless or did not have a regular place to sleep	3.7	3.0 - 4.5	18,100	8.9	5.0 - 12.8	2,900	3.5	2.6 - 4.3	12,500	3.0	1.1 - 4.9	2,800
Moved due to problems paying rent or mortgage	7.5	6.4 - 8.6	36,600	12.5	5.2 - 19.9	4,200	8.0	6.7 - 9.2	28,700	4.0	2.4 - 5.7	3,700
Woman or partner lost job	17.3	15.7 - 18.9	84,200	17.5	10.0 - 25.1	5,900	18.0	16.2 - 19.8	64,700	14.7	10.8 - 18.6	13,600
Woman or partner had pay or hours cut back	14.3	12.8 - 15.8	69,500	10.9	5.7 - 16.0	3,700	14.6	12.8 - 16.3	52,300	14.7	11.2 - 18.3	13,600
Became separated or divorced	7.9	6.8 - 9.0	38,600	18.6	11.1 - 26.0	6,300	7.6	6.4 - 8.8	27,400	5.3	3.4 - 7.1	4,900
Had no practical or emotional support	5.5	4.4 - 6.5	26,900	3.4	1.4 - 5.5	1,200	5.5	4.2 - 6.8	20,100	6.0	4.0 - 7.9	5,600
<b>Substance Use</b>												
Any smoking, 3 months before pregnancy	11.9	10.6 - 13.3	58,700	18.5	10.9 - 26.1	6,100	12.5	10.9 - 14.1	45,500	7.6	4.8 - 10.3	7,100
Any smoking, 1st or 3rd trimester	8.3	7.1 - 9.6	41,000	14.0	6.5 - 21.4	4,600	8.6	7.2 - 10.0	31,300	5.4	3.1 - 7.7	5,000
Any smoking, postpartum	5.7	4.7 - 6.6	27,800	12.9	5.6 - 20.3	4,300	5.9	4.8 - 7.1	21,600	2.1	1.2 - 3.0	2,000
Any binge drinking, 3 months before pregnancy	13.9	12.5 - 15.3	68,000	10.0	6.0 - 13.9	3,200	14.8	13.2 - 16.4	53,700	11.9	8.4 - 15.3	11,100
Any alcohol use, 1st or 3rd trimester	20.9	19.1 - 22.6	102,000	15.5	8.0 - 23.1	5,100	20.7	18.7 - 22.7	75,100	23.4	18.7 - 28.1	21,800
<b>Infant Sleep and Breastfeeding</b>												
Placed infant on back to sleep	76.1	74.1 - 78.1	366,400	70.0	62.6 - 77.5	21,600	75.3	72.9 - 77.7	269,800	81.2	77.3 - 85.0	74,900
Intended to breastfeed, before birth	92.2	90.9 - 93.5	444,100	88.7	84.8 - 92.6	27,600	92.3	90.7 - 93.9	331,300	93.2	90.8 - 95.6	85,200
Intended to breastfeed exclusively, before birth	62.0	59.9 - 64.2	298,800	46.8	38.5 - 55.0	14,500	63.7	61.2 - 66.2	228,700	60.8	55.6 - 66.1	55,600
<b>Breastfeeding practices</b>												
Any breastfeeding, 1 month after delivery	82.7	81.0 - 84.4	393,200	72.0	65.1 - 78.8	22,300	82.7	80.7 - 84.7	293,400	86.1	82.3 - 90.0	77,500
Exclusive breastfeeding, 1 month after delivery	41.9	39.7 - 44.1	196,500	39.5	31.0 - 48.0	12,100	43.2	40.7 - 45.7	151,100	37.7	32.5 - 43.0	33,300
Any breastfeeding, 3 months after delivery	64.9	62.4 - 67.5	245,000	34.8	26.3 - 43.3	8,700	65.4	62.5 - 68.3	183,500	73.6	67.6 - 79.7	52,800
Exclusive breastfeeding, 3 months after delivery	26.5	24.3 - 28.7	98,600	9.3	5.7 - 12.9	2,300	27.3	24.8 - 29.9	75,600	29.0	23.4 - 34.6	20,600



# MIHA Snapshot, California by Maternal Age, 2012

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>Pregnancy Intention and Family Planning</b>												
Mistimed or unwanted pregnancy	30.9	28.8 - 33.0	152,500	55.2	46.0 - 64.4	18,900	31.4	28.9 - 33.9	114,600	20.2	16.1 - 24.3	18,900
Unsure of pregnancy intentions	12.9	11.3 - 14.4	63,500	23.6	14.9 - 32.3	8,100	11.4	9.8 - 12.9	41,500	14.8	10.7 - 18.9	13,900
Postpartum birth control use	89.8	88.1 - 91.5	395,800	85.9	78.5 - 93.3	24,700	89.7	87.8 - 91.7	295,600	91.6	88.1 - 95.0	75,500
<b>Service Utilization and Health Insurance Coverage</b>												
Had a usual source of pre-pregnancy care	72.0	70.1 - 74.0	356,600	65.8	57.6 - 74.1	22,700	70.7	68.4 - 72.9	259,000	79.7	75.7 - 83.6	74,900
Initiated prenatal care in 1st trimester †	88.0	86.6 - 89.4	430,000	75.0	68.1 - 81.8	25,500	88.5	86.8 - 90.2	320,700	90.8	88.0 - 93.7	83,800
Had a dental visit during pregnancy	42.1	40.0 - 44.3	208,300	35.8	26.6 - 44.9	12,300	39.7	37.3 - 42.2	145,400	53.7	48.4 - 59.1	50,500
Had a postpartum medical visit	88.3	87.0 - 89.7	434,500	72.7	65.0 - 80.5	25,100	88.5	86.9 - 90.0	323,200	93.5	91.3 - 95.8	86,200
Mom or infant needed but couldn't afford care postpartum	14.8	13.2 - 16.4	71,500	20.7	12.3 - 29.1	6,700	15.5	13.6 - 17.4	55,400	10.3	7.5 - 13.1	9,400
Participated in WIC during pregnancy	55.6	54.1 - 57.1	269,800	85.8	81.2 - 90.4	29,400	57.3	55.4 - 59.3	206,700	37.2	32.4 - 42.0	33,700
Received CalFresh (food stamps) during pregnancy	24.7	23.0 - 26.5	121,900	30.3	22.3 - 38.2	10,400	26.8	24.6 - 28.9	97,600	14.9	11.4 - 18.4	13,900
<b>Pre-pregnancy insurance</b>												
Medi-Cal	24.5	22.7 - 26.3	120,700	52.9	43.9 - 62.0	18,300	25.1	22.9 - 27.3	91,300	11.9	8.8 - 14.9	11,100
Uninsured	24.7	22.9 - 26.4	121,500	23.7	15.6 - 31.8	8,200	26.0	23.9 - 28.1	94,700	19.9	16.0 - 23.7	18,600
Private	47.0	45.2 - 48.7	231,300	18.3	11.1 - 25.5	6,300	44.9	42.7 - 47.0	163,400	65.7	61.1 - 70.3	61,600
<b>Prenatal insurance</b>												
Medi-Cal	49.8	48.2 - 51.5	246,200	83.3	78.2 - 88.5	28,800	51.9	49.8 - 54.0	189,700	29.6	25.2 - 34.0	27,800
Uninsured	1.7	1.2 - 2.1	8,200	3.1	0.8 - 5.3	1,100	1.4	0.9 - 1.8	5,000	2.3	0.7 - 3.9	2,200
Private	43.5	41.8 - 45.1	214,800	10.9	6.8 - 15.1	3,800	41.1	39.1 - 43.2	150,400	64.6	59.9 - 69.2	60,700
<b>Maternal postpartum insurance</b>												
Medi-Cal	34.6	32.8 - 36.5	169,700	69.0	60.6 - 77.5	23,500	35.6	33.3 - 37.8	128,800	18.5	14.5 - 22.4	17,300
Uninsured	16.7	15.2 - 18.1	81,600	16.5	8.6 - 24.3	5,600	17.4	15.7 - 19.2	63,100	13.8	10.7 - 16.8	12,900
Private	45.1	43.4 - 46.8	221,000	11.4	7.0 - 15.9	3,900	42.9	40.8 - 45.0	155,300	65.9	61.2 - 70.5	61,800
<b>Infant health insurance</b>												
Medi-Cal	49.2	47.4 - 51.0	237,400	80.9	73.0 - 88.8	25,100	51.4	49.2 - 53.5	184,500	30.2	25.6 - 34.8	27,800
Healthy Families	5.1	4.2 - 6.1	24,800	5.5	1.3 - 9.8	1,700	5.3	4.1 - 6.4	18,900	4.5	2.9 - 6.1	4,200
Uninsured	2.4	1.5 - 3.3	11,800	7.2	0.2 - 14.1	2,200	2.2	1.3 - 3.2	8,100	1.6	0.5 - 2.7	1,500
Private	40.7	39.0 - 42.4	196,200	5.1	2.0 - 8.3	1,600	38.2	36.2 - 40.3	137,300	62.2	57.3 - 67.0	57,200
<b>Maternal Demographics</b>												
Did not complete high school (or GED)	18.2	16.4 - 19.9	89,700	43.2	33.7 - 52.7	14,800	16.5	14.6 - 18.5	60,500	15.3	11.8 - 18.7	14,300
Unmarried	41.7	39.7 - 43.6	205,400	85.1	79.3 - 90.9	29,200	41.7	39.4 - 44.0	152,200	25.6	20.9 - 30.3	24,000
<b>Race/Ethnicity</b>												
Hispanic	50.1	48.2 - 52.0	242,700	77.0	70.8 - 83.1	26,200	50.4	48.2 - 52.7	181,200	38.8	33.8 - 43.8	35,200
Black	5.8	5.2 - 6.5	28,300	7.9	3.6 - 12.2	2,700	6.0	5.0 - 7.1	21,700	4.3	2.6 - 6.0	3,900
White	28.7	26.9 - 30.5	139,000	12.5	8.5 - 16.4	4,200	29.0	27.0 - 31.0	104,300	33.5	28.0 - 39.1	30,400
Asian/Pacific Islander	14.8	13.2 - 16.5	71,900	1.8	0.6 - 3.1	600	14.0	12.1 - 16.0	50,400	22.9	18.3 - 27.5	20,800
Born outside the U.S.	39.3	37.2 - 41.5	194,800	18.4	11.7 - 25.1	6,300	37.9	35.4 - 40.3	138,800	52.8	47.4 - 58.1	49,600
Speaks non-English language at home	30.8	28.8 - 32.8	150,100	22.7	15.5 - 29.9	7,800	30.5	28.1 - 32.8	110,000	35.3	30.2 - 40.5	32,300

