# Sustaining Change in Challenging Times

California Needs Innovative Breastfeeding Support Strategies

A Policy Update on California Breastfeeding and Hospital Performance Produced by California WIC Association and the UC Davis Human Lactation Center

## California Fact Sheet: 2017 Data







# Breastfeeding Keeps Mothers and Babies Healthy

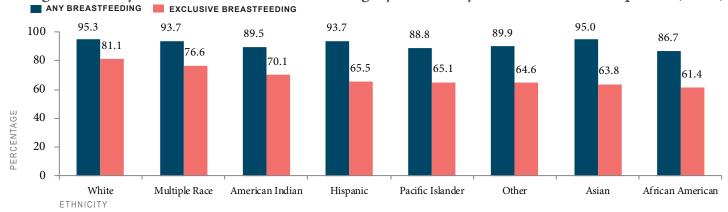
- Breastfeeding provides both mothers and infants with lifelong health benefits that dramatically reduce health care costs. 1-4 Breast milk provides infants with optimal nutrition along with unique components that promote growth, development, and a strong immune system. 1-2 For mothers, breastfeeding supports rapid recovery from childbirth and reduces risk for cancer and chronic disease. 2-4 These benefits are greatest among mothers and infants who breastfeed exclusively. 1-2
- While breastfeeding is a natural process, most mothers need support during the hospital stay to overcome common challenges. <sup>5,6</sup> Therefore, hospital policies and practices strongly influence mothers' abilities to meet their breastfeeding goals. <sup>6,7</sup> Mothers who experience supportive practices during the hospital stay are more likely to breastfeed exclusively than those who do not. <sup>1,6</sup>

## STATEWIDE PROGRESS HAS SLOWED

- Statewide efforts for systems change have improved the quality of maternity care in many California hospitals and substantially increased the number of Baby-Friendly hospitals throughout the state. As a result of these efforts, exclusive in-hospital breastfeeding rates have increased from 56.6% in 2010 to 69.6% in 2017. Recognizing the importance of high quality maternity policies, California legislators enacted a law (SB-402, De Leon) requiring that all maternity hospitals adopt optimal policies by 2025.
- Unfortunately, the most recent data show the pace of progress has slowed. Immediate action is needed to identify the sources of the slowdown and provide targeted support when and where it is needed. Early intervention may provide the boost needed to address barriers, reinvigorate staff, and to continue progress towards providing optimal care for all California mothers and babies.

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 (2017)



Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2017.

### 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. 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 2017, nearly 94% of California mothers began breastfeeding, but 26% of those mothers also fed their infants formula during the hospital stay. The Healthy People 2020 objectives indicate that in-hospital supplementation should be limited to about 14% of

- breastfed infants.<sup>5</sup> Since 2010, gaps between any and exclusive breastfeeding rates have narrowed for all California women, but disparities persist (Figure 1).<sup>9</sup>
- Table 1 includes the 2017 any and exclusive rates, by county. From 2016 to 2017, rates increased in only 10 counties. Rates did not change in 29 counties and decreased in 10 counties (Figure 2).
- 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 53% to 73% lower than those of this year's highest-performing hospitals. The lowest-performing hospitals also are more likely to serve large numbers of low-income women of color.9

Table 1. California Counties: In-Hospital Any and Exclusive Breastfeeding Rates, Lowest to Highest by Exclusive Rate (2017)

