

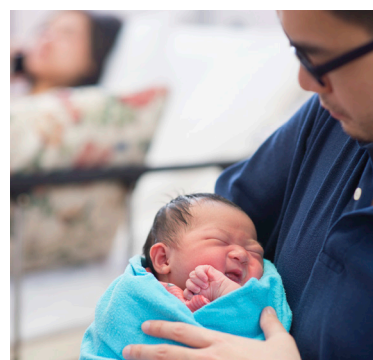
Using Data to Drive Change:

California Continues to Increase In-hospital Exclusive Breastfeeding Rates

A Policy Update on California Breastfeeding and Hospital Performance

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

California Fact Sheet: 2015 Data



EXCLUSIVE BREASTFEEDING PROTECTS MOTHERS' AND BABIES' HEALTH

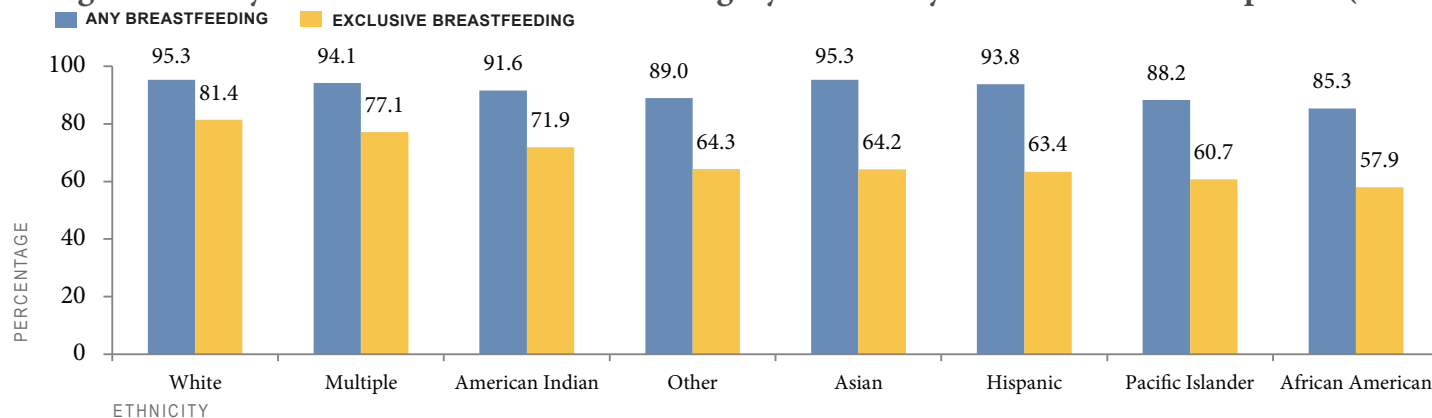
- Breast milk provides all the nutrients infants need as well as specific factors needed to build a strong immune system.¹
- In-hospital support is crucial to breastfeeding mothers' success.²⁻⁴ The greatest health benefits are seen when exclusive breastfeeding continues for 6 months. It is estimated that \$3.0 billion in medical costs would be saved if all U.S. infants were fed according to the current pediatric guidelines.⁵
- Hospitals that have instituted Baby-Friendly policies have high rates of breastfeeding, no matter where they are located or what populations they serve.^{4,6} As more California hospitals have adopted these evidence-based reforms, in-hospital exclusive breastfeeding has increased since 2010 from 56.6% to 68.6%.⁷

CALIFORNIA'S SUCCESS IS DRIVEN BY EVIDENCE

- For more than 15 years, decision-makers and advocates in California have used hospital-level surveillance data to coordinate and monitor efforts to improve the quality of perinatal care.
- Data show that mothers who experience more supportive practices (such as early breastfeeding initiation and limited supplementation) are more likely to breastfeed exclusively in the hospital and beyond.^{6,8}
- California has the greatest number of Baby-Friendly Hospitals in the nation and legislation requiring that all maternity hospitals adopt these or similar policies by 2025.⁹ Improved hospital policies and practices have increased breastfeeding among all California mothers.⁷

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.⁷

Figure 1. Any and Exclusive Breastfeeding by Ethnicity in California Hospitals (2015)



Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2015.