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 2012. Prior poor birth outcomes are presented for all women. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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		495,500	50.1	48.2- 52.0	242,700	5.8	5.2- 6.5	28,300	28.7	26.9- 30.5	139,000	14.8	13.2- 16.5	71,900
<b>Prior Poor Birth Outcomes</b>															
Prior low birth weight or preterm delivery	8.8	7.6- 9.9	42,900	9.9	8.1- 11.8	23,700	13.2	8.4- 17.9	3,700	6.5	5.0- 8.0	8,900	7.4	4.1- 10.7	5,300
Prior delivery by c-section	16.1	14.5- 17.7	79,600	18.1	15.6- 20.7	44,000	15.7	10.5- 21.0	4,500	14.3	11.6- 16.9	19,800	14.0	9.7- 18.2	10,000
<b>Health Status</b>															
In good to excellent health before pregnancy	92.2	91.1- 93.4	456,300	88.5	86.4- 90.6	214,600	91.5	88.0- 95.0	25,900	97.4	96.5- 98.2	134,900	94.7	92.5- 97.0	68,000
Chronic conditions before or during pregnancy															
Diabetes or gestational diabetes	11.3	10.0- 12.7	55,400	12.2	10.1- 14.2	29,000	7.5	4.6- 10.5	2,100	6.6	5.2- 8.0	9,100	18.6	13.8- 23.3	13,200
Hypertension, preeclampsia or eclampsia	8.5	7.5- 9.6	41,200	7.2	5.7- 8.7	16,800	8.5	5.4- 11.6	2,400	10.3	8.2- 12.4	14,200	8.8	5.7- 11.8	6,200
Asthma	8.0	6.9- 9.1	38,700	6.9	5.2- 8.6	16,100	19.2	11.0- 27.4	5,400	8.9	7.3- 10.4	12,100	5.5	3.4- 7.5	3,800
<b>Nutrition and Weight</b>															
Daily folic acid use, month before pregnancy	34.0	31.9- 36.1	168,100	26.7	23.9- 29.5	64,600	29.7	21.4- 38.1	8,400	42.2	38.3- 46.2	58,600	44.4	38.0- 50.7	31,900
Overweight before pregnancy	24.1	22.2- 26.0	111,600	29.4	26.2- 32.6	63,200	25.1	18.9- 31.3	6,900	20.7	17.8- 23.5	28,400	14.9	10.6- 19.3	10,500
Obese before pregnancy	18.3	16.6- 19.9	84,600	22.6	20.0- 25.2	48,700	25.2	17.1- 33.4	7,000	15.0	12.5- 17.4	20,600	8.3	4.4- 12.1	5,800
Inadequate weight gain during pregnancy	16.5	14.7- 18.4	63,800	19.8	16.7- 22.9	34,400	14.8	6.4- 23.2	3,300	10.3	7.6- 13.0	11,900	19.3	14.4- 24.2	12,100
Excessive weight gain during pregnancy	42.5	40.0- 45.1	164,200	40.1	36.4- 43.9	69,700	45.9	34.4- 57.3	10,400	48.6	44.3- 52.9	56,400	35.8	28.8- 42.8	22,500
Food insecurity during pregnancy	18.6	16.9- 20.3	91,600	25.4	22.5- 28.3	61,300	25.9	15.2- 36.5	7,200	11.0	9.0- 13.0	15,200	8.6	6.0- 11.3	6,200
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>															
Physical or psychological IPV during pregnancy	8.8	7.5- 10.2	43,400	10.5	8.4- 12.6	25,300	15.2	4.7- 25.6	4,300	4.4	3.3- 5.5	6,100	9.4	5.5- 13.3	6,700
Prenatal depressive symptoms	16.4	14.7- 18.1	81,200	20.1	17.3- 22.9	48,700	23.8	13.5- 34.0	6,700	11.2	8.8- 13.5	15,500	11.2	7.9- 14.5	8,000
Postpartum depressive symptoms	16.0	14.3- 17.6	78,800	16.9	14.4- 19.4	40,900	24.2	13.9- 34.5	6,800	13.6	10.9- 16.2	18,800	14.7	10.4- 19.0	10,500
<b>Hardships and Support during Pregnancy</b>															
Homeless or did not have a regular place to sleep	3.7	3.0- 4.5	18,100	4.8	3.4- 6.2	11,200	8.4	4.5- 12.4	2,300	2.6	1.6- 3.6	3,600	0.8	0.1- 1.5	600
Moved due to problems paying rent or mortgage	7.5	6.4- 8.6	36,600	8.2	6.3- 10.1	19,400	8.6	5.2- 11.9	2,400	7.8	6.0- 9.6	10,700	4.0	2.4- 5.5	2,800
Woman or partner lost job	17.3	15.7- 18.9	84,200	21.2	18.5- 23.9	50,000	17.1	11.1- 23.0	4,700	14.1	11.5- 16.7	19,400	11.0	8.0- 13.9	7,800
Woman or partner had pay or hours cut back	14.3	12.8- 15.8	69,500	16.7	14.2- 19.1	39,400	16.3	10.0- 22.6	4,500	12.4	10.1- 14.7	17,100	9.9	6.8- 13.0	6,900
Became separated or divorced	7.9	6.8- 9.0	38,600	11.0	8.9- 13.1	26,100	13.1	8.5- 17.6	3,600	4.1	3.0- 5.2	5,600	2.8	1.6- 4.0	2,000
Had no practical or emotional support	5.5	4.4- 6.5	26,900	6.9	5.5- 8.2	16,600	9.6	0.0- 20.2	2,700	1.3	0.7- 1.9	1,800	6.9	3.5- 10.3	5,000
<b>Substance Use</b>															
Any smoking, 3 months before pregnancy	11.9	10.6- 13.3	58,700	9.2	7.3- 11.1	22,100	17.8	7.3- 28.3	4,900	18.0	15.2- 20.8	25,000	5.9	3.9- 7.9	4,200
Any smoking, 1st or 3rd trimester	8.3	7.1- 9.6	41,000	6.4	4.7- 8.1	15,300	16.3	5.8- 26.9	4,500	11.9	9.7- 14.2	16,600	3.3	1.9- 4.7	2,300
Any smoking, postpartum	5.7	4.7- 6.6	27,800	3.5	2.3- 4.8	8,500	13.7	3.0- 24.5	3,800	9.1	7.3- 10.8	12,600	2.3	1.2- 3.3	1,600
Any binge drinking, 3 months before pregnancy	13.9	12.5- 15.3	68,000	12.8	10.9- 14.8	30,500	9.8	5.3- 14.3	2,700	19.8	16.9- 22.8	27,400	8.5	5.4- 11.6	6,100
Any alcohol use, 1st or 3rd trimester	20.9	19.1- 22.6	102,000	15.7	13.2- 18.2	37,400	27.2	18.5- 35.9	7,500	32.7	28.9- 36.5	45,200	11.7	8.2- 15.2	8,400
<b>Infant Sleep and Breastfeeding</b>															
Placed infant on back to sleep	76.1	74.1- 78.1	366,400	73.7	70.6- 76.7	173,400	61.0	50.3- 71.7	16,800	81.3	78.4- 84.2	110,600	79.5	74.3- 84.6	55,000
Intended to breastfeed, before birth	92.2	90.9- 93.5	444,100	91.5	89.6- 93.4	214,900	84.0	73.3- 94.7	23,200	93.8	92.0- 95.6	126,900	94.0	91.3- 96.8	66,400
Intended to breastfeed exclusively, before birth	62.0	59.9- 64.2	298,800	53.3	50.0- 56.5	125,100	50.8	41.9- 59.6	14,000	79.0	75.8- 82.2	106,800	60.4	54.2- 66.6	42,700
<b>Breastfeeding practices</b>															
Any breastfeeding, 1 month after delivery	82.7	81.0- 84.4	393,200	80.0	77.3- 82.6	185,500	68.9	57.9- 79.9	18,800	86.4	83.9- 88.9	116,400	88.2	84.7- 91.7	60,300
Exclusive breastfeeding, 1 month after delivery	41.9	39.7- 44.1	196,500	38.4	35.2- 41.6	86,400	39.1	29.2- 49.0	10,600	53.3	49.3- 57.4	71,900	29.6	24.0- 35.2	20,400
Any breastfeeding, 3 months after delivery	64.9	62.4- 67.5	245,000	58.7	55.0- 62.5	110,300	47.4	35.1- 59.7	9,700	72.0	67.7- 76.4	73,900	76.9	71.2- 82.6	43,300
Exclusive breastfeeding, 3 months after delivery	26.5	24.3- 28.7	98,600	20.5	17.6- 23.5	37,300	15.6	10.1- 21.2	3,300	40.3	35.7- 44.8	41,400	22.0	16.2- 27.7	12,500



