

A Fair Start for Better Health:

California Hospitals Must Close the Gap in Exclusive Breastfeeding Rates

All children deserve to get the best start in life.



Despite increased awareness of the health risks linked to overweight, increasing numbers—in fact, hundreds of thousands—of California children and adolescents are either overweight or obese.^{1,3} Millions of dollars are spent each year addressing obesity-related health problems in children that were once seen only in adults, such as type 2 diabetes, joint problems, high blood pressure, and high cholesterol.^{4,5}

California's low-income children are even more likely to be overweight. According to the Centers for Disease Control and Prevention (CDC), more than 19 percent of low-income Hispanic children and low-income Native American children younger than five are overweight, as are 13 percent of low-income white children and low-income African-American children.³

Breastfeeding is a low-cost, low-tech intervention that, according to the American Academy of Pediatrics⁶ and CDC,⁷ can reduce children's risk for overweight. Needlessly and unfortunately, low-income children—who are at greatest risk for overweight—are also least likely to be breastfed.

A POLICY UPDATE ON CALIFORNIA BREASTFEEDING AND HOSPITAL PERFORMANCE

Produced by the California WIC Association and the UC Davis Human Lactation Center

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BREASTFEEDING IS THE FIRST STEP IN REDUCING HEALTH DISPARITIES

Every year, the strength and breadth of research evidence increases, showing that both babies and mothers benefit from breastfeeding. Breast milk provides infants with all the nutrients they need, along with elements that promote growth and a healthy immune system.⁶ This year, in a comprehensive scientific review of hundreds of studies, the U.S. Agency for Healthcare Research and Quality found that breastfeeding significantly reduces children’s risk for infections and chronic diseases such as diabetes and asthma. Of great importance, the report also concluded that breastfeeding lowers the mother’s risk for type 2 diabetes and for breast and ovarian cancers.⁸

The benefits of breastfeeding are greatest when babies are breastfed *exclusively*—that is, breast milk is the baby’s *only* food for up to the first six months of life. A mother needs support while she is in the hospital for her decision to breastfeed her baby exclusively. Evidence shows that hospitals that have implemented model policies around infant feeding—such as the WHO/UNICEF “Baby-Friendly” policies—experience higher rates of exclusive breastfeeding. Particularly for hospitals serving low-income women of color, policies must ensure that exclusive breastfeeding is the institutional norm. No matter where they happen to begin life, all babies—and their mothers—must be given a fair chance to gain the enormous protections that can only be provided by breastfeeding.



Exclusive Breastfeeding:
The infant receives only breast milk, no other food or fluid.



LOCATION MATTERS: STARK DIFFERENCES IN HOSPITAL BREASTFEEDING RATES



Although more than 86 percent of mothers breastfeed or provide breast milk for their infants during the hospital stay, exclusive breastfeeding rates vary widely among California counties and among hospitals.⁹ Unfortunately, only about half of the breastfed infants in California hospitals receive only breast milk.⁹ The highest rates tend to be in mountain and coastal counties, the lowest in the Central Valley and Southern California (Table 1). Offering supplemental formula unnecessarily in the hospital can interfere with a mother’s plan to breastfeed.^{10,11}

The gap between the “any” and “exclusive” breastfeeding rates in California counties shown in Table 1 starkly underscores how hospital practices can undermine or encourage infant feeding among those who have already decided to breastfeed their infants. In several studies, “Baby-Friendly” or similar hospital practices were found to have a positive impact on breastfeeding rates among *all* mothers giving birth—not only among those who are most likely to breastfeed, such as upper-income women or women within specific cultural groups.¹²⁻¹⁷ It is the responsibility of each hospital to provide quality, consistent, and culturally competent support for exclusive breastfeeding to all mothers, no matter what their income level or cultural group.

