

Breastfeeding

- African American babies were least likely to be breastfed in the hospital.
- In the San Francisco Bay Area, low-income mothers were less likely to breastfeed their babies than higher-income mothers.

In 2006, 12,147 babies born in Contra Costa hospitals were breastfed, formula fed or some combination of the two before being discharged from the hospital. Of these, 11,318 were breastfed at least once. The percentage of babies who were breastfed during this period (93.2%) was higher than the California percentage (86.5%).¹ Both the county and the state met the Healthy People 2010 objective for breastfeeding in early postpartum (75%).²

While a high percentage of babies were breastfed, nearly one third of these were also formula fed before being discharged from the hospital. Just 62.2% (7,556) of the 12,147 babies were breastfed exclusively until they left the hospital.

Table 1 ■ Breastfeeding in hospital by race/ethnicity

Contra Costa County hospitals, 2006

	Any Breastfeeding		*	Exclusive Breastfeeding	
	Number	Prevalence		Number	Prevalence
Hispanic	4,153	94.8%	*	2,650	60.5%
White	3,877	92.9%		2,755	66.0% *
Asian/Pacific Islander	1,236	94.8%		792	60.7%
African American	895	84.6%	**	566	53.5% **
Total	11,318	93.2%		7,556	62.2%

Total includes some racial/ethnic groups not shown.

* Significantly higher rate compared to county.

** Significantly lower rate compared to county.

In Contra Costa, the greatest number of babies breastfed before discharge were Hispanic (4,153) followed by white (3,877), Asian/Pacific Islander (1,236), and African American (895). A higher percentage of Hispanic babies (94.8%) were breastfed before discharge compared with babies in the county overall (93.2%). African American babies had the lowest percentage of breastfeeding before discharge (84.6%), lower than the county and any other race/ethnicity group listed.

White babies had the highest percentage of exclusively breastfeeding before discharge (66.0%) higher than babies in the county overall (62.2%) and any other race/ethnicity group listed. African American babies had the lowest percentage of exclusive breastfeeding before discharge (53.5%), lower than the county and any other race/ethnicity listed.

Table 2 ■ Breastfeeding in hospital by facility

Contra Costa County hospitals, 2006

	Any Breastfeeding		Exclusive Breastfeeding	
	Number	Prevalence	Number	Prevalence
Kaiser Permanente Walnut Creek Medical Center	3,974	96.0%*	2,848	68.8%*
John Muir Memorial Hospital	2,442	92.3%	1,476	55.8%
Contra Costa Regional Medical Center	1,803	93.2%	976	50.5%**
Sutter Delta Medical Center	748	85.6%**	440	50.3%**
San Ramon Regional Medical Center	747	94.3%	421	53.2%**
Doctors Medical Center—San Pablo	372	84.4%**	174	39.5%**
Total	11,318	93.2%	7,556	62.2%

Total includes some cases not assigned to facilities listed.

* Significantly higher rate compared to county.

** Significantly lower rate compared to county.

Babies in the Kaiser Permanente Walnut Creek Medical Center had a higher percentage of breastfeeding (96.0%) and exclusive breastfeeding (68.8%) before discharge than babies in the county overall (93.2% and 62.2%, respectively).

They also had a higher percentage of exclusive breastfeeding than any other facility listed. Babies at Sutter Delta Medical Center and Doctors Medical Center—San Pablo had a lower percentage of breastfeeding and exclusive breastfeeding before discharge than babies in the county overall. Babies in Contra Costa Regional Medical Center and San Ramon Regional Medical Center had breastfeeding percentages similar to the county overall but exclusive breastfeeding rates that were lower than the county's.



Editor's note: Analyses of breastfeeding practices at 3, 6 and 12 months for Contra Costa were not possible due to small sample size, but we can look at Northern California percentages to get an idea of what is happening locally and make comparisons to the state and nation.

Table 3 ■ Breastfeeding Percentages, 2006

	6 months	12 months
Northern California	58.6%	33.4%
California	53.6%	31.9%
United States	43.5% **	22.7% **
Healthy People 2010 objective	50%	25%

** Significantly lower rate than Northern California.

In 2006, 58.6% of Northern California babies were still being breastfed at 6 months. This percentage was similar to California’s percentage (53.6%) and higher than the nation’s (43.5%). Both Northern California and California as a whole met the Healthy People 2010 objective of 50% of babies being breastfed at 6 months; the United States did not.