# MIHA Snapshot, California by Race/Ethnicity, 2012

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>Pregnancy Intention and Family Planning</b>															
Mistimed or unwanted pregnancy	30.9	28.8 - 33.0	152,500	38.2	34.9 - 41.5	92,300	45.4	34.9 - 55.9	12,700	20.8	18.0 - 23.6	28,800	21.3	15.8 - 26.8	15,200
Unsure of pregnancy intentions	12.9	11.3 - 14.4	63,500	13.1	10.8 - 15.3	31,600	19.0	12.4 - 25.6	5,300	10.9	8.3 - 13.6	15,100	13.4	8.7 - 18.0	9,600
Postpartum birth control use	89.8	88.1 - 91.5	395,800	92.3	90.2 - 94.3	201,300	87.4	80.7 - 94.1	20,900	89.6	87.0 - 92.2	113,700	82.3	75.2 - 89.4	49,000
<b>Service Utilization and Health Insurance Coverage</b>															
Had a usual source of pre-pregnancy care	72.0	70.1 - 74.0	356,600	68.2	65.2 - 71.2	165,300	70.4	61.8 - 79.0	19,900	79.4	76.8 - 82.1	110,300	71.7	65.7 - 77.7	51,500
Initiated prenatal care in 1st trimester †	88.0	86.6 - 89.4	430,000	86.5	84.3 - 88.7	206,300	78.4	69.7 - 87.2	21,800	91.8	90.1 - 93.5	126,700	89.7	85.3 - 94.0	63,600
Had a dental visit during pregnancy	42.1	40.0 - 44.3	208,300	36.2	33.0 - 39.3	87,500	34.9	26.0 - 43.9	9,900	51.8	47.9 - 55.7	71,900	45.0	38.6 - 51.3	32,200
Had a postpartum medical visit	88.3	87.0 - 89.7	434,500	86.3	84.0 - 88.6	207,900	82.3	75.8 - 88.8	23,300	90.9	89.0 - 92.7	125,900	91.9	89.0 - 94.8	65,000
Mom or infant needed but couldn't afford care postpartum	14.8	13.2 - 16.4	71,500	19.3	16.6 - 22.0	45,500	19.6	9.1 - 30.2	5,400	9.2	7.6 - 10.8	12,400	10.0	6.5 - 13.5	7,000
Participated in WIC during pregnancy	55.6	54.1 - 57.1	269,800	79.3	77.3 - 81.3	191,000	71.2	64.6 - 77.8	19,600	26.6	23.7 - 29.5	35,900	26.5	21.2 - 31.9	18,200
Received CalFresh (food stamps) during pregnancy	24.7	23.0 - 26.5	121,900	31.3	28.3 - 34.4	75,500	56.2	47.9 - 64.4	15,700	13.4	11.5 - 15.4	18,600	11.9	8.2 - 15.6	8,500
<b>Pre-pregnancy insurance</b>															
Medi-Cal	24.5	22.7 - 26.3	120,700	32.2	29.1 - 35.3	77,400	44.8	34.8 - 54.7	12,600	11.7	9.7 - 13.7	16,200	16.1	12.0 - 20.2	11,500
Uninsured	24.7	22.9 - 26.4	121,500	35.3	32.2 - 38.3	84,700	23.8	15.6 - 32.0	6,700	13.1	11.1 - 15.0	18,100	13.3	9.5 - 17.1	9,500
Private	47.0	45.2 - 48.7	231,300	29.5	26.8 - 32.3	71,000	27.5	21.1 - 33.9	7,700	69.5	66.5 - 72.5	96,400	68.6	63.4 - 73.9	49,200
<b>Prenatal insurance</b>															
Medi-Cal	49.8	48.2 - 51.5	246,200	69.0	66.3 - 71.7	166,800	68.6	61.9 - 75.3	19,400	26.5	23.7 - 29.3	36,800	24.4	19.9 - 28.9	17,500
Uninsured	1.7	1.2 - 2.1	8,200	2.3	1.5 - 3.2	5,600	*			0.7	0.3 - 1.0	900	1.5	0.1 - 2.8	1,000
Private	43.5	41.8 - 45.1	214,800	25.9	23.4 - 28.5	62,700	25.7	19.4 - 32.1	7,300	64.8	61.6 - 68.1	90,000	67.2	61.6 - 72.7	48,100
<b>Maternal postpartum insurance</b>															
Medi-Cal	34.6	32.8 - 36.5	169,700	45.5	42.3 - 48.7	108,300	64.7	57.5 - 71.9	18,200	19.5	17.0 - 22.0	27,000	17.1	13.0 - 21.2	12,300
Uninsured	16.7	15.2 - 18.1	81,600	25.0	22.3 - 27.7	59,400	7.2	3.8 - 10.6	2,000	8.3	6.5 - 10.0	11,500	9.1	6.0 - 12.2	6,500
Private	45.1	43.4 - 46.8	221,000	27.3	24.7 - 29.8	64,800	25.4	19.3 - 31.4	7,100	66.5	63.3 - 69.7	92,200	69.7	64.4 - 75.1	50,000
<b>Infant health insurance</b>															
Medi-Cal	49.2	47.4 - 51.0	237,400	68.6	65.8 - 71.4	161,200	66.9	59.0 - 74.9	18,600	26.3	23.5 - 29.2	35,800	23.4	19.0 - 27.9	16,500
Healthy Families	5.1	4.2 - 6.1	24,800	5.7	4.5 - 7.0	13,500	3.6	0.0 - 8.1	1,000	3.6	2.4 - 4.7	4,800	6.8	2.4 - 11.1	4,800
Uninsured	2.4	1.5 - 3.3	11,800	3.4	1.7 - 5.2	8,000	1.4	0.2 - 2.5	400	1.6	1.0 - 2.3	2,200	1.3	0.0 - 2.6	900
Private	40.7	39.0 - 42.4	196,200	21.4	19.1 - 23.6	50,200	25.3	18.8 - 31.8	7,000	63.1	59.8 - 66.5	85,800	66.5	60.7 - 72.2	46,700
<b>Maternal Demographics</b>															
<b>Age</b>															
15-19	7.0	5.8 - 8.2	34,500	10.8	8.5 - 13.1	26,200	9.5	4.1 - 14.9	2,700	3.1	2.1 - 4.0	4,200	0.9	0.3 - 1.4	600
20-34	74.0	72.0 - 76.1	366,900	74.7	71.8 - 77.5	181,200	76.5	69.0 - 84.1	21,700	75.0	71.1 - 79.0	104,300	70.2	64.5 - 75.9	50,400
35+	19.0	17.2 - 20.8	94,100	14.5	12.4 - 16.7	35,200	14.0	8.1 - 19.8	3,900	21.9	17.9 - 25.9	30,400	29.0	23.3 - 34.6	20,800
Did not complete high school (or GED)	18.2	16.4 - 19.9	89,700	31.5	28.3 - 34.6	76,200	9.1	6.1 - 12.0	2,600	4.5	3.4 - 5.6	6,300	4.3	2.3 - 6.3	3,100
Unmarried	41.7	39.7 - 43.6	205,400	54.9	51.7 - 58.0	132,300	69.3	62.6 - 76.0	19,500	25.4	22.3 - 28.5	35,200	17.6	13.3 - 21.9	12,600
Born outside the U.S.	39.3	37.2 - 41.5	194,800	47.6	44.4 - 50.8	115,400	9.6	5.3 - 13.9	2,700	12.4	9.0 - 15.8	17,200	76.8	72.1 - 81.6	55,200
Speaks non-English language at home	30.8	28.8 - 32.8	150,100	43.4	40.3 - 46.6	104,700	3.3	1.0 - 5.6	900	7.4	4.3 - 10.5	10,200	47.5	40.8 - 54.2	31,800
<b>Income as a percent of the Federal Poverty Guideline</b>															
0-100%	43.4	41.5 - 45.3	198,900	62.0	59.0 - 64.9	136,300	67.8	60.4 - 75.2	17,500	21.2	18.5 - 23.9	28,000	18.6	14.5 - 22.7	12,500
101-200%	18.6	16.9 - 20.3	85,200	21.0	18.5 - 23.5	46,100	15.9	9.8 - 21.9	4,100	16.2	13.6 - 18.9	21,500	17.4	11.9 - 23.0	11,700
>200%	38.0	36.2 - 39.8	174,200	17.1	14.9 - 19.2	37,600	16.3	11.6 - 21.1	4,200	62.6	59.1 - 66.0	82,700	64.0	57.8 - 70.1	43,100