Table 1. California Counties: In-Hospital Any and Exclusive Breastfeeding Rates, Lowest to Highest by Exclusive Rate

RANK	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE
(STATE)	CALIFORNIA	506,442	86.5	42.8
51	IMPERIAL	2,765	86.0	8.4
50	COLUSA	196	79.6	9.2
49	SAN BENITO	555	92.6	12.3
48	CALAVERAS	83	89.2	21.7
47	TULARE	6,717	80.7	21.7
46	KINGS	1,858	69.8	22.4
45	KERN	12,957	83.2	22.7
44	LOS ANGELES	141,747	82.3	24.4
43	MERCED	3,342	85.8	27.7
42	ORANGE	44,020	85.2	31.2
41	SAN JOAQUIN	9,483	84.2	32.3
40	MADERA	2,198	75.5	33.6
39	SAN BERNARDINO	25,039	82.6	34.6
38	SUTTER	2,158	79.1	38.5
37	FRESNO	15,492	84.7	38.7
36	STANISLAUS	8,720	83.4	38.8
35	LAKE	474	86.7	42.0
34	VENTURA	10,268	90.1	44.1
33	RIVERSIDE	25,517	84.7	47.4
32	AMADOR	218	86.7	51.8
31	TEHAMA	610	89.0	55.4
30	SACRAMENTO	22,491	86.1	56.0
29	PLACER	2,044	93.1	56.6
28	SANTA BARBARA	5,405	93.7	56.7
27	CONTRA COSTA	10,842	93.2	58.6

RANK	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE
26	SAN DIEGO	40,122	89.9	58.9
25	MONO	142	91.5	59.9
24	SOLANO	4,681	87.4	60.9
23	DEL NORTE	322	91.6	64.9
22	HUMBOLDT	1,499	91.9	66.3
21	TUOLUMNE	553	93.7	66.9
20	NAPA	1,140	93.5	67.1
19	SANTA CRUZ	3,456	96.4	67.4
18	BUTTE	2,809	87.8	67.6
17	MONTEREY	5,830	94.8	67.7
16	SANTA CLARA	26,562	93.5	68.3
15	SAN MATEO	4,749	95.1	70.3
14	SONOMA	5,161	95.3	71.0
13	SAN LUIS OBISPO	2,473	94.8	72.3
12	EL DORADO	992	92.9	72.4
11	SISKIYOU	323	93.2	72.8
10	SAN FRANCISCO	11,529	94.0	74.5
9	LASSEN	111	89.2	74.8
8	MARIN	1,512	97.6	74.9
7	INYO	88	95.5	75.0
6	MENDOCINO	925	93.4	75.6
5	NEVADA	861	96.1	76.0
4	YOLO	2,006	95.0	76.5
3	ALAMEDA	18,646	94.5	76.5
2	PLUMAS	83	94.0	85.5
1	SHASTA	2,078	92.4	86.2

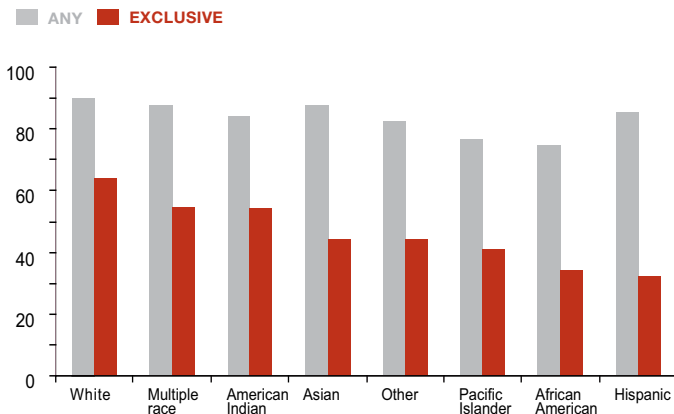
Note: Seven counties had too few births with known type of feeding to report: Alpine, Glenn, Mariposa, Modoc, Sierra, Trinity, Yuba.
 Data Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2006.