Rank	County	Total Births	% Any Breastfeeding	% Exclusive Breastfeeding
	CALIFORNIA	409,678	93.9	69.6
49	IMPERIAL	2,532	91.9	42.1
48	SHASTA	1,796	95.9	43.9
47	MADERA	815	85.5	47.1
46	TULARE	5,672	91.0	55.8
45	SUTTER	503	91.8	56.1
44	SAN BENITO	398	94.0	58.8
43	KINGS	2,213	89.0	59.8
42	MONTEREY	4,788	96.0	60.3
41	SANTA BARBARA	5,025	95.7	60.5
40	SAN JOAQUIN	6,381	87.7	61.7
39	MERCED	3,081	91.8	62.0
38	LOS ANGELES	108,461	9.39	62.6
37	KERN	11,108	89.8	62.9
36	LASSEN	225	93.3	64.0
35	SAN Bernardino	23,416	89.7	64.9
34	ORANGE	36,466	94.8	66.1
33	RIVERSIDE	21,047	91.4	66.8
32	STANISLAUS	9,022	89.6	67.1
31	TUOLUMNE	500	95.4	68.2
30	MENDOCINO	771	96.4	69.1
29	TEHAMA	464	93.3	69.2
28	LAKE	418	91.9	71.1
27	DEL NORTE	253	93.3	72.3
26	FRESNO	14,270	89.0	72.4

Rank	County	Total Births	% Any Breastfeeding	% Exclusive Breastfeeding
25	SACRAMENTO	14,065	91.8	72.8
24	VENTURA	7,657	96.4	75.4
23	BUTTE	2,610	92.8	76.7
22	HUMBOLDT	1,212	92.9	76.7
21	PLACER	7,506	96.3	77.4
20	SISKIYOU	295	93.6	78.6
19	PLUMAS	66	97.0	78.8
18	SAN DIEGO	33,358	95.9	78.9
17	SANTA CLARA	23,136	97.2	79.7
16	SAN FRANCISCO	10,595	97.2	80.6
15	SOLANO	4,231	95.2	81.3
14	CONTRA COSTA	10,049	96.8	81.3
13	EL DORADO	725	96.4	81.4
12	ALAMEDA	15,983	96.9	81.5
11	NAPA	723	98.2	83.5
10	SAN MATEO	4,772	97.4	84.8
9	AMADOR	286	96.5	85.3
8	YOLO	1,970	96.6	86.1
7	SONOMA	4,255	97.0	86.1
6	NEVADA	729	97.5	87.0
5	SAN LUIS OBISPO	2,137	97.5	87.1
4	INYO	185	98.4	88.1
3	MONO	100	95.0	89.0
2	MARIN	1,102	98.8	89.4
1	SANTA CRUZ	2,305	99.1	91.8

Note: Nine counties had too few births with known feeding to report: Alpine, Calaveras, Colusa, Glenn, Mariposa, Modoc, Sierra, Trinity, and Yuba. Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2017.

Table 2. California's Lowest-Scoring Hospitals, by Rank (2017)

RANK	HOSPITAL	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE	% MEDI-CAL BIRTHS
1	WHITTIER HOSPITAL MEDICAL CENTER	LOS ANGELES	2,541	93.9	14.8	61.8
2	GARDEN GROVE HOSPITAL	ORANGE	1,600	96.0	20.3	18.8
3	MONTEREY PARK HOSPITAL	LOS ANGELES	1,577	88.9	19.0	52.1
4	MONTCLAIR HOSPITAL MEDICAL CENTER	SAN Bernardino	758	81.3	15.7	37.8
5	ANAHEIM GLOBAL MEDICAL CENTER	ORANGE	877	92.8	27.4	72.7
6	GARFIELD MEDICAL CENTER	LOS ANGELES	2,775	95.4	30.9	43.9
7	PIH HEALTH HOSPITAL - DOWNEY	LOS ANGELES	884	87.7	28.3	52.2
8	SAN DIMAS COMMUNITY HOSPITAL	LOS ANGELES	552	89.7	32.4	0.8
9	ORANGE COUNTY GLOBAL MEDICAL CENTER	ORANGE	1,688	91.4	34.4	82.6
10	VICTOR VALLEY GLOBAL MEDICAL CENTER	SAN BERNARDINO	1,163	78.2	27.5	82.3
11	HEMET VALLEY MEDICAL CENTER	RIVERSIDE	932	75.5	26.1	91.4
12	MEMORIAL HOSPITAL OF GARDENA*	LOS ANGELES	703	93.7	40.8	95.8
13	SOUTH COAST GLOBAL MEDICAL CENTER	ORANGE	1,368	83.6	34.4	42.2
14	MERCY MEDICAL CENTER REDDING	SHASTA	1,794	95.9	43.9	63.4
15	EMANUEL MEDICAL CENTER	STANISLAUS	1,196	91.5	42.8	69.9