\* Data are not presented because fewer than 10 women reported. † In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 2012. Prior poor birth outcomes are presented for all women. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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		495,500	43.4	41.5 - 45.3	198,900	18.6	16.9 - 20.3	85,200	38.0	36.2 - 39.8	174,200
<b>Prior Poor Birth Outcomes</b>												
Prior low birth weight or preterm delivery	8.8	7.6 - 9.9	42,900	11.3	9.2 - 13.4	22,100	10.1	7.3 - 13.0	8,600	5.7	4.1 - 7.3	9,900
Prior delivery by c-section	16.1	14.5 - 17.7	79,600	18.2	15.4 - 21.1	36,300	17.1	13.4 - 20.8	14,600	13.6	11.1 - 16.0	23,600
<b>Health Status</b>												
In good to excellent health before pregnancy	92.2	91.1 - 93.4	456,300	87.1	84.9 - 89.3	173,100	93.1	90.8 - 95.4	79,200	98.4	97.5 - 99.2	170,900
Chronic conditions before or during pregnancy												
Diabetes or gestational diabetes	11.3	10.0 - 12.7	55,400	12.5	10.1 - 14.8	24,300	11.1	8.4 - 13.8	9,300	9.5	7.6 - 11.5	16,400
Hypertension, preeclampsia or eclampsia	8.5	7.5 - 9.6	41,200	9.6	7.7 - 11.4	18,300	7.1	5.3 - 8.9	6,000	8.1	6.3 - 9.9	13,900
Asthma	8.0	6.9 - 9.1	38,700	10.1	8.1 - 12.1	19,300	6.6	4.4 - 8.8	5,500	6.1	4.8 - 7.4	10,500
<b>Nutrition and Weight</b>												
Daily folic acid use, month before pregnancy	34.0	31.9 - 36.1	168,100	21.8	18.9 - 24.6	43,200	34.3	29.3 - 39.3	29,200	48.8	45.1 - 52.5	84,900
Overweight before pregnancy	24.1	22.2 - 26.0	111,600	27.5	24.1 - 30.9	49,400	27.1	22.8 - 31.4	22,300	19.4	16.7 - 22.2	33,300
Obese before pregnancy	18.3	16.6 - 19.9	84,600	23.6	20.6 - 26.6	42,400	22.3	18.2 - 26.4	18,400	12.0	9.8 - 14.2	20,500
Inadequate weight gain during pregnancy	16.5	14.7 - 18.4	63,800	19.7	16.2 - 23.1	27,800	16.9	12.3 - 21.4	11,400	13.9	11.1 - 16.7	21,000
Excessive weight gain during pregnancy	42.5	40.0 - 45.1	164,200	42.9	38.6 - 47.3	60,800	44.5	38.8 - 50.1	30,200	42.5	38.5 - 46.4	64,100
Food insecurity during pregnancy	18.6	16.9 - 20.3	91,600	33.2	29.7 - 36.6	65,300	16.1	12.6 - 19.5	13,700	2.6	1.7 - 3.5	4,500
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>												
Physical or psychological IPV during pregnancy	8.8	7.5 - 10.2	43,400	13.1	10.5 - 15.6	25,900	7.3	4.8 - 9.8	6,200	3.9	2.2 - 5.6	6,800
Prenatal depressive symptoms	16.4	14.7 - 18.1	81,200	24.3	21.0 - 27.6	48,300	17.1	13.5 - 20.8	14,600	7.1	5.4 - 8.8	12,400
Postpartum depressive symptoms	16.0	14.3 - 17.6	78,800	19.6	16.7 - 22.6	38,900	18.2	14.4 - 22.1	15,500	10.7	8.4 - 12.9	18,500
<b>Hardships and Support during Pregnancy</b>												
Homeless or did not have a regular place to sleep	3.7	3.0 - 4.5	18,100	7.6	5.9 - 9.4	14,700	1.0	0.4 - 1.7	900	0.5	0.1 - 0.9	900
Moved due to problems paying rent or mortgage	7.5	6.4 - 8.6	36,600	12.4	10.1 - 14.7	23,900	7.1	4.6 - 9.7	5,900	2.7	1.8 - 3.6	4,700
Woman or partner lost job	17.3	15.7 - 18.9	84,200	25.9	22.8 - 29.0	49,900	17.2	13.4 - 21.1	14,400	8.0	6.1 - 9.9	13,900
Woman or partner had pay or hours cut back	14.3	12.8 - 15.8	69,500	18.7	16.1 - 21.4	36,100	16.1	12.3 - 20.0	13,400	8.7	6.8 - 10.5	15,000
Became separated or divorced	7.9	6.8 - 9.0	38,600	13.7	11.4 - 16.0	26,600	6.5	4.7 - 8.4	5,500	1.5	0.9 - 2.1	2,600
Had no practical or emotional support	5.5	4.4 - 6.5	26,900	8.9	6.7 - 11.1	17,600	6.2	3.5 - 8.8	5,300	1.3	0.6 - 2.1	2,300
<b>Substance Use</b>												
Any smoking, 3 months before pregnancy	11.9	10.6 - 13.3	58,700	16.4	13.8 - 19.0	32,100	12.2	9.3 - 15.1	10,400	7.1	5.3 - 8.8	12,300
Any smoking, 1st or 3rd trimester	8.3	7.1 - 9.6	41,000	12.4	9.9 - 14.9	24,300	8.4	6.2 - 10.5	7,100	3.6	2.3 - 4.9	6,200
Any smoking, postpartum	5.7	4.7 - 6.6	27,800	8.8	6.9 - 10.8	17,200	5.4	3.4 - 7.3	4,600	1.8	1.1 - 2.4	3,000
Any binge drinking, 3 months before pregnancy	13.9	12.5 - 15.3	68,000	11.5	9.5 - 13.5	22,300	15.8	12.3 - 19.3	13,400	16.6	14.0 - 19.1	28,800
Any alcohol use, 1st or 3rd trimester	20.9	19.1 - 22.6	102,000	15.2	12.5 - 17.8	29,600	15.0	12.2 - 17.9	12,700	30.3	26.9 - 33.7	52,300
<b>Infant Sleep and Breastfeeding</b>												
Placed infant on back to sleep	76.1	74.1 - 78.1	366,400	67.8	64.2 - 71.5	130,100	77.1	73.0 - 81.2	64,800	84.6	81.9 - 87.4	145,100
Intended to breastfeed, before birth	92.2	90.9 - 93.5	444,100	87.8	85.0 - 90.6	168,200	93.0	90.4 - 95.5	77,800	96.7	95.5 - 97.9	165,800
Intended to breastfeed exclusively, before birth	62.0	59.9 - 64.2	298,800	51.0	47.4 - 54.5	97,600	63.3	58.6 - 68.0	52,900	74.7	71.4 - 78.0	128,000
<b>Breastfeeding practices</b>												
Any breastfeeding, 1 month after delivery	82.7	81.0 - 84.4	393,200	74.9	71.5 - 78.2	142,000	82.3	78.7 - 86.0	67,900	90.5	88.5 - 92.5	154,100
Exclusive breastfeeding, 1 month after delivery	41.9	39.7 - 44.1	196,500	36.7	33.3 - 40.2	67,600	41.1	36.2 - 45.9	33,500	47.9	44.1 - 51.7	81,100
Any breastfeeding, 3 months after delivery	64.9	62.4 - 67.5	245,000	51.5	47.3 - 55.8	78,600	66.9	61.4 - 72.4	44,100	80.5	76.9 - 84.2	104,400
Exclusive breastfeeding, 3 months after delivery	26.5	24.3 - 28.7	98,600	17.8	14.8 - 20.8	26,300	27.2	22.1 - 32.4	17,600	37.3	33.1 - 41.4	48,700



# MIHA Snapshot, California by Income, 2012

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>Pregnancy Intention and Family Planning</b>												
Mistimed or unwanted pregnancy	30.9	28.8 - 33.0	152,500	41.5	37.8 - 45.1	82,100	32.4	28.0 - 36.9	27,300	17.1	14.3 - 20.0	29,800
Unsure of pregnancy intentions	12.9	11.3 - 14.4	63,500	17.8	15.0 - 20.7	35,300	11.9	8.7 - 15.1	10,000	7.4	5.5 - 9.3	12,900
Postpartum birth control use	89.8	88.1 - 91.5	395,800	90.5	87.9 - 93.1	156,400	92.3	89.3 - 95.3	74,200	88.4	85.4 - 91.4	138,000
<b>Service Utilization and Health Insurance Coverage</b>												
Had a usual source of pre-pregnancy care	72.0	70.1 - 74.0	356,600	63.8	60.5 - 67.2	126,900	65.3	60.6 - 70.1	55,700	85.6	82.9 - 88.2	149,000
Initiated prenatal care in 1st trimester †	88.0	86.6 - 89.4	430,000	81.0	78.2 - 83.8	158,000	90.2	87.9 - 92.5	76,000	96.0	94.1 - 97.9	165,900
Had a dental visit during pregnancy	42.1	40.0 - 44.3	208,300	31.3	27.9 - 34.7	61,900	31.0	26.5 - 35.5	26,400	60.4	56.7 - 64.0	105,000
Had a postpartum medical visit	88.3	87.0 - 89.7	434,500	81.1	78.5 - 83.8	159,600	90.6	87.9 - 93.4	77,200	96.0	94.7 - 97.3	166,800
Mom or infant needed but couldn't afford care postpartum	14.8	13.2 - 16.4	71,500	21.7	18.5 - 24.8	41,700	19.1	15.0 - 23.2	16,000	4.6	3.5 - 5.8	8,000
Participated in WIC during pregnancy	55.6	54.1 - 57.1	269,800	87.5	85.8 - 89.3	174,000	66.5	61.9 - 71.2	56,700	8.2	6.4 - 10.1	14,400
Received CalFresh (food stamps) during pregnancy	24.7	23.0 - 26.5	121,900	49.9	46.4 - 53.4	98,500	14.8	11.2 - 18.5	12,600	0.9	0.4 - 1.4	1,600
Pre-pregnancy insurance												
Medi-Cal	24.5	22.7 - 26.3	120,700	47.3	43.8 - 50.9	93,200	17.4	13.8 - 21.1	14,800	1.1	0.6 - 1.5	1,900
Uninsured	24.7	22.9 - 26.4	121,500	37.8	34.3 - 41.3	74,500	31.3	26.9 - 35.6	26,600	6.0	4.3 - 7.8	10,500
Private	47.0	45.2 - 48.7	231,300	12.2	10.0 - 14.4	24,100	44.7	39.8 - 49.5	38,000	89.1	87.0 - 91.2	155,000
Prenatal insurance												
Medi-Cal	49.8	48.2 - 51.5	246,200	86.5	84.2 - 88.8	171,100	51.6	46.8 - 56.4	44,000	5.0	3.7 - 6.2	8,700
Uninsured	1.7	1.2 - 2.1	8,200	3.1	2.0 - 4.2	6,200	1.3	0.6 - 2.0	1,100	0.2	0.0 - 0.3	300
Private	43.5	41.8 - 45.1	214,800	8.9	6.9 - 10.8	17,500	36.6	31.8 - 41.4	31,200	88.3	86.2 - 90.4	153,800
Maternal postpartum insurance												
Medi-Cal	34.6	32.8 - 36.5	169,700	64.4	61.1 - 67.8	126,500	29.1	24.8 - 33.5	24,500	1.9	1.4 - 2.5	3,400
Uninsured	16.7	15.2 - 18.1	81,600	24.7	21.7 - 27.7	48,500	21.6	18.2 - 25.1	18,200	4.6	3.2 - 6.1	8,100
Private	45.1	43.4 - 46.8	221,000	9.0	7.1 - 10.9	17,700	41.2	36.4 - 46.1	34,700	89.8	87.9 - 91.6	156,300
Infant health insurance												
Medi-Cal	49.2	47.4 - 51.0	237,400	85.7	83.1 - 88.2	164,600	53.5	48.6 - 58.4	44,600	4.6	3.4 - 5.8	7,900
Healthy Families	5.1	4.2 - 6.1	24,800	4.5	3.2 - 5.8	8,700	9.7	6.0 - 13.5	8,100	4.2	2.9 - 5.5	7,300
Uninsured	2.4	1.5 - 3.3	11,800	3.4	1.5 - 5.2	6,500	2.2	1.3 - 3.0	1,800	0.8	0.4 - 1.3	1,500
Private	40.7	39.0 - 42.4	196,200	6.0	4.4 - 7.5	11,500	28.7	24.1 - 33.3	23,900	87.1	85.0 - 89.1	149,900
<b>Maternal Demographics</b>												
Did not complete high school (or GED)	18.2	16.4 - 19.9	89,700	33.1	29.7 - 36.5	65,700	13.9	10.2 - 17.6	11,800	1.4	0.5 - 2.4	2,500
Unmarried	41.7	39.7 - 43.6	205,400	68.1	65.0 - 71.2	134,900	36.8	32.2 - 41.4	31,200	13.1	10.7 - 15.5	22,700
Race/Ethnicity												
Hispanic	50.1	48.2 - 52.0	242,700	69.6	66.9 - 72.4	136,300	55.0	50.1 - 59.9	46,100	22.4	19.4 - 25.3	37,600
Black	5.8	5.2 - 6.5	28,300	8.9	7.2 - 10.7	17,500	4.9	3.1 - 6.7	4,100	2.5	1.8 - 3.2	4,200
White	28.7	26.9 - 30.5	139,000	14.3	12.3 - 16.3	28,000	25.6	21.6 - 29.6	21,500	49.2	45.4 - 53.0	82,700
Asian/Pacific Islander	14.8	13.2 - 16.5	71,900	6.4	5.0 - 7.8	12,500	14.0	9.6 - 18.4	11,700	25.6	22.0 - 29.2	43,100
Born outside the U.S.	39.3	37.2 - 41.5	194,800	42.6	39.2 - 46.0	84,600	44.2	39.2 - 49.1	37,600	31.1	27.3 - 34.9	54,100
Speaks non-English language at home	30.8	28.8 - 32.8	150,100	39.3	35.9 - 42.7	77,300	33.4	28.6 - 38.1	27,900	17.8	14.4 - 21.3	30,400