HOSPITALS CAN CHALLENGE, RATHER THAN REINFORCE, CULTURAL ASSUMPTIONS ABOUT BREASTFEEDING

In-hospital breastfeeding rates among California women differ widely by ethnicity (Figure 1). Although the majority of women of every race and ethnicity choose to breastfeed, women of color are more likely to supplement breastfeeding with formula during their hospital stay. Despite differences in breastfeeding rates among cultural groups reported by researchers,¹⁸⁻²¹ institutional commitment to cultural competence at all levels of

hospital practice can ensure that care is based on need rather than on assumptions and generalizations. It should never be assumed, for example, that African-American women do not want breastfeeding support or that all Hispanic women want to use formula in the hospital. Hospital practices can reinforce a woman's decision to breastfeed and help her understand the value of exclusive breastfeeding.

Figure 1. Any and Exclusive Breastfeeding by Ethnicity in California Hospitals (2006)



Data Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2006.



Evidence-based policies, and a commitment to cultural competence at all levels of hospital practice, can better ensure that California hospitals provide all mothers with an equal opportunity to breastfeed their babies.

HOSPITAL POLICIES MATTER

Hospital policies have an enormous impact on the decisions mothers make about infant feeding.¹⁴⁻¹⁶ Although breastfeeding is a natural process, new mothers and babies need education and support to get feedings off to a good start. Many hospitals lack enough trained staff to give mothers the help they need after giving birth. Furthermore, mothers can be discouraged or prevented from carrying out their decision to breastfeed in the face of hospital practices such as separating mothers from their babies, delaying the first feeding, and giving formula to every mother—even those who have told hospital staff that they want to breastfeed.^{16,21}

Hospitals have only a brief opportunity to help mothers establish the healthiest feeding for their infants. Hospital stays for uncomplicated births typically last only 24 to 48 hours. Healthy mothers and babies need time to get breastfeeding started before babies are given anything else. Even women who plan to give both breast milk and formula to their infants after leaving the hospital should not give formula until their milk supply is established. Giving formula too early can undermine a woman's decision to include breastfeeding in her feeding plans.

Mothers need opportunities to practice feeding their infants while skilled support is available. Since low-income women are unlikely to be able to afford professional breastfeeding support once they leave the hospital, assistance in the hospital may be the only help they receive. Hospital practices that interfere with breastfeeding are particularly hard on these women.

In some California hospitals, formula is given to more than 85 percent of breastfed infants, even though only a small percentage of infants have medical situations that result in a doctor's recommendation for supplementation. In these hospitals, it is likely that supplementation is a matter of routine. If every mother receives education, attention, and support for exclusive breastfeeding, supplementation of breastfed infants can be minimized.

Every baby born deserves to receive the myriad health protections that only breast milk can provide. In order to ensure that fair chance, California hospitals must do a better job to support exclusive breastfeeding as the institutional norm.

THE ANALYSIS

The California Department of Public Health Genetic Disease Screening Program asks staff to report types of infant feeding during their hospital stay for all families who have babies in California hospitals: whether since birth the baby has received only breast milk, breast milk and formula, only formula, or something else. When babies receive only breast milk, they are said to be “exclusively breastfed.” “Any breastfeeding” refers to babies who receive both breast milk and formula as well as those who are exclusively breastfed.

Using these data, the University of California, Davis Human Lactation Center has compiled a list of the 15 hospitals with the highest breastfeeding scores and the 15 hospitals with the lowest breastfeeding scores in the state. The scores represent hospitals' exclusive breastfeeding rates and the disparity between their “any” and “exclusive” breastfeeding rates across ethnic groups. The group of highest-scoring hospitals (Table 2) had the highest “exclusive” breastfeeding rates and the least disparity between the “any” and “exclusive” rates. The group of lowest-scoring hospitals (Table 3) had the lowest “exclusive” breastfeeding rates and the greatest disparity between the two rates.

Because the estimated breastfeeding rates for many of these hospitals were too close together to distinguish them from each other statistically, the hospitals in each group are not “ranked” individually. Instead, the hospitals in both tables are simply listed in order of their exclusive breastfeeding rates. As a way to approximate the levels of service to low-income women in these hospitals, the tables also include estimated MediCal birth rates.