BREASTFEEDING IN CALIFORNIA HOSPITALS

- The California Department of Public Health Maternal, Child and Adolescent Health Program (MCAH) collects infant-feeding data for all maternity hospitals in the state.⁷ 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.
- Nearly 94% of mothers begin breastfeeding, but 27% of those mothers also feed their infants formula during the hospital stay. Gaps between any and exclusive breastfeeding rates have narrowed for all California women, but disparities persist (Figure 1).⁷
- Table 1 includes the 2015 “any” and “exclusive” rates, by county. Although disparities remain, rates increased in nearly all counties since 2010. Of the 44 counties with increased “exclusive” rates between 2010 and 2015, 15 increased 10% to 19%, 4 increased 20% to 29%, and 1 county’s exclusive rate went up by more than 30% (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 43% to 80% 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.

Table 1. California Counties: In-Hospital Any and Exclusive Breastfeeding Rates, Lowest to Highest by Exclusive Rate (2015)

Rank	County	Total Births	% Any Breastfeeding	% Exclusive Breastfeeding
	CALIFORNIA	427,033	93.9	68.6
50	COLUSA	139	89.9	33.8
49	IMPERIAL	2,825	93.2	36.9
48	SUTTER	1,723	90.4	44.7
47	TULARE	5,931	89.5	50.8
46	SAN BENITO	426	92.0	51.4
45	MADERA	901	85.6	52.4
44	KINGS	2,216	87.3	56.9
43	KERN	11,370	89.4	59.4
42	SANTA BARBARA	5,112	95.6	59.8
41	LOS ANGELES	114,850	93.8	60.2
40	SAN JOAQUIN	6,609	87.8	60.7
39	FRESNO	14,805	88.7	60.9
38	SAN BERNARDINO	23,367	88.6	61.2
37	MONTEREY	5,319	96.5	63.0
36	MERCED	3,095	92.8	65.6
35	LAKE	429	90.2	65.7
34	DEL NORTE	261	88.9	66.7
33	ORANGE	36,676	95.1	67.1
32	RIVERSIDE	21,968	92.4	67.7
31	STANISLAUS	9,138	90.6	70.5
30	TUOLUMNE	494	97.4	71.9
29	SACRAMENTO	14,520	91.3	72.1
28	MENDOCINO	899	95.9	73.5
27	VENTURA	8,299	96.2	73.6
26	HUMBOLDT	1,332	92.6	74.9
25	TEHAMA	555	93.2	76.4
24	BUTTE	2,598	93.7	77.3
23	PLUMAS	64	93.8	78.1
22	LASSEN	221	94.1	79.2
21	SANTA CLARA	24,077	97.2	79.4
20	SAN DIEGO	34,837	96.2	79.6
19	SAN FRANCISCO	10,438	97.1	80.7
18	SOLANO	4,151	94.8	81.7
17	CONTRA COSTA	10,570	96.5	81.9
16	PLACER	7,438	96.3	82.2
15	ALAMEDA	16,489	97.3	82.9
14	AMADOR	277	93.1	83.0
13	SAN MATEO	5,254	97.5	83.4
12	SHASTA	1,860	94.4	83.5
11	NAPA	824	97.6	84.2
10	EL DORADO	779	96.4	84.3
9	SISKIYOU	316	96.5	84.5
8	INYO	181	97.8	86.7
7	NEVADA	780	97.8	87.3
6	YOLO	1,942	98.2	87.6
5	SONOMA	4,621	97.4	87.7
4	SAN LUIS OBISPO	2,250	97.7	88.1
3	MONO	99	98.0	88.9
2	MARIN	1,173	99.0	89.1
1	SANTA CRUZ	2,528	98.8	93.2

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

Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2015.