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 2012. Prior poor birth outcomes are presented for all women. See the Technical Document for information on weighting, comparability to prior years and technical 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, 2012

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		495,500	49.8	48.2 - 51.5	246,200	1.7	1.2 - 2.1	8,200	43.5	41.8 - 45.1	214,800
<b>Prior Poor Birth Outcomes</b>												
Prior low birth weight or preterm delivery	8.8	7.6 - 9.9	42,900	9.8	8.1 - 11.5	23,800	13.8	5.4 - 22.2	1,100	6.7	5.2 - 8.3	14,400
Prior delivery by c-section	16.1	14.5 - 17.7	79,600	18.1	15.6 - 20.6	44,500	18.8	7.6 - 30.1	1,600	14.3	12.0 - 16.5	30,600
<b>Health Status</b>												
In good to excellent health before pregnancy	92.2	91.1 - 93.4	456,300	88.5	86.5 - 90.5	217,700	80.1	67.1 - 93.2	6,600	96.6	95.4 - 97.8	207,000
Chronic conditions before or during pregnancy												
Diabetes or gestational diabetes	11.3	10.0 - 12.7	55,400	12.2	10.3 - 14.1	29,600	5.6	0.0 - 11.2	400	10.8	8.8 - 12.7	22,900
Hypertension, preeclampsia or eclampsia	8.5	7.5 - 9.6	41,200	8.8	7.4 - 10.3	21,000	10.8	4.3 - 17.2	900	8.1	6.5 - 9.7	17,100
Asthma	8.0	6.9 - 9.1	38,700	9.5	7.7 - 11.4	22,700	5.6	0.6 - 10.7	400	6.9	5.5 - 8.3	14,600
<b>Nutrition and Weight</b>												
Daily folic acid use, month before pregnancy	34.0	31.9 - 36.1	168,100	23.2	20.6 - 25.7	57,000	20.0	10.6 - 29.3	1,600	45.9	42.5 - 49.4	98,500
Overweight before pregnancy	24.1	22.2 - 26.0	111,600	26.3	23.4 - 29.2	57,700	19.6	7.7 - 31.4	1,400	22.1	19.5 - 24.8	46,600
Obese before pregnancy	18.3	16.6 - 19.9	84,600	23.1	20.5 - 25.7	50,700	18.9	9.0 - 28.8	1,400	14.2	12.0 - 16.4	29,900
Inadequate weight gain during pregnancy	16.5	14.7 - 18.4	63,800	20.0	16.9 - 23.1	35,000	18.1	6.6 - 29.7	1,000	13.3	10.9 - 15.8	24,600
Excessive weight gain during pregnancy	42.5	40.0 - 45.1	164,200	42.1	38.4 - 45.9	73,600	47.5	28.6 - 66.5	2,500	42.9	39.2 - 46.6	79,000
Food insecurity during pregnancy	18.6	16.9 - 20.3	91,600	30.1	27.1 - 33.1	73,600	35.1	20.6 - 49.6	2,900	5.8	4.6 - 7.0	12,400
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>												
Physical or psychological IPV during pregnancy	8.8	7.5 - 10.2	43,400	12.6	10.3 - 14.9	30,900	18.6	5.5 - 31.6	1,500	4.0	2.7 - 5.4	8,700
Prenatal depressive symptoms	16.4	14.7 - 18.1	81,200	22.3	19.5 - 25.2	54,800	37.4	23.2 - 51.5	3,100	9.4	7.5 - 11.2	20,100
Postpartum depressive symptoms	16.0	14.3 - 17.6	78,800	19.4	16.7 - 22.0	47,600	20.4	10.6 - 30.2	1,700	12.0	9.8 - 14.1	25,600
<b>Hardships and Support during Pregnancy</b>												
Homeless or did not have a regular place to sleep	3.7	3.0 - 4.5	18,100	6.0	4.6 - 7.4	14,300	13.4	4.5 - 22.3	1,100	0.9	0.3 - 1.5	2,000
Moved due to problems paying rent or mortgage	7.5	6.4 - 8.6	36,600	11.1	9.1 - 13.1	26,700	9.5	3.4 - 15.7	800	3.2	2.2 - 4.1	6,700
Woman or partner lost job	17.3	15.7 - 18.9	84,200	24.2	21.5 - 26.8	57,700	25.8	12.5 - 39.0	2,100	10.0	8.0 - 12.0	21,300
Woman or partner had pay or hours cut back	14.3	12.8 - 15.8	69,500	18.6	16.2 - 21.0	44,300	15.3	2.4 - 28.1	1,200	9.9	8.1 - 11.8	21,200
Became separated or divorced	7.9	6.8 - 9.0	38,600	12.8	10.7 - 14.9	30,800	9.6	2.6 - 16.5	800	2.4	1.6 - 3.2	5,200
Had no practical or emotional support	5.5	4.4 - 6.5	26,900	7.9	6.1 - 9.7	19,200	8.0	2.7 - 13.2	700	2.8	1.6 - 4.0	6,000
<b>Substance Use</b>												
Any smoking, 3 months before pregnancy	11.9	10.6 - 13.3	58,700	15.6	13.3 - 17.9	37,900	16.3	7.1 - 25.6	1,300	7.9	6.2 - 9.6	16,900
Any smoking, 1st or 3rd trimester	8.3	7.1 - 9.6	41,000	11.8	9.6 - 14.0	28,700	15.4	6.3 - 24.6	1,300	4.2	2.9 - 5.5	9,000
Any smoking, postpartum	5.7	4.7 - 6.6	27,800	8.6	6.8 - 10.4	20,900	5.6	2.2 - 9.0	500	2.2	1.5 - 3.0	4,800
Any binge drinking, 3 months before pregnancy	13.9	12.5 - 15.3	68,000	11.7	9.9 - 13.4	28,200	14.8	5.4 - 24.2	1,200	15.8	13.5 - 18.1	33,800
Any alcohol use, 1st or 3rd trimester	20.9	19.1 - 22.6	102,000	15.0	12.7 - 17.2	36,400	16.0	6.6 - 25.5	1,300	27.7	24.6 - 30.7	58,800
<b>Infant Sleep and Breastfeeding</b>												
Placed infant on back to sleep	76.1	74.1 - 78.1	366,400	70.0	66.9 - 73.2	166,600	70.5	58.9 - 82.2	5,400	82.9	80.3 - 85.5	174,300
Intended to breastfeed, before birth	92.2	90.9 - 93.5	444,100	89.0	86.7 - 91.3	211,500	84.7	74.4 - 94.9	6,500	96.0	94.9 - 97.0	201,900
Intended to breastfeed exclusively, before birth	62.0	59.9 - 64.2	298,800	53.7	50.5 - 56.9	127,600	36.3	22.5 - 50.2	2,800	71.7	68.6 - 74.8	150,800
<b>Breastfeeding practices</b>												
Any breastfeeding, 1 month after delivery	82.7	81.0 - 84.4	393,200	77.2	74.4 - 80.0	181,400	82.1	73.5 - 90.8	6,200	88.5	86.5 - 90.5	183,500
Exclusive breastfeeding, 1 month after delivery	41.9	39.7 - 44.1	196,500	38.3	35.2 - 41.3	87,500	32.0	17.7 - 46.3	2,300	45.9	42.5 - 49.3	95,000
Any breastfeeding, 3 months after delivery	64.9	62.4 - 67.5	245,000	54.7	51.0 - 58.5	105,000	53.8	36.4 - 71.2	3,200	76.6	73.1 - 80.0	121,500
Exclusive breastfeeding, 3 months after delivery	26.5	24.3 - 28.7	98,600	19.3	16.7 - 21.9	36,000	17.6	2.6 - 32.7	1,000	35.0	31.2 - 38.7	55,700