At 12 months, the percentage of Northern California babies being breastfed (33.4%) was still similar to California’s (31.9%) and higher than that of the United States (22.7%). Again, Northern California and California as a whole met the Healthy People 2010 objective (25%), while the nation did not.

Table 4 ■ Exclusive breastfeeding percentages, 2006

	3 months	6 months
Northern California	48.8%	26.1%
California	42.5%	20.0%
United States	33.6% **	14.1% **
Healthy People 2010 objective	40%	17%

** Significantly lower rate than Northern California.

In 2006, 48.8% of Northern California babies were exclusively breastfed at 3 months and 26.1% were exclusively breastfed at 6 months. These percentages were similar to those for all of California (42.5% and 20.0%, respectively) and higher than the percentages for the United States (33.6% and 14.1%, respectively). Both Northern California and California as a whole met the Healthy People 2010 objective for exclusive breastfeeding at 3 months (40%) and 6 months (17%); the United States did not.



Editor’s note: Analysis of breastfeeding by race/ethnicity was not possible for Contra Costa due to small sample size, but we can look to the San Francisco Bay Area to learn more about how breastfeeding practices vary across our community.

Table 5 ■ Breastfeeding at 2 months by mother's race/ethnicity

San Francisco Bay Area, 2005–2006

	Any		Exclusive	
Asian/Pacific Islander	84.5%		52.4%	
White	84.1%		64.2%	*
Latina	76.6%		46.2%	**
African American	62.9%	**	39.1%	**
Total	80.2%		54.1%	

Total percentage includes some racial/ethnic groups not shown.

* Significantly higher rate than the San Francisco Bay Area.

** Significantly lower rate than the San Francisco Bay Area.

When their babies were 2 months old, African American mothers had the lowest percentage of breastfeeding (62.9%), lower than the San Francisco Bay Area as a whole (80.2%) and every other racial/ethnic group listed. The percentages of African American (39.1%) and Latina (46.2%) mothers exclusively breastfeeding at 2 months were lower than the San Francisco Bay Area as a whole (54.1%), while the percentage of white mothers exclusively breastfeeding at 2 months (64.2%) was higher than the San Francisco Bay Area as a whole.

Table 6 ■ Breastfeeding at 2 months by income

San Francisco Bay Area, 2005–2006

	Any		Exclusive	
0-100% of Federal Poverty Level	71.7%	**	41.5%	**
101-200% of Federal Poverty Level	69.9%	**	41.1%	**
201-300% of Federal Poverty Level	83.1%		59.0%	
301-400% of Federal Poverty Level	82.5%		53.1%	
Over 400% of Federal Poverty Level	88.0%	*	65.2%	*
Total	80.2%		54.1%	

Total percentage includes cases with unknown income level.

* Significantly higher rate than the San Francisco Bay Area.

** Significantly lower rate than the San Francisco Bay Area.

Mothers who lived at 0–100% and 101–200% of the Federal Poverty Level had a lower percentage of breastfeeding (71.7% and 69.9%) and exclusive breastfeeding (41.5% and 41.1%) than the San Francisco Bay Area overall (80.2% and 54.1%, respectively). In contrast, mothers who lived at over 400% of the

Federal Poverty Level had higher percentages of breastfeeding (88.0%) and exclusive breastfeeding (65.2%) compared to the San Francisco Bay Area as a whole.

What is “any” and “exclusive” breastfeeding?

The percentage of women breastfeeding or “any breastfeeding” includes all women who have breastfed exclusively or have combined breastfeeding with formula or other foods divided by the total number who have only breastfed, only formula fed, or combined breastfeeding, formula feeding and/or other foods. The percentage of women “exclusively breastfeeding” are those who have used only breast milk to feed their infant since birth divided by the total number who have only breastfed, only formula fed, or any combination breastfeeding, formula feeding, and/or other foods. The percentages for breastfeeding before discharge excluded cases with unknown method of feeding and those using total parenteral nutrition/hyperalimentation (TPN/Hyperal).

Why is it important?

In addition to the Healthy People 2010 objectives already noted, the American Academy of Pediatrics recommends exclusive breastfeeding for six months and continued breastfeeding with complementary solid foods up to 12 months or longer.³

Breastfeeding reduces an infant’s risk for both acute and chronic disease, increases mother-infant bonding, fosters appropriate growth and development and may increase learning ability and reduce the risk for obesity. In addition to reduced health care costs, breastfeeding reduces social costs and is less damaging to the environment than formula feeding.³

Breastfeeding mothers are half as likely to miss a day of work for a sick child compared to mothers of formula-fed infants.⁴ So it is possible that increasing breastfeeding percentages may increase productivity. According to an article published in April 2010 in the journal *Pediatrics*, \$13 billion and 911 infant lives could be saved per year if 90% of U.S. families complied with the medical recommendations to breastfeed exclusively for 6 months.⁵

Who does it impact most?