In some California hospitals, formula is given to more than 85 percent of breastfed infants.

Table 2. California's Highest-Scoring Hospitals, by Exclusive Breastfeeding Rates

HOSPITAL (*Baby-Friendly Facilities)	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE	ESTIMATED % MEDI-CAL BIRTHS
El Camino Hospital	Santa Clara	4119	97.9	93.2	4
Hayward Kaiser Hospital *	Alameda	2802	96.7	92.2	N/A
Monterey Peninsula Community Hospital *	Monterey	1157	96.2	92	9
Scripps Memorial Hospital La Jolla	San Diego	3053	97.0	90.9	1
Sutter Davis Hospital	Yolo	1228	97.6	90.2	50
French Hospital Medical Center	San Luis Obispo	721	97.1	90	42
Sutter Maternity and Surgery Center	Santa Cruz	789	98.5	87.7	24
Alta Bates Community Hospital	Alameda	6538	95.2	87.4	45
Stanford/Lucile S. Packard	Santa Clara	5144	96.9	87	44
Scripps Memorial Hospital Encinitas *	San Diego	1481	96.8	86.9	38
Mercy Medical Center Redding	Shasta	1972	92.8	86.4	54
Feather River Hospital	Butte	597	94.1	85.8	52
San Francisco General Hospital *	San Francisco	907	92.4	85.3	96
Marshall Hospital	El Dorado	604	92.4	83.6	59
Saint Agnes Medical Center	Fresno	3106	88.0	82.6	58

Table 3. California's Lowest-Scoring Hospitals, by Exclusive Breastfeeding Rates

HOSPITAL	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE	ESTIMATED % MEDI-CAL BIRTHS
Bellflower Medical Center	Los Angeles	1848	94.6	<1	90
Pacifica Hospital of the Valley	Los Angeles	1004	96.1	<1	93
Pacific Alliance Medical Center, Inc.	Los Angeles	1892	99.2	1.1	99
Coastal Communities Hospital	Orange	2129	91.4	1.5	94
California Hospital Medical Center	Los Angeles	3711	85.0	3.2	98
Garden Grove Hospital	Orange	2623	79.6	4.4	86
Western Medical Center Anaheim	Orange	2564	83.8	4.5	96
Valley Care Olive View-UCLA Medical Center and Health Centers (formerly Olive View Medical Center)	Los Angeles	758	76.9	4.5	99
Kern Medical Center	Kern	3943	91.9	5.4	98
La Palma Intercommunity Hospital	Orange	664	86.3	5.6	49
San Joaquin General Hospital	San Joaquin	2247	92.5	5.9	89
St. Francis Medical Center (formerly St. Francis Hospital Lynwood)	Los Angeles	6537	82.4	7	82
Arowhead Regional Medical Center	San Bernardino	3515	95.3	8.5	94
Whittier Hospital	Los Angeles	1422	88.2	8.9	70
Garfield Medical Center	Los Angeles	3771	91.2	11.3	69

NOTES TO TABLES 2 AND 3:

Selection Criteria: Only hospitals with at least 20 births with known feeding information in three or more ethnicities were eligible for listing. Scoring was based on two criteria: 1) exclusive breastfeeding rate, and 2) the difference between the “any” breastfeeding and “exclusive” breastfeeding rates. Hospital groups with the 15 highest and lowest scores are listed above in order of their exclusive breastfeeding rates rather than by score. Estimated breastfeeding rates for many of these hospitals were not statistically different from each other. Therefore, the hospitals within each group cannot be individually ranked.