# MIHA Snapshot, California by Prenatal Health Insurance, 2012

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>Pregnancy Intention and Family Planning</b>												
Mistimed or unwanted pregnancy	30.9	28.8 - 33.0	152,500	40.6	37.4 - 43.9	99,400	40.6	26.9 - 54.2	3,300	20.2	17.5 - 23.0	43,300
Unsure of pregnancy intentions	12.9	11.3 - 14.4	63,500	15.7	13.3 - 18.0	38,300	20.4	6.9 - 33.9	1,700	9.8	7.6 - 12.1	21,100
Postpartum birth control use	89.8	88.1 - 91.5	395,800	91.5	89.4 - 93.6	199,100	81.2	67.1 - 95.2	6,000	88.5	85.7 - 91.2	169,400
<b>Service Utilization and Health Insurance Coverage</b>												
Had a usual source of pre-pregnancy care	72.0	70.1 - 74.0	356,600	60.3	57.2 - 63.3	148,300	41.6	28.2 - 55.0	3,400	87.0	84.7 - 89.4	186,800
Initiated prenatal care in 1st trimester †	88.0	86.6 - 89.4	430,000	83.3	81.0 - 85.6	201,200	60.9	47.0 - 74.8	4,900	94.3	92.6 - 96.1	201,100
Had a dental visit during pregnancy	42.1	40.0 - 44.3	208,300	30.5	27.5 - 33.4	74,800	31.7	19.0 - 44.4	2,500	56.3	52.9 - 59.7	120,800
Had a postpartum medical visit	88.3	87.0 - 89.7	434,500	82.6	80.3 - 85.0	201,800	59.5	45.7 - 73.4	4,900	95.4	94.1 - 96.7	204,200
Mom or infant needed but couldn't afford care postpartum	14.8	13.2 - 16.4	71,500	22.2	19.4 - 25.0	53,000	30.5	18.7 - 42.4	2,400	5.9	4.4 - 7.3	12,300
Participated in WIC during pregnancy	55.6	54.1 - 57.1	269,800	87.5	86.1 - 88.9	215,300	56.7	42.9 - 70.5	4,600	19.1	16.7 - 21.6	39,300
Received CalFresh (food stamps) during pregnancy	24.7	23.0 - 26.5	121,900	46.1	43.0 - 49.3	112,700	16.0	8.0 - 24.0	1,300	2.9	1.7 - 4.1	6,200
<b>Pre-pregnancy insurance</b>												
Medi-Cal	24.5	22.7 - 26.3	120,700	48.2	45.0 - 51.3	117,400	8.8	2.9 - 14.7	700	0.7	0.0 - 1.4	1,600
Uninsured	24.7	22.9 - 26.4	121,500	42.5	39.4 - 45.6	103,500	85.2	77.8 - 92.5	7,000	1.9	1.2 - 2.7	4,200
Private	47.0	45.2 - 48.7	231,300	7.5	5.9 - 9.1	18,300	*			96.9	95.8 - 98.0	207,800
<b>Maternal postpartum insurance</b>												
Medi-Cal	34.6	32.8 - 36.5	169,700	66.8	63.9 - 69.6	161,500	32.6	20.1 - 45.0	2,700	2.3	1.3 - 3.2	4,900
Uninsured	16.7	15.2 - 18.1	81,600	27.8	25.1 - 30.6	67,300	62.9	50.0 - 75.7	5,200	1.6	1.1 - 2.1	3,500
Private	45.1	43.4 - 46.8	221,000	4.5	3.6 - 5.5	10,900	*			95.8	94.7 - 96.9	205,700
<b>Infant health insurance</b>												
Medi-Cal	49.2	47.4 - 51.0	237,400	89.1	87.0 - 91.3	212,300	67.1	54.0 - 80.3	5,100	8.0	6.4 - 9.6	16,900
Healthy Families	5.1	4.2 - 6.1	24,800	4.5	3.3 - 5.7	10,800	*			2.7	1.5 - 3.9	5,600
Uninsured	2.4	1.5 - 3.3	11,800	3.1	1.4 - 4.8	7,400	25.1	12.5 - 37.6	1,900	1.0	0.6 - 1.4	2,100
Private	40.7	39.0 - 42.4	196,200	3.0	2.1 - 3.9	7,200	3.9	0.8 - 6.9	300	88.0	86.0 - 90.0	185,800
<b>Maternal Demographics</b>												
<b>Age</b>												
15-19	7.0	5.8 - 8.2	34,500	11.7	9.4 - 14.0	28,800	12.8	3.8 - 21.8	1,100	1.8	1.1 - 2.4	3,800
20-34	74.0	72.0 - 76.1	366,900	77.0	74.3 - 79.8	189,700	60.9	46.3 - 75.5	5,000	70.0	66.7 - 73.3	150,400
35+	19.0	17.2 - 20.8	94,100	11.3	9.4 - 13.2	27,800	26.3	11.8 - 40.8	2,200	28.2	25.0 - 31.5	60,700
<b>Did not complete high school (or GED)</b>												
Unmarried	18.2	16.4 - 19.9	89,700	31.3	28.2 - 34.3	76,700	37.2	23.0 - 51.4	3,100	3.8	2.4 - 5.3	8,200
<b>Race/Ethnicity</b>												
Hispanic	41.7	39.7 - 43.6	205,400	64.6	61.8 - 67.5	158,100	52.9	38.5 - 67.2	4,400	17.9	15.4 - 20.4	38,400
Black	50.1	48.2 - 52.0	242,700	68.9	66.5 - 71.4	166,800	69.4	57.1 - 81.7	5,600	30.0	27.0 - 33.0	62,700
White	5.8	5.2 - 6.5	28,300	8.0	6.6 - 9.4	19,400	*			3.5	2.7 - 4.3	7,300
Asian/Pacific Islander	28.7	26.9 - 30.5	139,000	15.2	13.5 - 16.9	36,800	11.7	5.5 - 17.9	900	43.1	39.7 - 46.5	90,000
Born outside the U.S.	14.8	13.2 - 16.5	71,900	7.2	5.8 - 8.6	17,500	12.8	2.1 - 23.5	1,000	23.0	19.9 - 26.2	48,100
<b>Speaks non-English language at home</b>												
Income as a percent of the Federal Poverty Guideline	39.3	37.2 - 41.5	194,800	44.4	41.4 - 47.4	109,100	66.6	54.6 - 78.6	5,500	33.8	30.4 - 37.2	72,600
0-100%	30.8	28.8 - 32.8	150,100	40.2	37.2 - 43.2	97,500	46.2	32.0 - 60.5	3,800	20.6	17.5 - 23.7	43,400
101-200%	43.4	41.5 - 45.3	198,900	76.5	74.0 - 78.9	171,100	81.9	73.3 - 90.5	6,200	8.7	6.8 - 10.5	17,500
>200%	18.6	16.9 - 20.3	85,200	19.7	17.4 - 21.9	44,000	14.5	6.5 - 22.5	1,100	15.4	12.9 - 17.9	31,200
	38.0	36.2 - 39.8	174,200	3.9	2.9 - 4.9	8,700	3.6	0.9 - 6.2	300	75.9	73.1 - 78.8	153,800

\* Data are not presented because fewer than 10 women reported. † In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 2012. Prior poor birth outcomes are presented for all women. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

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# MIHA Snapshot, California by Education, 2012