Table 2. California’s Lowest-Scoring Hospitals, by Rank (2015)

RANK	HOSPITAL	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE	% MEDI-CAL BIRTHS
1	MONTEREY PARK HOSPITAL	LOS ANGELES	1,561	87.4	17.8	65.8
2	FOUNTAIN REGIONAL MEDICAL CENTER	ORANGE	3,219	93.4	28.3	40.3
3	VICTOR VALLEY COMMUNITY HOSPITAL	SAN BERNARDINO	1,128	79.1	19.9	67.7
4	PIH HEALTH HOSPITAL - DOWNEY	LOS ANGELES	970	85.5	25.9	53.0
5	CALIFORNIA HOSPITAL MEDICAL CENTER	LOS ANGELES	3,222	89.3	34.9	95.4
6	ST. FRANCIS HOSPITAL LYNWOOD*	LOS ANGELES	4,422	86.3	35.8	78.5
7	GLENDALE MEMORIAL HOSPITAL AND HEALTH CENTER*	LOS ANGELES	1,657	94.1	43.8	85.0
8	WHITTIER HOSPITAL MEDICAL CENTER	LOS ANGELES	2,755	91.3	42.1	59.2
9	HEMET VALLEY MEDICAL CENTER	RIVERSIDE	1,100	77.5	33.0	92.7
10	WESTERN MEDICAL CENTER ANAHEIM	ORANGE	869	95.2	45.1	85.3
11	GARDEN GROVE HOSPITAL	ORANGE	1,547	94.6	44.8	66.0
12	JOHN F. KENNEDY MEMORIAL HOSPITAL	RIVERSIDE	2,133	93.8	46.3	85.4
13	SAN DIMAS COMMUNITY HOSPITAL	LOS ANGELES	502	93.0	46.2	0.9
14	FREMONT MEDICAL CENTER	SUTTER	1,723	90.4	44.7	69.4
15	HARBOR-UCLA MEDICAL CENTER	LOS ANGELES	543	84.0	41.1	88.0

Table 3. California’s Highest-Scoring Hospitals, by Rank (2015)

RANK	HOSPITAL	COUNTY	TOTAL BIRTHS	% ANY	% EXCLUSIVE	% MEDI-CAL BIRTHS
1	DOMINICAN SANTA CRUZ HOSPITAL*	SANTA CRUZ	609	99.5	97.5	38.2
2	KAISER WALNUT CREEK HOSPITAL	CONTRA COSTA	3,032	98.5	96.1	4.5
3	WOODLAND MEMORIAL HOSPITAL*	YOLO	631	98.7	95.2	55.7
4	SUTTER MATERNITY AND SURGERY CENTER*	SANTA CRUZ	905	99.6	94.8	26.6
5	FRENCH HOSPITAL MEDICAL CENTER*	SAN LUIS OBISPO	463	99.6	93.1	27.5
6	UC SAN FRANCISCO HOSPITAL/MOFFITT	SAN FRANCISCO	2,129	96.9	91.3	22.9
7	EL CAMINO HOSPITAL	SANTA CLARA	3,485	99.0	92.6	6.2
8	SCRIPPS MEMORIAL HOSPITAL ENCINITAS*	SAN DIEGO	1,833	97.4	90.9	8.1
9	EL CAMINO LOS GATOS HOSPITAL	SANTA CLARA	565	99.5	92.2	6.2
10	SAN FRANCISCO KAISER HOSPITAL	SAN FRANCISCO	2,571	98.6	91.5	3.4
11	MARSHALL HOSPITAL*	EL DORADO	479	97.5	90.4	65.3
12	POMERADO HOSPITAL	SAN DIEGO	1,140	95.7	89.1	12.9
13	SCRIPPS MEMORIAL HOSPITAL LA JOLLA	SAN DIEGO	3,161	98.2	90.0	1.1
14	KAISER OAKLAND HOSPITAL	ALAMEDA	2,680	98.9	90.4	8.3
15	SANTA ROSA KAISER	SONOMA	1,909	98.3	90.0	9.6