Terminology: “Any breastfeeding” includes mothers exclusively breastfeeding and mothers supplementing breastfeeding with formula. “Exclusive breastfeeding” includes mothers who give breast milk only. Data collection: The breastfeeding data used to develop these tables are from the California Newborn Screening Program database of the Genetic Disease Screening Program. All nonmilitary hospitals are required to complete the Newborn Screening Test Form prior to an infant’s discharge. Upon completing the form, staff must select one of the following five categories describing “all feedings since birth” (not including water feedings): (1) Breast only; (2) Formula only; (3) Breast and Formula; (4) TPN/Hyperal; (5) Other. Hospitals vary in how and when these data are collected and this variation may affect the outcomes. Percentages are calculated using only those whose feeding method is known. Only infants receiving oral feeds were included for this analysis. The estimated MediCal births data are from the Automated Vital Statistics System, which is created using birth certificate forms required in all hospitals. Staff completing the forms list “expected form of payment” for each birth. This is self-reported information, not actual billing or payment data, and is therefore subject to variation in how and when the data are collected and to errors in reporting.

Data sources: Breastfeeding data from California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2006. Estimated MediCal births data from Automated Vital Statistics System (AVSS) Database, Center for Health Statistics, California Department of Public Health, 2006.

The data in Tables 2 and 3 clearly demonstrate that California is experiencing significant and troubling health disparities in exclusive breastfeeding. By and large, the lowest-performing hospitals (those with the lowest rates of exclusive breastfeeding) are hospitals that serve large numbers of low-income women of col-

or. Conversely, the hospitals with the highest rates of exclusive breastfeeding are largely institutions where mothers with higher incomes and less ethnic diversity give birth. And yet, the data show that *nearly all of these mothers are equal* in their initial desire to breastfeed their babies in order to provide the best start in life.

HOSPITAL POLICY CHANGES ARE NEEDED TO CLOSE THE RACIAL AND SOCIOECONOMIC GAPS IN CALIFORNIA BREASTFEEDING

Research has shown that hospital policies that specifically support breastfeeding can dramatically increase exclusive breastfeeding rates and improve the health of mothers and infants after discharge.¹⁵⁻²¹ Eighteen hospitals in California—including many of the state’s top performers—have been designated as “Baby-Friendly Hospitals” (Table 4),²² a welcome 50 percent increase since 2004. “Baby-Friendly” hospitals provide the best possible care for all mothers and their infants by following the “Ten Steps to Successful Breastfeeding” outlined by the World Health Organization and UNICEF²² (Figure 2). These steps ensure that all mothers receive breastfeeding education and support from well-trained staff. Community Hospital of San Bernardino was among the lowest-performing hospitals in 2004, but their recent decision to become Baby-Friendly helped them increase their exclusive breastfeeding rates from less than 20 percent to more than 50 percent.

CASE HISTORY: SAN BERNARDINO MAKEOVER

Community Hospital of San Bernardino (CHSB) provides maternity care to thousands of low-income women every year (92 percent of whom are covered by MediCal). In 2004, 76 percent of mothers were initiating breastfeeding, but only 19 percent were breastfeeding exclusively. With support from the local First 5 Commission, the Perinatal Services Network of Loma Linda University Children’s Hospital partnered with and provided intensive training to CHSB nurses.

CHSB leadership participated in monthly meetings to discuss how to overcome barriers, such as giving formula to breastfed babies, and how to improve care, such as by providing early skin-to-skin contact. As a result, CHSB leadership embraced the goal of becoming Baby-Friendly. Once the Baby-Friendly policies and procedures were in place, CHSB’s exclusive breastfeeding rates climbed from 19 percent to 50 percent in just three years!

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Strategies, tools, and training resources for changing hospital environments are well-known and easily accessible. Model hospital policies based on the Ten Steps, and a toolkit that assists in their implementation, are available on the California Department of Public Health’s Maternal, Child, and Adolescent Health website, <http://www.cdph.ca.gov/healthinfo/healthyliving/childfamily/Pages/MainPageofBreastfeedingToolkit.aspx>. These policies can be used as a guide to increase breastfeeding rates statewide.