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		495,500	18.2	16.4- 19.9	89,700	21.9	20.2- 23.7	108,500	28.1	26.3- 30.0	139,100	31.8	29.9- 33.6	156,900
<b>Prior Poor Birth Outcomes</b>															
Prior low birth weight or preterm delivery	8.8	7.6- 9.9	42,900	12.9	9.4- 16.5	11,400	8.2	6.3- 10.2	8,800	11.0	8.5- 13.5	15,200	4.8	3.3- 6.3	7,500
Prior delivery by c-section	16.1	14.5- 17.7	79,600	22.1	17.2- 26.9	19,800	14.9	11.4- 18.3	16,100	14.9	12.5- 17.3	20,700	14.6	11.8- 17.4	22,900
<b>Health Status</b>															
In good to excellent health before pregnancy	92.2	91.1- 93.4	456,300	82.7	78.4- 86.9	73,900	92.0	90.2- 93.7	99,600	92.1	89.8- 94.3	128,000	98.1	97.1- 99.1	153,500
Chronic conditions before or during pregnancy															
Diabetes or gestational diabetes	11.3	10.0- 12.7	55,400	14.1	10.5- 17.7	12,400	10.3	7.7- 12.9	11,000	10.2	7.9- 12.5	14,000	11.5	9.1- 13.9	17,800
Hypertension, preeclampsia or eclampsia	8.5	7.5- 9.6	41,200	8.7	6.2- 11.3	7,500	8.2	6.2- 10.1	8,600	9.4	7.3- 11.6	12,800	7.8	5.9- 9.8	12,100
Asthma	8.0	6.9- 9.1	38,700	7.0	3.9- 10.1	6,000	9.4	6.7- 12.1	9,900	9.2	7.3- 11.2	12,600	6.5	4.9- 8.0	10,000
<b>Nutrition and Weight</b>															
Daily folic acid use, month before pregnancy	34.0	31.9- 36.1	168,100	23.3	18.5- 28.1	20,800	27.6	23.5- 31.6	29,800	29.5	26.0- 33.0	41,100	48.5	44.4- 52.7	76,000
Overweight before pregnancy	24.1	22.2- 26.0	111,600	26.0	20.7- 31.2	18,600	27.2	22.7- 31.6	26,900	26.0	22.6- 29.3	35,500	19.6	16.5- 22.7	30,300
Obese before pregnancy	18.3	16.6- 19.9	84,600	19.3	15.3- 23.2	13,800	24.3	20.0- 28.6	24,100	23.7	20.5- 26.8	32,400	9.1	7.2- 11.0	14,000
Inadequate weight gain during pregnancy	16.5	14.7- 18.4	63,800	25.3	18.3- 32.2	14,300	20.0	15.8- 24.2	15,700	13.6	10.9- 16.2	15,200	13.5	10.6- 16.4	18,500
Excessive weight gain during pregnancy	42.5	40.0- 45.1	164,200	35.9	29.1- 42.7	20,200	44.2	38.7- 49.8	34,800	45.6	41.3- 49.8	51,200	41.8	37.3- 46.2	57,400
Food insecurity during pregnancy	18.6	16.9- 20.3	91,600	37.5	32.0- 43.1	33,400	23.5	19.6- 27.3	25,200	17.6	15.0- 20.2	24,400	5.4	2.8- 7.9	8,400
<b>Intimate Partner Violence (IPV) and Depressive Symptoms</b>															
Physical or psychological IPV during pregnancy	8.8	7.5- 10.2	43,400	15.6	11.2- 19.9	13,800	9.4	7.1- 11.6	10,100	8.0	6.0- 10.0	11,100	5.2	2.6- 7.8	8,200
Prenatal depressive symptoms	16.4	14.7- 18.1	81,200	26.9	21.4- 32.4	24,100	19.2	15.8- 22.6	20,800	16.3	13.7- 18.9	22,600	8.6	5.8- 11.4	13,500
Postpartum depressive symptoms	16.0	14.3- 17.6	78,800	19.3	14.4- 24.2	17,200	16.4	13.5- 19.3	17,800	18.1	15.1- 21.1	25,100	11.8	8.7- 14.9	18,400
<b>Hardships and Support during Pregnancy</b>															
Homeless or did not have a regular place to sleep	3.7	3.0- 4.5	18,100	8.8	5.8- 11.7	7,400	4.7	2.9- 6.6	5,000	3.5	2.1- 4.9	4,800	0.6	0.2- 1.0	900
Moved due to problems paying rent or mortgage	7.5	6.4- 8.6	36,600	11.6	7.7- 15.6	10,100	7.8	5.8- 9.9	8,300	10.6	8.2- 12.9	14,400	2.4	1.6- 3.3	3,800
Woman or partner lost job	17.3	15.7- 18.9	84,200	20.6	16.0- 25.2	17,800	21.0	17.1- 24.9	22,000	21.0	18.0- 24.1	28,800	9.7	7.5- 11.9	15,100
Woman or partner had pay or hours cut back	14.3	12.8- 15.8	69,500	14.1	10.4- 17.9	12,100	20.7	16.7- 24.8	21,900	16.9	14.2- 19.6	23,100	7.9	6.1- 9.7	12,300
Became separated or divorced	7.9	6.8- 9.0	38,600	12.6	9.0- 16.2	11,000	12.8	9.5- 16.1	13,600	7.9	6.1- 9.6	10,700	2.0	1.3- 2.8	3,200
Had no practical or emotional support	5.5	4.4- 6.5	26,900	7.9	5.9- 9.9	7,100	8.0	5.4- 10.6	8,600	4.4	2.9- 5.9	6,100	3.2	1.0- 5.4	5,000
<b>Substance Use</b>															
Any smoking, 3 months before pregnancy	11.9	10.6- 13.3	58,700	14.2	10.6- 17.9	12,500	11.5	9.4- 13.5	12,300	16.5	13.7- 19.4	22,800	7.0	4.3- 9.7	11,000
Any smoking, 1st or 3rd trimester	8.3	7.1- 9.6	41,000	11.9	8.3- 15.5	10,500	8.0	6.3- 9.7	8,600	11.7	9.2- 14.2	16,100	3.6	1.3- 5.9	5,700
Any smoking, postpartum	5.7	4.7- 6.6	27,800	8.3	5.2- 11.4	7,300	6.3	4.8- 7.8	6,800	6.8	5.5- 8.2	9,400	2.7	0.5- 4.9	4,300
Any binge drinking, 3 months before pregnancy	13.9	12.5- 15.3	68,000	9.8	7.0- 12.6	8,500	11.7	9.0- 14.5	12,600	17.1	14.3- 20.0	23,500	14.9	12.3- 17.5	23,300
Any alcohol use, 1st or 3rd trimester	20.9	19.1- 22.6	102,000	12.6	7.9- 17.3	11,000	11.8	9.2- 14.5	12,700	22.9	19.6- 26.2	31,500	30.0	26.3- 33.7	46,500
<b>Infant Sleep and Breastfeeding</b>															
Placed infant on back to sleep	76.1	74.1- 78.1	366,400	68.2	62.9- 73.5	56,600	70.5	65.8- 75.2	74,500	76.2	72.9- 79.5	104,800	83.9	80.5- 87.4	130,000
Intended to breastfeed, before birth	92.2	90.9- 93.5	444,100	90.8	88.2- 93.4	74,800	87.9	84.3- 91.4	93,300	93.1	91.3- 94.9	128,600	95.3	92.8- 97.7	146,500
Intended to breastfeed exclusively, before birth	62.0	59.9- 64.2	298,800	45.3	39.8- 50.8	37,300	51.2	46.5- 55.9	54,400	67.3	63.8- 70.9	93,000	73.8	69.9- 77.8	113,500
<b>Breastfeeding practices</b>															
Any breastfeeding, 1 month after delivery	82.7	81.0- 84.4	393,200	79.1	74.7- 83.4	64,700	76.1	72.0- 80.3	79,800	81.1	78.2- 84.0	110,000	90.5	87.8- 93.3	138,200
Exclusive breastfeeding, 1 month after delivery	41.9	39.7- 44.1	196,500	37.7	32.0- 43.3	29,000	38.0	33.5- 42.6	39,000	43.2	39.4- 47.0	58,700	45.6	41.4- 49.8	69,600
Any breastfeeding, 3 months after delivery	64.9	62.4- 67.5	245,000	56.2	49.8- 62.6	37,400	54.2	48.8- 59.7	47,000	61.5	57.1- 65.8	64,300	80.7	76.1- 85.3	96,000
Exclusive breastfeeding, 3 months after delivery	26.5	24.3- 28.7	98,600	18.4	13.3- 23.6	11,600	19.5	15.4- 23.6	16,500	25.6	21.8- 29.4	26,800	36.4	31.9- 41.0	43,500



# MIHA Snapshot, California by Education, 2012

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>Pregnancy Intention and Family Planning</b>															
Mistimed or unwanted pregnancy	30.9	28.8- 33.0	152,500	36.6	31.0- 42.2	32,700	41.0	36.2- 45.8	44,100	34.0	30.5- 37.5	47,000	17.8	14.3- 21.4	27,900
Unsure of pregnancy intentions	12.9	11.3- 14.4	63,500	15.5	11.4- 19.6	13,900	14.7	11.5- 17.9	15,800	16.0	12.7- 19.2	22,100	7.4	5.3- 9.5	11,600
Postpartum birth control use	89.8	88.1- 91.5	395,800	91.9	88.8- 95.0	72,100	88.1	83.8- 92.3	85,200	90.4	87.6- 93.1	112,000	89.4	86.2- 92.5	125,600
<b>Service Utilization and Health Insurance Coverage</b>															
Had a usual source of pre-pregnancy care	72.0	70.1- 74.0	356,600	66.6	61.5- 71.7	59,700	63.8	59.3- 68.2	69,100	70.7	67.3- 74.2	98,200	82.1	78.9- 85.3	128,800
Initiated prenatal care in 1st trimester †	88.0	86.6- 89.4	430,000	84.4	81.2- 87.6	73,900	84.7	81.4- 88.0	89,900	85.3	82.4- 88.3	117,600	94.7	92.5- 96.9	147,600
Had a dental visit during pregnancy	42.1	40.0- 44.3	208,300	33.4	28.1- 38.7	29,800	31.6	27.1- 36.1	34,200	36.8	33.1- 40.5	51,100	59.1	54.9- 63.3	92,600
Had a postpartum medical visit	88.3	87.0- 89.7	434,500	79.0	74.7- 83.4	69,700	83.0	79.6- 86.5	88,900	89.9	87.7- 92.0	124,900	95.7	94.3- 97.2	149,900
Mom or infant needed but couldn't afford care postpartum	14.8	13.2- 16.4	71,500	26.4	21.1- 31.8	22,000	17.6	14.0- 21.1	18,600	15.5	13.2- 17.7	21,300	6.0	3.5- 8.6	9,300
Participated in WIC during pregnancy	55.6	54.1- 57.1	269,800	89.5	87.0- 92.0	79,800	81.7	78.7- 84.7	87,600	57.9	54.6- 61.3	78,200	15.2	12.2- 18.3	23,300
Received CalFresh (food stamps) during pregnancy	24.7	23.0- 26.5	121,900	49.8	44.1- 55.4	44,400	34.6	30.3- 38.9	37,200	24.3	21.2- 27.3	33,600	4.1	1.9- 6.3	6,400
<b>Pre-pregnancy insurance</b>															
Medi-Cal	24.5	22.7- 26.3	120,700	49.3	43.6- 54.9	43,600	38.4	33.7- 43.1	41,200	19.8	17.3- 22.3	27,500	5.1	2.7- 7.4	7,900
Uninsured	24.7	22.9- 26.4	121,500	36.4	31.2- 41.6	32,300	35.8	31.3- 40.2	38,400	25.6	22.2- 29.0	35,500	9.6	7.4- 11.8	15,000
Private	47.0	45.2- 48.7	231,300	12.5	8.4- 16.7	11,100	21.9	18.4- 25.3	23,500	48.5	44.8- 52.2	67,300	82.4	79.3- 85.5	129,100
<b>Prenatal insurance</b>															
Medi-Cal	49.8	48.2- 51.5	246,200	86.4	82.6- 90.1	76,700	75.1	71.4- 78.7	81,200	47.6	44.0- 51.2	66,100	13.5	10.7- 16.4	21,200
Uninsured	1.7	1.2- 2.1	8,200	3.4	1.7- 5.1	3,100	2.3	1.1- 3.5	2,500	1.0	0.5- 1.5	1,400	0.8	0.2- 1.4	1,200
Private	43.5	41.8- 45.1	214,800	9.3	5.8- 12.7	8,200	19.3	15.9- 22.7	20,900	42.0	38.4- 45.6	58,400	81.1	77.8- 84.3	127,100
<b>Maternal postpartum insurance</b>															
Medi-Cal	34.6	32.8- 36.5	169,700	60.7	55.3- 66.1	53,100	53.1	48.5- 57.7	56,300	34.7	31.2- 38.2	48,100	7.4	4.9- 9.8	11,500
Uninsured	16.7	15.2- 18.1	81,600	27.2	22.6- 31.9	23,800	24.2	20.3- 28.0	25,600	15.6	12.9- 18.2	21,600	6.6	4.8- 8.5	10,400
Private	45.1	43.4- 46.8	221,000	10.4	6.9- 14.0	9,100	19.7	16.3- 23.0	20,800	44.1	40.5- 47.8	61,200	82.6	79.5- 85.8	129,500
<b>Infant health insurance</b>															
Medi-Cal	49.2	47.4- 51.0	237,400	83.5	79.7- 87.3	68,800	74.4	70.0- 78.7	79,200	49.1	45.4- 52.7	67,700	13.6	10.8- 16.4	21,000
Healthy Families	5.1	4.2- 6.1	24,800	6.9	4.4- 9.4	5,700	4.5	2.2- 6.8	4,800	6.4	4.5- 8.2	8,800	3.6	2.0- 5.1	5,500
Uninsured	2.4	1.5- 3.3	11,800	2.0	1.1- 2.9	1,700	5.2	1.8- 8.6	5,600	1.8	1.2- 2.4	2,500	1.3	0.1- 2.6	2,000
Private	40.7	39.0- 42.4	196,200	7.2	4.3- 10.1	5,900	13.7	11.0- 16.4	14,600	38.2	34.6- 41.8	52,700	79.3	76.0- 82.6	122,600
<b>Maternal Demographics</b>															
Unmarried	41.7	39.7- 43.6	205,400	62.1	56.8- 67.4	55,600	61.7	57.3- 66.0	66,400	43.9	40.1- 47.6	60,600	14.3	11.2- 17.4	22,400
<b>Race/Ethnicity</b>															
Hispanic	50.1	48.2- 52.0	242,700	86.0	83.4- 88.6	76,200	67.9	63.9- 71.9	72,600	44.7	40.9- 48.4	60,800	21.3	18.1- 24.6	32,300
Black	5.8	5.2- 6.5	28,300	2.9	2.0- 3.8	2,600	7.9	5.7- 10.2	8,500	7.7	6.1- 9.4	10,500	4.4	2.3- 6.6	6,700
White	28.7	26.9- 30.5	139,000	7.1	5.3- 8.9	6,300	15.2	12.5- 18.0	16,300	35.4	31.8- 39.0	48,200	44.8	40.6- 49.0	67,900
Asian/Pacific Islander	14.8	13.2- 16.5	71,900	3.5	1.9- 5.1	3,100	8.3	5.5- 11.1	8,900	11.4	8.9- 14.0	15,500	29.2	25.1- 33.3	44,200
Born outside the U.S.	39.3	37.2- 41.5	194,800	60.3	54.6- 65.9	54,100	45.4	40.9- 50.0	49,200	23.0	19.9- 26.1	32,000	37.7	33.5- 41.9	59,100
Speaks non-English language at home	30.8	28.8- 32.8	150,100	54.2	48.5- 60.0	48,100	40.0	35.5- 44.5	42,900	18.0	15.1- 20.8	24,700	22.4	18.5- 26.3	34,300
<b>Income as a percent of the Federal Poverty Guideline</b>															
0-100%	43.4	41.5- 45.3	198,900	82.1	77.7- 86.5	65,700	69.7	65.6- 73.7	67,500	39.5	35.8- 43.2	51,200	9.3	6.4- 12.1	14,000
101-200%	18.6	16.9- 20.3	85,200	14.8	10.7- 18.8	11,800	21.7	18.0- 25.4	21,000	27.5	24.2- 30.9	35,700	11.0	8.4- 13.6	16,600
>200%	38.0	36.2- 39.8	174,200	3.1	1.2- 5.1	2,500	8.6	6.6- 10.7	8,400	33.0	29.5- 36.5	42,800	79.7	76.2- 83.3	120,200