Table 3. California's Highest-Scoring Hospitals, by Rank (2017)

RANK	HOSPITAL	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE	% MEDI-CAL BIRTHS
1	SUTTER MATERNITY AND SURGERY CENTER*	SANTA CRUZ	959	99.6	95.6	23.6
2	FRENCH HOSPITAL MEDICAL CENTER*	SAN LUIS OBISPO	488	99.2	95.1	28.6
3	EL CAMINO HOSPITAL LOS GATOS*	SANTA CLARA	585	98.3	94.0	7.0
4	SCRIPPS MEMORIAL HOSPITAL ENCINITAS*	SAN DIEGO	1,658	97.1	91.2	4.8
5	SIERRA NEVADA MEMORIAL HOSPITAL	NEVADA	414	97.6	91.5	62.4
6	WOODLAND MEMORIAL HOSPITAL*	YOLO	605	96.7	90.6	55.8
7	POMERADO HOSPITAL	SAN DIEGO	893	95.1	88.4	10.3
8	KAISER SANTA ROSA	SONOMA	1,749	98.0	90.3	12.1
9	FRESNO COMMUNITY REGIONAL MEDICAL CENTER	FRESNO	3,509	83.0	79.5	80.0
10	SAN FRANCISCO GENERAL HOSPITAL	SAN FRANCISCO	960	96.1	88.1	89.5
11	EL CAMINO HOSPITAL MOUNTAIN VIEW	SANTA CLARA	3,727	98.8	89.7	7.0
12	KAISER WALNUT CREEK HOSPITAL	CONTRA COSTA	2,899	98.4	89.4	5.5
13	MARIN GENERAL HOSPITAL*	MARIN	1,102	98.8	89.4	54.0
14	MILLS-PENINSULA MEDICAL CENTER	SAN MATEO	1,709	96.5	87.5	11.0
15	NORTHERN INYO HOSPITAL*	INYO	182	98.4	88.1	54.8

<sup>\*</sup> Baby-Friendly Hospital

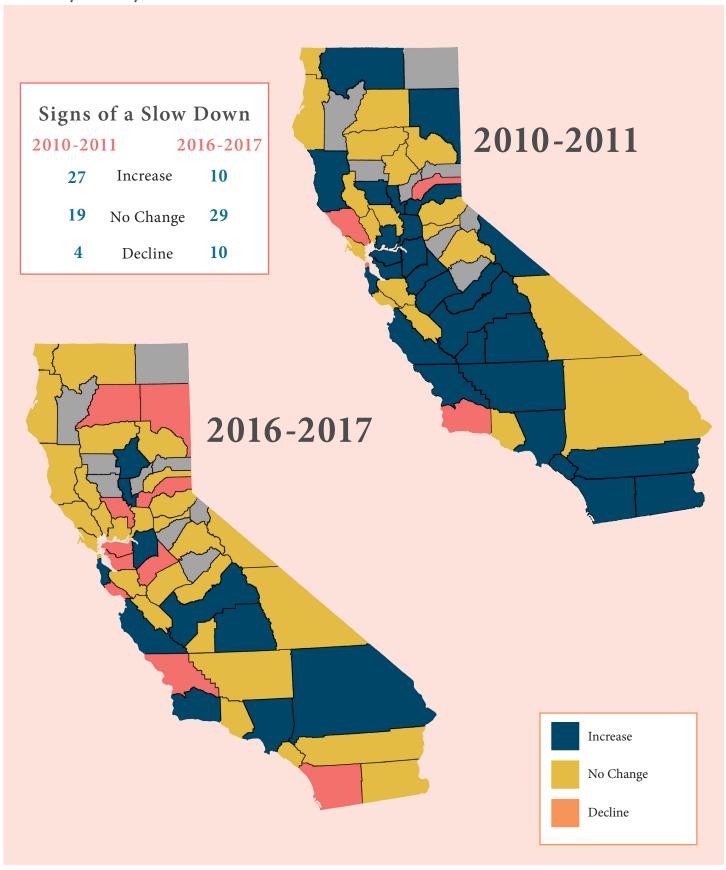
Notes: Estimated Medi-Cal birth rates are included as a way to approximate the levels of service to low-income women.

