Achieving Breastfeeding Equity in California

Are hospitals doing enough to support at-risk families?

A Policy Update on California Breastfeeding and Hospital Performance

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

California Fact Sheet: 2018 Data

Breastfeeding: A Health Equity Priority

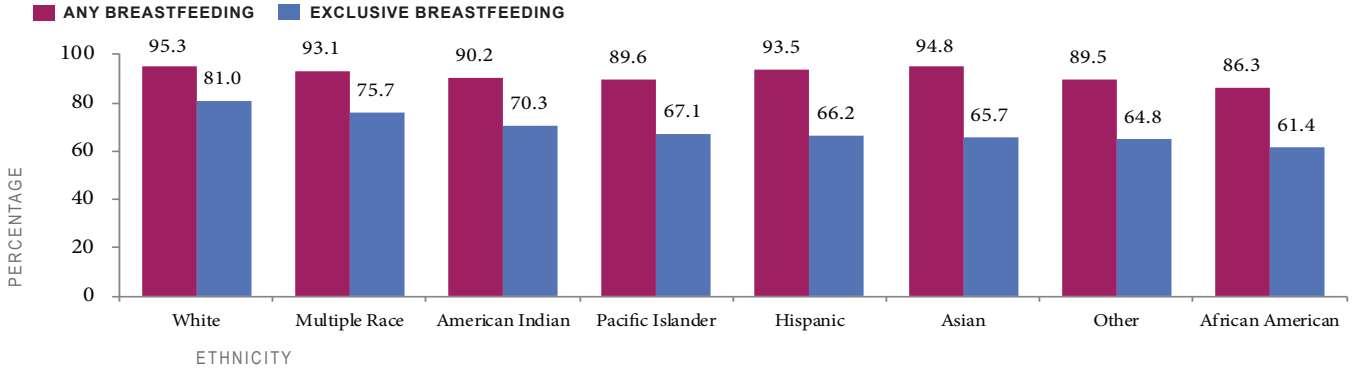
- Breastfeeding provides short- and long-term health benefits that reduce health care costs.[1-4] Breast milk provides infants with all the nutrients they need and other components that promote optimal growth, development, and immune function.[1,2] For mothers, breastfeeding promotes a more rapid recovery from childbirth and reduces risk for some cancers and chronic diseases.[2-4] These benefits are greatest when breast milk is fed exclusively.[1,2]
- To breastfeed successfully, most mothers need skilled support during the hospital stay.[5,6] Hospital practices strongly influence mothers' abilities to achieve their breastfeeding goals.[6,7] Mothers who experience supportive practices in the hospital are more likely to breastfeed exclusively than those who do not.[1,7]
- Ongoing state and local efforts have improved the quality of maternity care in many hospitals and increased the number of Baby-Friendly hospitals statewide.[8]

Building on the Foundation of Baby-Friendly Practices

- Improvements in hospital policies have resulted in increases in breastfeeding rates. From 2010 to 2018, California exclusive in-hospital breastfeeding rates rose from 56.6% to 70.4%, and population differences were reduced significantly.[9]
- Recent data show that progress has slowed, and smaller but important disparities persist.[9] While Baby-Friendly and similar policies improve maternity care, not all California women experience these policies and practices the same way.[7,10]
- To achieve breastfeeding equity in California hospitals, we must build on the foundation created by widespread adoption of supportive policies. Resources, quality improvement processes, and community partnerships are needed to ensure equitable structures and approaches are in place to meet the needs of California's diverse families.[11]

The UC Davis Human Lactation Center used data reported by the California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Program to create the following charts showing in-hospital breastfeeding rates.[9]

Figure 1. Any and Exclusive Breastfeeding by Ethnicity in California Hospitals (2018)



Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2018.