Figure 2: The Ten Steps to Successful Breastfeeding

1. Maintain a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
6. Give infants no food or drink other than breast milk, unless medically indicated.
7. Practice “rooming in” – allow mothers and infants to remain together 24 hours a day.
8. Encourage unrestricted breastfeeding.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Source: Protecting, Promoting, and Supporting Breastfeeding: The Special Role of Maternity Services, a Joint WHO/UNICEF Statement. Geneva, World Health Organization, 1989.

RECOMMENDATIONS FOR ACTION

Exclusive breastfeeding is the healthiest way to feed new babies and is clearly the preferred feeding method for most new mothers. A host of health organizations, including the American Academy of Pediatrics, American College of Obstetricians and Gynecologists, American Academy of Breastfeeding Medicine, and World Health Organization, all recommend exclusive breastfeeding for the first six months of life.

Reducing ongoing and troubling health disparities can only be achieved if individual behavioral change is linked to aggressive efforts—using policy change—to make personal healthy choices easier and more affordable. Successful efforts to increase exclusive breastfeeding are a perfect example of how changing institutional norms and practices can foster improved provider and individual behaviors.



EFFECTIVE ACTIONS TO INCREASE EXCLUSIVE HOSPITAL BREASTFEEDING

- The California Department of Public Health must continue to provide yearly hospital performance data as well as strategically targeted training and technical assistance to hospitals serving large numbers of low-income women of color.
- More California hospitals should rid their environments of formula marketing materials and end the practice of providing free formula to mothers who have decided to breastfeed their infants.
- Because culturally and linguistically appropriate support for breastfeeding can reduce health care costs for years to come, policy makers and insurers must make in-hospital breastfeeding support services for all women a top priority. Efforts to improve access should include the following:
 - Streamlining regulations and reimbursement for breastfeeding-related services and supplies through MediCal.
 - Training for all hospital staff and steps taken to ensure sufficient numbers of culturally and linguistically competent providers are available.
- Hospitals should be supported in their efforts to become Baby-Friendly or to implement the California Model Hospital Policies in the following ways:
 - Administrators and decision makers should be made aware of the resources and technical assistance available to support their efforts to improve hospital policies.
 - Breastfeeding education and support should be part of quality improvement processes within all California hospitals offering maternity services.
- Medical and public health agencies must ensure that all pregnant women, regardless of income or racial/ethnic background, have the opportunity to make an informed and careful decision whether to feed only breast milk during their hospital stay, so as to continue to build the demand for in-hospital support services.
- Partnerships among coalitions, state agencies, insurers, and medical professionals are needed to address and improve hospital practices around breastfeeding.
- Forge stronger ties with WIC and other prenatal or breastfeeding support programs for low-income women.

In-hospital support of mothers who decide to breastfeed is a vital opportunity to improve the health of California's young families, regardless of income or culture. The opportunity to provide a fair start for all kids must not be lost—we owe it to their health and their future.



Table 4. Baby-Friendly Hospitals in California

HOSPITAL	COUNTY
Barstow Community Hospital*	San Bernardino
Community Hospital of San Bernardino*	San Bernardino
Community Hospital of the Monterey Peninsula	Monterey
Corona Regional Medical Center*	Riverside
Glendale Memorial Hospital and Health Center*	Los Angeles
Goleta Valley Cottage Hospital	Santa Barbara
Inland Midwife Services—The Birth Center	Riverside
Kaiser Permanente Medical Center, Hayward	Alameda
Kaiser Permanente Medical Center, Riverside*	Riverside
Mountains Community Hospital *	San Bernardino
Providence Holy Cross Medical Center*	Los Angeles
Robert E. Bush Naval Hospital *	San Bernardino
Scripps Memorial Hospital Encinitas	San Diego
San Francisco General Hospital*	San Francisco
University of California, San Diego, Medical Center*	San Diego
Ventura County Medical Center	Ventura
Weed Army Community Hospital	San Bernardino
Women's Health & Birth Center	Sonoma

* Became Baby-Friendly since 2004

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