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, 2017.

Figure 2. Comparison of Year-Over-Year Changes in In-Hospital Exclusive Breastfeeding Rates by County, 2010-2011 and 2016-2017



Notes: Specific county rates are available at http://www.calwic.org/what-we-do/breastfeeding-advocacy/hospital-breastfeeding-rates-reports/. County classifications (Increase, No Change, and Decrease) based on identification of statistically significant changes in year-over-year rates.<sup>9</sup>

90 White Multiple Race 80 American Indian 70 All Other 60 Asian Hispanic PERCENTAGE Pacific Islander 40 African American 2010 2011 2012 2013 2014 2015 2016 2017

Figure 3. In-Hospital Exclusive Breastfeeding Rates by Race/Ethnicity, 2010-2017

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

## Intervention is Needed Before Gains are Lost

- Quality improvement efforts have been used in many areas of medical practice, including breastfeeding support. Unfortunately, sustainability of changes in policy and practice remains a challenge even when initial efforts result in significant clinical improvements. Only about 30% of quality improvement efforts are sustained after the initial projects or activities conclude. Barriers to sustainability of quality improvement efforts include lack of ongoing leadership, reduced or reallocation of resources, reduced interest, and change fatigue. 10-13
- makers and health care systems seeking to reinvigorate and sustain quality improvements. Successful programs that have generated long-term systems change share several common elements, including informed and effective leadership, the development of local clinical champions, provision of adequate resources, clear and frequent communication of progress on metrics, and ongoing incentives and promotion activities. For example, collaborative efforts to promote human milk feeding for very-low-birthweight infants were more likely to be sustained when strategies included multidisciplinary team involvement and training, actions to ensure staff buy-in, integration of change into daily processes, and ongoing data-related feedback.
- In today's busy medical environments, change fatigue also may be a significant challenge. 11,12 Change fatigue occurs when too many rapid changes are required from staff, resulting in lower morale and burnout. It is important that change fatigue is recognized and addressed as early

- as possible.<sup>12</sup> It is far more difficult to regain staff buyin when activities have stopped and gains in targeted outcomes have been lost. Because change fatigue may be caused by many factors, concerned staff and decision-makers in each facility must investigate and characterize problems unique to their environments before they take action. For example, in one facility, expected changes in breastfeeding rates may be slower than staff anticipate, making the effort appear futile. In other facilities, staff may need a better understanding of current management goals and critical milestones, especially if communications ended after initial goals were reached. In all cases, management should disseminate ongoing, engaging, and clear communications about expectations and how changes may be integral to existing processes.<sup>10,13</sup>
- While we cannot predict the future, the slowing progress for in-hospital breastfeeding rates may be an early indication that current initiatives are eroding or insufficient. Prompt action is needed when a slowdown is first observed, rather than waiting until momentum and morale are affected. The first step to reenergize change is to clarify the vision. In California, our vision has not changed. We are working to ensure that all California mothers have the knowledge, skills, and support they need to meet their breastfeeding goals.
- As we move closer to 2025 and the implementation of SB-402, state policy makers will play a vital role in driving continued improvements in hospital breastfeeding policies and practices. Clear communication about facility specific requirements and accountability will ensure that the progress made in the last decade will continue.<sup>9</sup>