Breastfeeding in California Hospitals

- The Maternal, Child and Adolescent Health Division (MCAH) of the California Department of Public Health (CDPH) collects infant-feeding data for all maternity hospitals in the state.[9] 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.
- The disparity or "gap" between the "any" and "exclusive" breastfeeding rates indicates the proportion of women whose infants were given something other than breast milk in the hospital despite their decision to breastfeed.
- In 2018, nearly 94% of California mothers began breastfeeding, but 25% of those mothers also fed their infants formula during the hospital stay.[9] The Healthy People 2020 objectives indicate that in-hospital supplementation should be limited to about 14% of breastfed infants.[5]
- Table 1 includes the 2018 any and exclusive breastfeeding rates, by county. From 2017 to 2018, exclusive rates increased slightly in only 15 counties. Rates did not change in 23 counties and decreased in 10 counties.
- The UC Davis Human Lactation Center has compiled separate lists of the 15 hospitals with the lowest (Table 2) and the highest (Table 3) breastfeeding scores in the state. The scores represent the rates of exclusive breastfeeding in each hospital and the disparity between the hospitals' any and exclusive breastfeeding rates across ethnic groups. Exclusive breastfeeding rates among lower performing hospitals exceed those in past reports. However, their rates remain 37% to 72% lower than those of this year's highest-performing hospitals. The lowest-performing hospitals are also more likely to serve large numbers of low-income women.[9]

Table 1. California Counties: In-Hospital Any and Exclusive Breastfeeding Rates, Lowest to Highest by Exclusive Rate (2018)

Rank	County	Total Births	% Any Breastfeeding	% Exclusive Breastfeeding
	CALIFORNIA	390963	93.8	70.2
49	SHASTA	1631	98.5	30.5
48	IMPERIAL	2306	93.3	47.0
47	MADERA	734	83.7	49.2
46	KINGS	2194	88.5	51.5
45	TULARE	5520	89.9	53.0
44	SAN BENITO	419	93.6	59.4
43	MERCED	2827	92.9	61.3
42	LAKE	392	90.1	62.2
41	SAN JOAQUIN	6201	88.6	62.4
40	LOS ANGELES	100675	93.7	63.4
39	KERN	10651	89.0	63.6
38	SANTA BARBARA	4727	96.6	65.8
37	TUOLUMNE	479	95.2	66.2
36	YUBA	1678	93.6	66.3
35	RIVERSIDE	19950	91.8	66.8
34	ORANGE	34368	94.4	66.9
33	STANISLAUS	8848	89.7	67.2
32	SAN BERNARDINO	22509	90.0	67.6
31	MONTEREY	4718	95.8	69.7
30	MENDOCINO	717	96.4	70.4
29	FRESNO	13722	87.8	70.6
28	SACRAMENTO	13801	92.0	72.5
27	DEL NORTE	250	90.0	73.2
26	BUTTE	2521	92.5	75.4
25	PLACER	7692	96.0	75.4
24	LASSEN	221	92.8	75.6
23	TEHAMA	473	94.1	76.5
22	SISKIYOU	312	94.6	76.9
21	PLUMAS	62	96.8	77.4
20	VENTURA	7444	96.0	78.3
19	SAN DIEGO	32423	95.8	79.4
18	ALAMEDA	15616	96.5	79.7
17	MONO	85	97.6	80.0
16	SANTA CLARA	22181	97.2	80.4
15	HUMBOLDT	1114	94.9	81.1
14	CONTRA COSTA	9685	96.5	81.5
13	EL DORADO	722	95.3	81.7
12	SONOMA	4172	96.7	82.2
11	SOLANO	4130	95.4	82.4
10	SAN FRANCISCO	9766	97.4	82.9
9	SAN MATEO	4381	97.9	83.8
8	NAPA	653	97.9	84.4
7	SAN LUIS OBISPO	2036	97.2	85.5
6	AMADOR	253	95.7	86.2
5	INYO	147	97.3	86.4
4	MARIN	1047	97.5	87.4
3	SANTA CRUZ	2073	98.2	87.6
2	YOLO	1750	96.5	88.9
1	NEVADA	677	98.2	90.5

Note: Nine counties had too few births with known feeding to report: Alpine, Calaveras, Colusa, Glenn, Mariposa, Modoc, Sierra, Sutter, and Trinity.

Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2018.