African American women are less likely than the population as a whole to breastfeed or exclusively breastfeed in the hospital and at 2 months. While Latinas tend to be breastfeeding at similar rates to the population at 2 months, Latinas are less likely to be exclusively breastfeeding.

Low-income women are less likely to be breastfeeding or exclusively breastfeeding than mothers as a whole. Similarly, those who were covered through Medi-Cal only during pregnancy were less likely to be breastfeeding or exclusively breastfeeding at 2 months than mothers who were covered exclusively by private insurance alone during their pregnancies.⁶ Women, Infant and Children (WIC) participants are less likely than non-WIC mothers to initiate breastfeeding or to continue breastfeeding for the recommended length of time.⁷

Mothers younger than 24 are less likely to be breastfeeding or to be exclusively breastfeeding at 2 months than mothers of all ages.⁶ Mothers with “some high school” or “high school/GED” were also less likely to be breastfeeding or exclusively breastfeeding at 2 months than mothers in the total population.⁶

What can we do about it?

Exclusive breastfeeding during the hospital stay is critical to breastfeeding duration.^{8,9,10}

Studies have shown that hospital practices affect breastfeeding duration and exclusivity throughout the first year of life. Implementation of the 10 evidence-based steps of the Baby Friendly Hospital Initiative (BFHI), developed by the World Health Organization in 1991, has been shown to increase initiation and exclusivity of breastfeeding.¹¹ Fewer than 3% of hospitals in the United States, and none in Contra Costa County, have Baby Friendly Hospital Certification.¹²

Hospitals that have implemented “baby friendly” policies outlined in the World Health Organization’s Ten Steps to Breastfeeding Success have higher exclusive breastfeeding rates among women of all races and ethnicities.^{13,14}

Peer Breastfeeding Counselors have been shown in several studies to improve exclusive breastfeeding rates.^{15,16}

Data Sources: Breastfeeding

TABLES

Table 1, 2: Number and percentage of breastfeeding women from Newborn Screening Data, 2006, California Department of Public Health, Center for Family Health, Genetic Disease Screening Program; retrieved 8/26/2010 from <http://www.cdph.ca.gov/data/statistics/Pages/BreastfeedingStatistics.aspx>. All nonmilitary hospitals providing maternity services are required to complete the Newborn Screening Test Form. Infant feeding data presented in this report include all feedings from birth to time of specimen collection, usually 24 to 48 hours after birth. The table values exclude cases with unknown method of feeding and cases marked as “TPN/Hyperal” or “Other”.

Table 1: Infant race/ethnicity is based upon mother and father race/ethnicity as reported on the birth certificate. Data presented for Hispanics include Hispanic residents of any race. Data for county totals shown in this table include information for all births occurring in that county, including cases in race/ethnicity groups not shown and with missing race/ethnicity data.

Table 2: Facilities with fewer than 50 births with known type of feeding are not shown.

Table 3,4: Percentage of women breastfeeding from National Immunization Survey, Centers for Disease Control and Prevention, Department of Health and Human Services; retrieved 8/26/2010 from http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm. The sample was limited to records with valid responses to the breastfeeding questions. Healthy People 2010 objectives retrieved 8/26/2010 from <http://www.healthypeople.gov/document/html/volume2/16mich.htm>

Table 5,6: Regional Tables from the 2005–2006 Maternal and Infant Health Assessment (MIHA) surveys; retrieved 8/26/2010 from <http://www.cdph.ca.gov/data/surveys/Pages/SanFranciscoBayAreaRegion.aspx>. San Francisco Bay Area data includes data from Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties. Data presented for Hispanics include Hispanic residents of any race. Data presented for whites, Asians/Pacific Islanders and African Americans include non-Hispanic residents. Not all race/ethnicities shown but all are included in totals for the region and each income level. The California Maternal and Infant Health Assessment (MIHA) is an annual, statewide-representative survey of women who recently gave birth to a live infant. It is completed via the mail, with telephone follow-up to non-respondents. MIHA is administered in English and Spanish only.

TEXT

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