# SUSTAINING CHANGE IN CHALLENGING TIMES

- California has long been a national leader in the promotion and support of optimal infant feeding. Advocates and policy makers must work together to develop action plans to combat potential reversals in breastfeeding rates and improve the quality of care in all of the state's maternity hospitals. 10-17
- 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 administrators can include compliance efforts in their long-range planning.
- Policy makers and advocates must work locally and regionally to ensure that resources are returned to quality improvement efforts before the gains already achieved are lost.
- Leaders and clinical champions in California hospitals are needed to identify and adopt innovative partnerships and practices needed to reinvigorate quality improvement processes and to integrate successful strategies into facility culture and existing processes.<sup>10-17</sup>
- Facilities should consistently collect and use data to identify gaps in policy and practice that may be impairing progress toward improvements in breastfeeding rates. 10-17
- Facilities with the lowest exclusive breastfeeding rates should work collaboratively with the state and other facilities to identify evidence-based and cost-effective solutions to remaining barriers and challenges. 14-16

#### **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 and those receiving TPN at time of specimen collection. Statewide, approximately 1.7% of cases have missing feeding information and/or are on 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 reported.

#### **REFERENCES:**

- 1. Perez-Escamilla R, et al. Impact of the Baby-friendly Hospital Initiative on breastfeeding and child health outcomes: a systematic review. Matern Child Nutr. Jul 2016;12(3):402-417.
- 2. World Health Organization. Guideline: Protecting, Promoting and Supporting Breastfeeding in Facilities Providing Maternity and Newborn Services. Geneva: 2017.
- 3. Bartick MC, et al. Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs. Matern Child Nutr. Jan 2017;13(1).
- 4. Bartick MC, et al.. Disparities in Breastfeeding: Impact on Maternal and Child Health Outcomes and Costs. J Pediatr. Feb 2017;181:49-55 e46.
- 5. Centers of Disease Control and Prevention. Breastfeeding Report Card 2018. (https://www.cdc.gov/breastfeeding/data/reportcard.htm).
- 6. Spaeth A, et al. Baby-Friendly Hospital designation has a sustained impact on continued breastfeeding. Matern Child Nutr. Jan 2018;14(1).
- 7. Patterson JA, et al. The effect of Baby-friendly status on exclusive breastfeeding in U.S. hospitals. Matern Child Nutr. Jul 2018;14(3):e12589.
- 8. Baby Friendly USA. Baby Friendly Facilities by State. 2018. (https://www.babyfriendlyusa.org/).
- 9. California Department of Public Health, Center for Family Health, Genetic Disease Screening Program, Newborn Screening Data, 2017. (https://www.cdph.ca.gov/Programs/CFH/DMCAH/Breastfeeding/Pages/In-Hospital-Breastfeeding-Initiation-Data.aspx).
- 10. Stone S, Lee HC, Sharek PJ. Perceived Factors Associated with Sustained Improvement Following Participation in a Multicenter Quality Improvement Collaborative. Jt Comm J Qual Patient Saf. Jul 2016;42(7):309-315.
- 11. Bray P, Cummings DM, Wolf M, Massing MW, Reaves J. After the collaborative is over: what sustains quality improvement initiatives in primary care practices? Jt Comm J Qual Patient Saf. Oct 2009;35(10):502-508.
- 12. Beer M, Nohria N. Cracking the code of change. Harv Bus Rev. May-Jun 2000;78(3):133-141, 216.
- 13. Weaver L, Bosse I, Sinclair D, Blais B, Pereira J. Making quality improvement stick and stay: Two lines of insurance. Healthc Manage Forum. Jan 2016;29(1):28-32.
- 14. Krauss MJ, Sharp M. Baby-Friendly as a Regional Collaborative Quality Improvement Project in an Academic Medical Center Environment. J Perinat Neonatal Nurs. Apr/Jun 2018;32(2):136-143.
- 15. Ward LP, et al. Improving Exclusive Breastfeeding in an Urban Academic Hospital. Pediatrics. Feb 2017;139(2).
- 16. Feldman-Winter L, et al. Best Fed Beginnings: A Nationwide Quality Improvement Initiative to Increase Breastfeeding. Pediatrics. Jul 2017;140(1).
- 17. Kahin SA, et al. Key Program Findings and Insights From the Baby-Friendly Hawaii Project. J Hum Lact. May 2017;33(2):409-414.







January 2019

This project was supported by Kaiser Foundation Hospitals.

Photograph Source: Istockphoto.com