Table 2. California's Lowest-Scoring Hospitals, by Rank (2018)

Rank	Hospital	County	Total Births	% Any	% Exclusive	% Medi-Cal Births
1	MERCY MEDICAL CENTER REDDING	SHASTA	1629	98.5	30.4	60.1
2	ANAHEIM GLOBAL MEDICAL CENTER	ORANGE	712	96.6	29.2	84.8
3	ORANGE COUNTY GLOBAL MEDICAL CENTER	ORANGE	1476	88.5	27.1	71.7
4	MONTEREY PARK HOSPITAL	LOS ANGELES	1216	91.6	30.1	62.8
5	SAN DIMAS COMMUNITY HOSPITAL	LOS ANGELES	500	88.6	29.2	<2.3
6	BEVERLY HOSPITAL*	LOS ANGELES	575	88.3	32.5	79.8
7	HEMET VALLEY MEDICAL CENTER	RIVERSIDE	693	78.1	26.3	91.0
8	SOUTH COAST GLOBAL MEDICAL CENTER	ORANGE	1320	79.7	28.4	36.4
9	VICTOR VALLEY GLOBAL MEDICAL CENTER	SAN BERNARDINO	999	74.5	26.2	82.7
10	JOHN F. KENNEDY MEMORIAL HOSPITAL	RIVERSIDE	1730	93.7	40.6	83.5
11	PIH HEALTH HOSPITAL-DOWNEY	LOS ANGELES	854	88.9	40.2	49.5
12	WHITTIER HOSPITAL	LOS ANGELES	1831	88.7	42.6	51.6
13	HOLLYWOOD PRESBYTERIAN MEDICAL CENTER*	LOS ANGELES	3026	96.2	49.2	85.3
14	FOUNTAIN VALLEY REGIONAL HOSPITAL	ORANGE	2806	92.5	49.2	50.5
15	EMANUEL MEDICAL CENTER	STANISLAUS	1025	92.0	49.2	70.4

Table 3. California's Highest-Scoring Hospitals, by Rank (2018)

Rank	Hospital	County	Total Births	% Any	% Exclusive	% Medi-Cal Births
1	SIERRA NEVADA MEMORIAL HOSPITAL	NEVADA	361	98.6	94.2	57.0
2	EL CAMINO HOSPITAL LOS GATOS*	SANTA CLARA	468	98.9	93.6	7.4
3	SAN FRANCISCO GENERAL HOSPITAL*	SAN FRANCISCO	805	97.3	90.7	88.4
4	WOODLAND MEMORIAL HOSPITAL*	YOLO	499	96.8	90.0	59.7
5	DIGNITY HEALTH DOMINICAN HOSPITAL*	SANTA CRUZ	581	98.3	90.9	45.6
6	SCRIPPS MEMORIAL HOSPITAL ENCINITAS*	SAN DIEGO	1,606	97.0	89.7	3.6
7	KAISER SANTA ROSA	SONOMA	1,835	98.5	90.6	11.1
8	SUTTER MATERNITY AND SURGERY CENTER*	SANTA CRUZ	846	98.3	90.3	24.8
9	UC SAN FRANCISCO HOSPITAL	SAN FRANCISCO	2,467	98.0	89.7	19.0
10	FRESNO COMMUNITY REGIONAL MEDICAL CENTER	FRESNO	4007	80.6	78.0	78.3
11	KAISER OAKLAND HOSPITAL	ALAMEDA	2849	98.7	90.0	9.3
12	SUTTER DAVIS HOSPITAL*	YOLO	1251	96.4	88.4	42.4
13	ARROWHEAD REGIONAL MEDICAL CENTER*	SAN BERNARDINO	2441	90.3	84.2	97.3
14	MAD RIVER COMMUNITY HOSPITAL	HUMBOLDT	525	96.6	88.2	64.2
15	SCRIPPS MEMORIAL HOSPITAL LA JOLLA	SAN DIEGO	2803	96.9	88.2	1.2

* Baby-Friendly Hospital

Notes: Estimated Medi-Cal birth rates are included as a way to approximate the levels of service to low-income women.

Selection Criteria: Only operating hospitals with at least 20 infants with known feeding data in three or more ethnicities were eligible for listing. Ranking was based on three criteria: 1) the exclusive breastfeeding rate; 2) the any breastfeeding rate; and 3) the difference between the any breastfeeding and exclusive breastfeeding rates. Hospitals with the 15 lowest and highest scores are listed above.

Terminology: "Any Breastfeeding" includes those exclusively breastfeeding and those supplementing with formula. "Exclusive Breastfeeding" includes those who breastfeed only.

Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2018.