† In 2012, the measure changed for this indicator and is not comparable to prior years (see Technical Document).

**Notes:** MIHA is an annual population-based survey of California resident women with a live birth in 2012, with a sample size of 6,810. Percent (%), 95% confidence interval (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 2012. Prior poor birth outcomes are presented for all women. See the Technical Document for information on weighting, comparability to prior years and technical definitions.

# Appendix

*“Getting the "A.I.M." insurance was the best thing I did. My current insurance through work didn't cover maternity! I have a healthy baby boy (3 month old) and we are happy.”*

— MIHA 2012 Respondent





# Technical Definition of Indicators

Indicators in the 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 corresponding to the MIHA 2012 survey is listed after each definition. Any changes to the survey question or indicator compared to prior years are noted in the definition. The questionnaires 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. (Q2, 3)

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 2010, the indicator was self-rated *physical* health. In 2011, the survey question was changed from two separate questions on physical health and mental health to one question on “health.” An additional response of “Very good” also was added between response categories “Excellent” and “Good.” Starting in 2011, the indicator 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. (Q15A, 17A)

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. (Q15B, 17B, 17D)

Asthma: Told by a health care worker that she had asthma before or during this pregnancy. (Q15C, 17C)

## 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. Starting in 2011, BMI values outside 13-69.99 were also excluded. Because the number of additional women excluded was small, the indicator in 2010 is comparable to subsequent years. (Q9, 12)

Inadequate/excessive weight gain during pregnancy: Adequacy of total weight gained during pregnancy, given pre-pregnancy BMI, was 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, 10, 12; 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). (Q71-74)

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

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. (Q32-34)

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. (Q26, 27)

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. (Q52, 53)

### **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. (Q29C-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. The indicator is not comparable with the indicator in 2010, which measured whether a woman moved to a new address for any reason. (Q29B)

Woman or partner lost job: Lost job even though wanted to go on working, or husband or partner lost their job during pregnancy. (Q29E-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. (Q29G).

Became separated or divorced: Became separated or divorced from partner during pregnancy. (Q29A)

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. (Q28A-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.)" Starting in 2011, the indicator is not comparable with prior years. (Q35, 36B, 36C)

Any smoking, postpartum: Smoked any cigarettes at the time of the survey. (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?” Starting in 2011, the indicator 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 before 2011. (Q13)

Unsure of pregnancy intentions: Just before pregnancy, felt that she was not sure if she wanted to get pregnant. (Q13)

Postpartum birth control use: Woman or husband/partner was doing something at the time of the survey to keep from getting pregnant; excluding from the denominator women who were pregnant and women who were not having sex at the time of the survey. Starting in 2011, the indicator is not comparable with prior years. (Q47, 48, 49)

### **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. (Q62)

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. (Q55)

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. (Q55)

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 at the time of the survey. The infant feeding questions changed in 2011. Starting in 2011, the indicator is not comparable with prior years. (Q58, 59, 60; 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 at the time of the survey. The infant feeding questions changed in 2011. Starting in 2011, the indicator is not comparable with prior years. (Q58, 59, 60, 61A, B, C; 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. Starting in 2011, the indicator is not comparable with prior years. (Q58, 59, 60; 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. Starting in 2011, the indicator is not comparable with prior years. (Q58, 59, 60, 61A, B, C; infant age calculated from date of birth on the birth certificate)

## **Health Care Utilization and Public Program Participation**

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.*)” In 2012, the filter question, “Did you get any prenatal care during your most recent pregnancy?” was dropped. The MIHA indicator is not comparable across 2010, 2011, and 2012. (Q19)

Had a dental visit during pregnancy: Visited a dentist, dental clinic, or got dental care at a health clinic. (Q22)

Had a postpartum medical visit: Had a postpartum check-up for herself (the medical check-up 4-6 weeks after a woman gives birth). (Q46B)

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. (Q46A, 57)

Participated in WIC during pregnancy: WIC is the Special Supplemental Nutrition Program for Women, Infants, and Children. In 2010, WIC status was self-reported on the MIHA survey. In 2012, WIC status was obtained from WIC administrative data (WIC ISIS) and linked to the MIHA survey.

Received CalFresh (food stamps) during pregnancy: CalFresh, formerly known as food stamps, is the California Supplemental Nutrition Assistance Program. (Q75)

## **Health Insurance Coverage**

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. Starting in 2011, women with “Other” insurance, such as military, Healthy Families, Medicare, or international are not shown (the 2010 indicator combined the “Other” and “Private” insurance categories); and women were asked to provide the name of their health insurance plan, which was used to categorize insurance with greater precision. Starting in 2011, the indicator is not comparable with prior years. (Q7, Q45)

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. Starting in 2011, women with “Other” insurance, such as military, Healthy Families, Medicare, or international are not shown; (the 2010 indicator combined the “Other” and “Private” insurance categories); and 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 their health insurance plan, which was used to categorize insurance with greater precision. Starting in 2011, the indicator is not comparable with prior years. (Q43)

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. Starting in 2011, infants with "Other" insurance, such as military, California Children's Services, or Medicare are not shown (the 2010 indicator combined the "Other" and "Private" insurance categories); and, women were asked to provide the name of their 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. Starting in 2011, the indicator is not comparable with prior years. (Q56)

### **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. (Q66)

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. (Q64)

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). (Q68)

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 annual Poverty Guidelines published by the U.S. Department of Health and Human Services for more detail: [aspe.hhs.gov/poverty/index.cfm](http://aspe.hhs.gov/poverty/index.cfm). (Q78, 79, 80)



# 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 may not be generalizable to women who speak other languages. 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. In 2010 through 2012, 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 2012, American Indians and Alaskan Natives were also oversampled. Starting 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, American Indian/ Alaskan Native, 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:

$$\text{NON-COVERAGE} * \text{INVERSE SAMPLING FRACTION} * \text{NON-RESPONSE} * \text{PROPENSITY SCORE}$$

### 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 2011, raking was conducted separately for each of the top 20 counties and for the other 38 counties, grouped into regions. In 2012, the raking was done separately for each county/region minus the American Indian/Alaskan Native population in that county/region. Then a final raking was done separately for the American Indian/Alaskan Native group.



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

After raking, differences between county-level and regional-level MIHA data and the BSMF are small. For example, 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 (6.2% in MIHA vs. 4.8% in the BSMF)—a difference of 1.4 percentage points. In 2011, all county estimates in MIHA were within 1.4 percentage points of the BSMF on the raking variables above, and all regional estimates were within 2.0 percentage points of the BSMF. In 2012, the largest difference between county MIHA estimates and the BSMF on the variables above was 2.8 percentage points and the largest differences for regional estimates was 4.8 percentage points.

### **Reason for Raking 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, the MIHA estimate was adjusted to 28.8% and was much closer to the BSMF estimate of 28.5%. Therefore the use of the raked weight produces estimates that are closer to the BSMF for sub-groups, and at the county and regional level.

The 2010 snapshots posted on the web used the 2010 weighting method and will not be updated using the raked weights. All future analyses will apply the raked weights to years 2010 onward. The difference between the estimates using the old and new weighting method is small. Therefore, counties and regions may compare the 2010, 2011, and 2012 Snapshots, in spite of the changes to the weighting methods.



*“Thank you for doing this - I hope it helps a lot of moms and kids. I lost a baby at 20 weeks of pregnancy and it was the hardest experience of my life. Reading this survey made me realize some women go through much harder times!”*

— MIHA 2012 Respondent