* Baby-Friendly Hospital

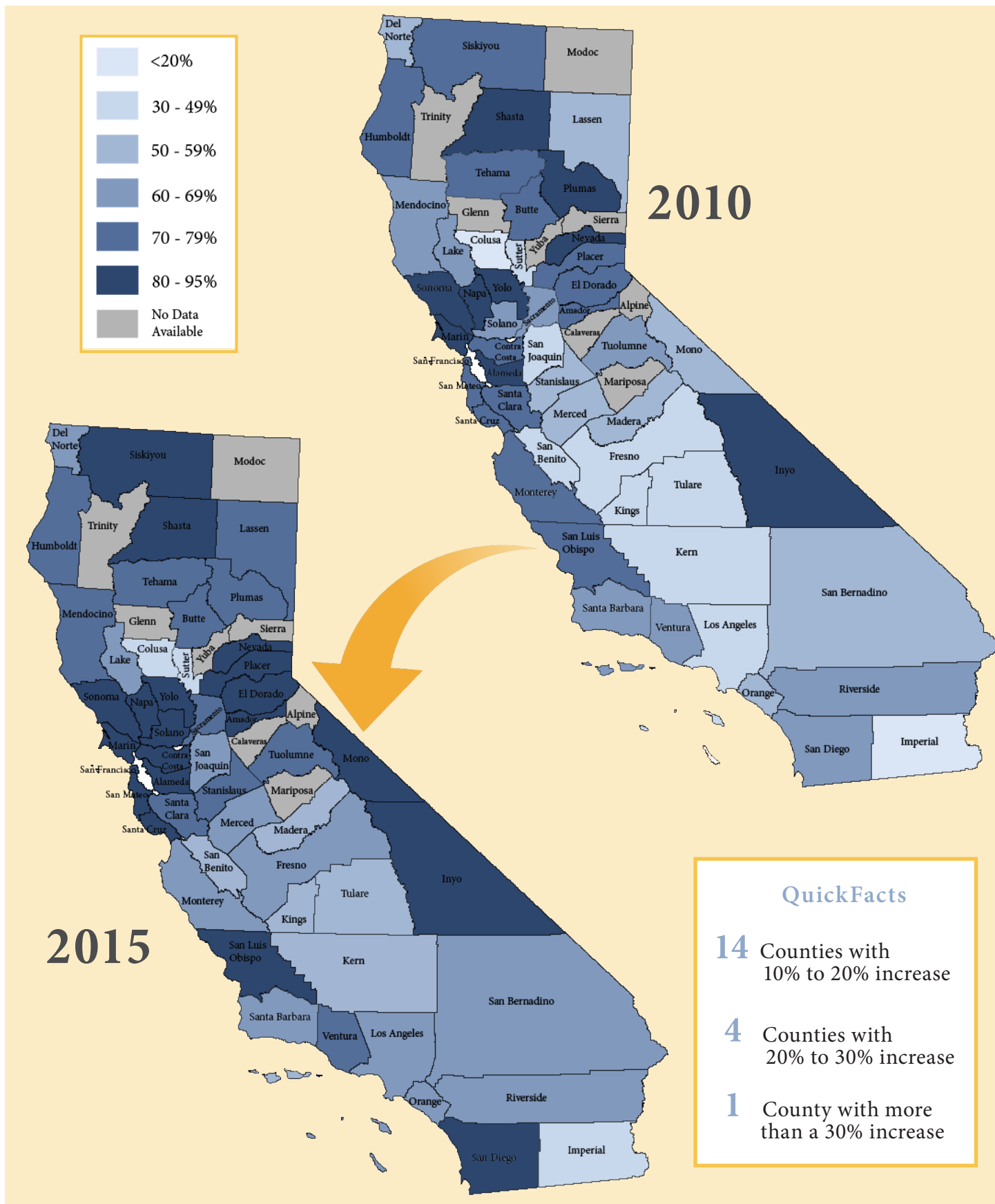
Notes: Estimated Medi-Cal birth rates are included as a way to approximate the levels of service to low-income women.

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) 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, 2015.