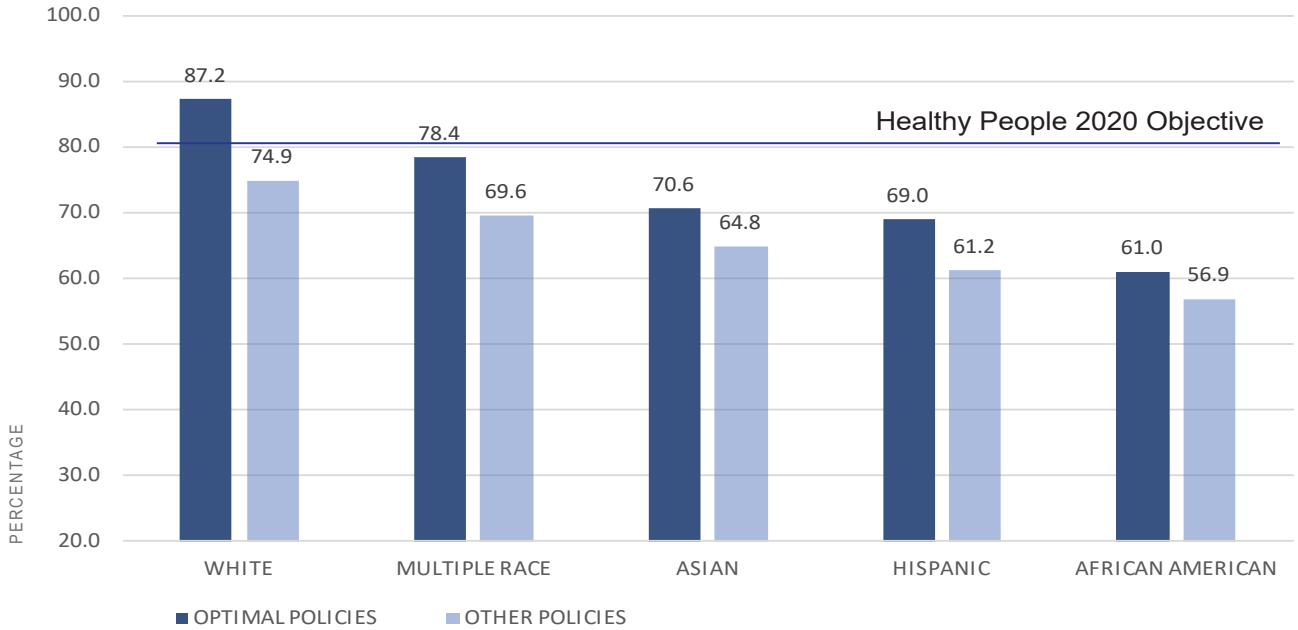
Progress toward Optimal Policies

- For more than a decade, California has led the nation in the designation of Baby-Friendly Hospitals, increasing from 34 hospitals in 2010 to 94 hospitals in 2018.[8]
- By 2025, all maternity hospitals in California must adopt Baby-Friendly or similar optimal policies such as those assessed by the Maternity Practices in Infant Care survey (SB-402, De Leon). Significant progress toward this goal has already been made statewide. Table 4 indicates the percentage of infants born in 2018 in hospitals with optimal policies by race/ethnicity. These percentages have reached over 50% for all groups except American Indian and Asian infants.
- Adoption of these policies improves rates among all groups.[7,9] Figure 2 shows that exclusive breastfeeding rates are consistently higher among all groups in hospitals with optimal policies as compared to those in hospitals with other policies.

Table 4. Percentage of Infants Born in CA Hospitals with Optimal Maternity Care Policies by Race/Ethnicity (2018)

Race/Ethnicity	Total Births	% Born in Facilities with Optimal Policies
AFRICAN AMERICAN	17,831	68.0%
AMERICAN INDIAN	646	38.1%
ASIAN	54,369	49.9%
MULTIPLE RACE	15,358	57.9%
PACIFIC ISLANDER	568	63.9%
OTHER	6,045	57.9%
WHITE	99,044	50.2%
HISPANIC	186,875	59.7%

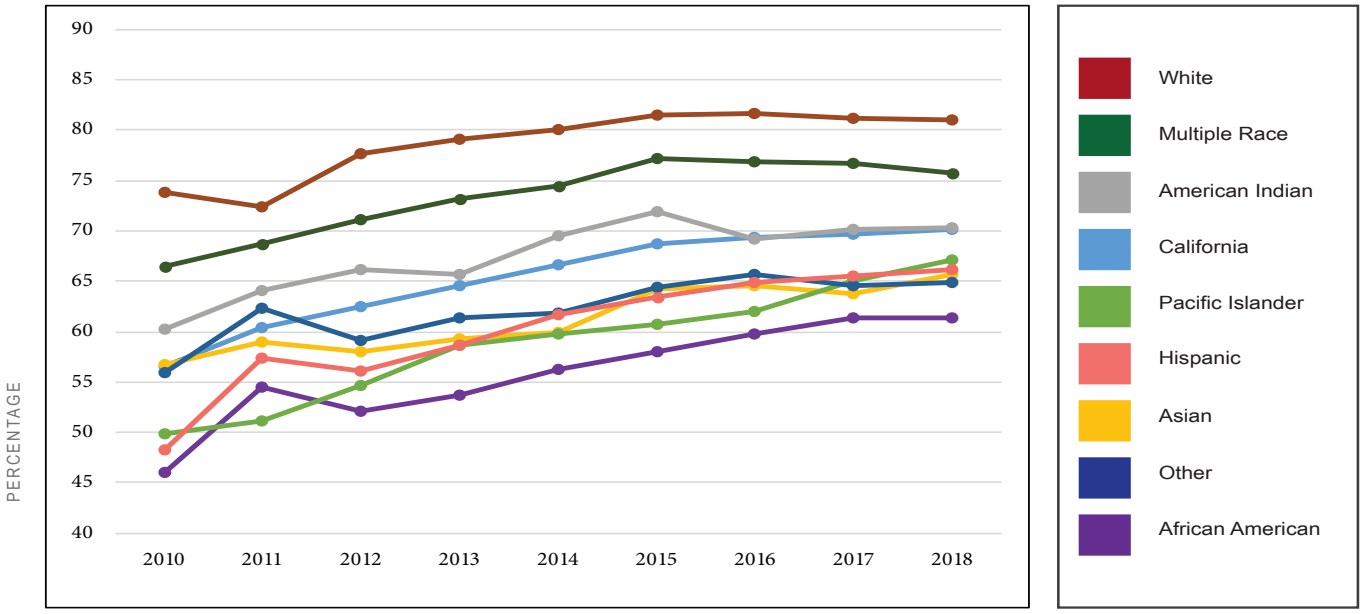
Figure 2. Comparison of Exclusive Breastfeeding Rates by Race/Ethnicity between CA Hospitals that Have Adopted Optimal Maternity Care Policies and Those with Other Policies (2018).



Notes: Optimal Policies group includes California Baby-Friendly designated and Kaiser Hospitals. Specific county rates are available at http://www.calwic.org/what-we-do/breastfeeding-advocacy/hospital-breastfeeding-rates-reports.

Only groups with sufficient data are represented.

Figure 3. In-Hospital County Exclusive Breastfeeding Rates by Race/Ethnicity, 2010-2018



Notes: Specific rates are available at http://www.calwic.org/what-we-do/breastfeeding-advocacy/hospital-breastfeeding-rates-reports.

Beyond Baby-Friendly

- Baby-Friendly or similar optimal policies have been demonstrated to reduce disparities in breastfeeding rates within hospitals, regions, and nationally.[4, 12] However, these policies are not able to eliminate disparities entirely. (Figure 2)[4, 12-14] Therefore, additional efforts are needed to work synergistically with Baby-Friendly policies to address the diverse needs and experiences of birthing women.
- Despite significant increases in exclusive breastfeeding among all groups since 2010, disparities in breastfeeding rates persist in California. (Figure 3)[9] For example, nationally, African American women still are less likely to initiate breastfeeding. Hispanic women are less likely to exclusively breastfeed than other groups despite having generally higher rates of initiation.[11,15]
- Researchers have identified several factors associated with persistent disparities in breastfeeding rates. For example, studies have found that there may be differences in exposures to hospital practices based on race/ethnicity. With non-Hispanic white women reporting exposure to optimal practices more often than women of other races and ethnicities.[10,16] These differences in exposure may be related to limited resources, differential support based on stereotypes[10] or a consequence of implicit bias among hospital personnel.[17]
- Even when policies and practices are uniformly experienced, individual mothers may be affected and influenced differently by them.[10,16] For example, using data from the New Mexico Pregnancy Risk Assessment System, researchers identified that rooming-in was positively associated with breastfeeding for at least two months among Native American women but negatively associated with the same outcome among English-speaking Hispanic women. These differences may come from population differences in context, expectations, and beliefs.[16] If these differences are not identified and addressed during interactions with patients, patients may be more likely to feel pressured rather than supported to breastfeed.[18]
- Differences in perinatal health, access to culturally and linguistically appropriate skilled care, exposure to racism, parenting norms, social support, and employment status influence mothers' intentions to breastfeed as well as their experience of guidance and support.[19-24] Standardized approaches to education and care may be less meaningful for women with divergent needs.
- Ongoing efforts in California hospitals to meet the requirement that all maternity hospitals adopt Baby-Friendly or similar optimal policies by 2025 will be important to ensure a foundation of quality maternity care is established throughout the state. However, disparities may continue unless efforts also are made to address community differences in resources, context, and experience.
- Fortunately, promising equitable structures and approaches have been identified that may be used synergistically with Baby-Friendly and other optimal policies. In many environments, changes are needed on multiple levels, requiring strong administrative support. Recommended changes include: 1) workforce development to increase diversity, 2) integration of peer counselors, doulas and family support workers in hospital settings, 3) the use of checklists so that all patients' needs are addressed, 4) changes in staffing responsibilities to accommodate new initiatives 5) partnerships with community groups, and 6) the use of technology to address immediate needs.[12,16,17,25]

Achieving Breastfeeding Equity in California Hospitals

- To regain momentum and further increase in-hospital exclusive breastfeeding, advocates and administrators must ensure that 1) Baby-Friendly and similar optimal policies are adopted by all California hospitals providing maternity care and 2) equitable structures and approaches are integrated throughout medical systems to work synergistically with those policies.
- The California Department of Public Health must provide clear guidance and associated metrics or benchmarks to be used for implementation of SB-402 so that hospital systems can prepare for surveillance beginning in 2025.
- Hospitals and medical systems must form ongoing partnerships in the communities they serve in order to identify and address their divergent needs and constraints. Evidence-based strategies, such as workforce development, may be used to start the process to include representative staff at all levels, peer counseling integration into perinatal care, and protocols to circumvent implicit bias.
- Administrators and policy-makers must ensure that resources, including funding, training, and needed staffing are available to support the removal of current barriers to breastfeeding equity. Targeted and sustainable changes will be needed to eliminate persistent disparities and ensure that all mothers in California are able to meet their breastfeeding goals.
- Breastfeeding policies, practices and rates should be considered in the health care reform efforts of the California Department of Health Care Services.
- The Department of Health Care Services must support comprehensive hospital breastfeeding initiatives, such as The Public Hospital Redesign and Incentives in Medi-Cal, and Medi-Cal Healthier Caliornia for All.

NOTES:

• All nonmilitary hospitals providing maternity services are required to complete the Newborn Screening Test Form [Version NBS-I(D) (12/08)].

• Infant-feeding data presented in this report include all feedings since birth to time of specimen collection, usually 24 to 48 hours since birth. Upon completing the form, staff must select from the following three categories to describe 'all feeding since birth': (1) Only Human Milk; (2) Only Formula; (3) Human Milk & Formula.

• The numerator for "Exclusive Breastfeeding" includes records marked "Only Human Milk." The numerator for "Any Breastfeeding" includes records marked "Only Human Milk" or "Human Milk & Formula." The denominator excludes cases with unknown method of feeding, cases marked NPO and those receiving TPN at time of specimen collection.

• Excludes data for infants who were in a Neonatal Intensive Care Unit (NICU) nursery at the time of specimen collection.

• Excludes cases that were not collected by facilities listed as "Kaiser" and/or "Regular" maternity hospitals in the newborn screening database.

• Data for counties include information for all births occurring in a 'Regular' or 'Kaiser' facility providing maternity services in that county. Counties and facilities with fewer than 50 births with known type of feeding are not shown.

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Photograph Sources: California WIC Association, Bill McLeod, www.Istockphoto.com