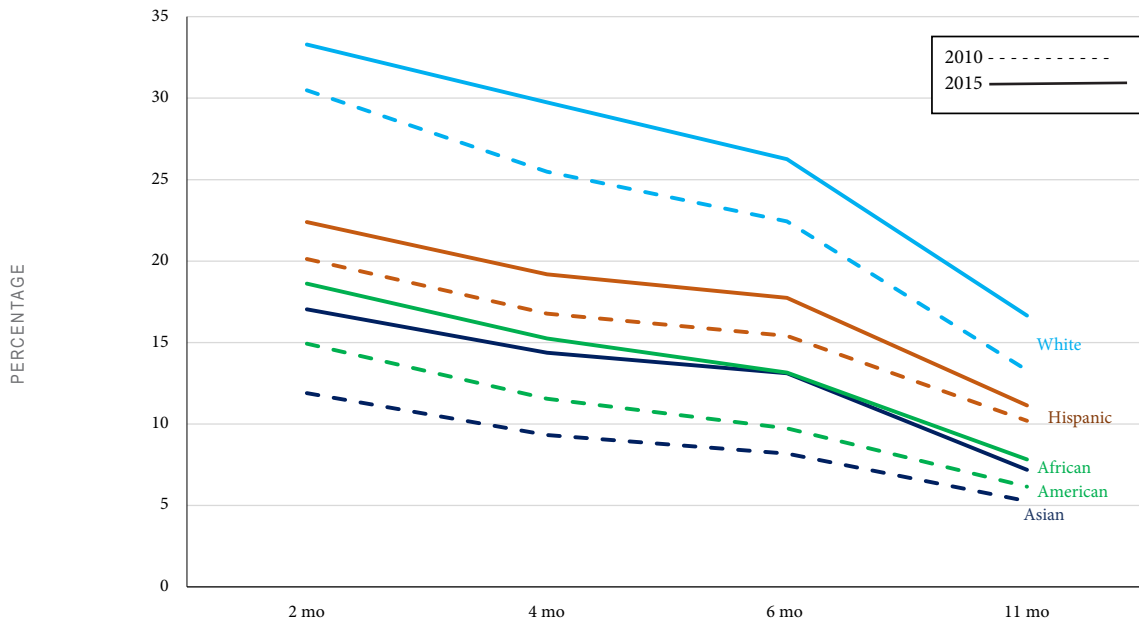
Figure 2. Changes in In-Hospital Exclusive Breastfeeding Rates by County, 2010 and 2015⁷



Notes: Specific county rates for 2010 available at <http://calwic.org/factsheets2012> and for 2015 in Table 1 of this fact sheet.

For classification purposes, rates were rounded to nearest whole number.

Figure 3. Percentage of “Fully Breastfeeding” Infants Enrolled in California WIC, by Infant Age and Ethnicity (2015)¹³



Notes: Rates of WIC enrolled infants receiving “fully breastfeeding” food package at 2, 4, 6, and 11 months in 2010 (dashed line) and 2015 (solid line). Source: California WIC Division, August 2016.

NATIONAL EFFORTS TO USE BREASTFEEDING DATA TO SET GOALS AND PRIORITIES

- The Healthy People 2020 framework includes targets for breastfeeding initiation, duration, and exclusivity.¹⁰ According to data collected by the National Immunization Survey (NIS) 2014-2015, California has achieved the 2020 benchmarks for breastfeeding initiation, breastfeeding at 12 months, and exclusive breastfeeding at 3 months. California is within 2% of the goals for breastfeeding rates at 6 months. However, these benchmarks are interim goals, not end points, which will be reset to direct national efforts through the next decade.¹¹
- The Centers for Disease Control and Prevention (CDC) use data to improve mothers’ access to breastfeeding support by tracking improvements in hospital practices,⁶ the proportion of babies born in supportive facilities, and the proportion of healthy babies receiving formula supplementation in the first 2 days.¹¹ California has shown strong improvements on all of these benchmarks, including dramatic increases in the number of babies born in Baby-Friendly Hospitals.
- Data are collected by the Joint Commission, an accrediting organization for hospitals, to monitor practices and feeding outcomes in order to drive quality improvement for maternity care nationwide. The majority of California hospitals are being monitored by the Joint Commission, which uses exclusive breastfeeding rates as one of the national core measures of perinatal care quality.¹²

USING DATA TO DRIVE IMPROVEMENTS IN CALIFORNIA BREASTFEEDING RATES

- For more than 15 years, advocates and policy makers in California have used local, regional, and statewide breastfeeding data to identify regions and groups needing targeted support and to monitor the impact of interventions and policy-level efforts. For many years, the focus for these efforts has been to increase the number of hospitals following the 10 specific hospital policies outlined in the Baby-Friendly Hospital Initiative.¹³ As a consequence, the number of Baby-Friendly hospitals in California continues to rise, from only 12 (3.3% of births) in 2006 to more than 80 (38.9% of births) in 2016.¹¹ Still, this designation has been achieved by only 1/3 of birthing hospitals in the state.
- As greater numbers of hospitals improve their policies, exclusive breastfeeding has increased dramatically. From 2010 to 2015, exclusive in-hospital breastfeeding rates increased among all California women by 12% (representing over 50,000 mothers). The highest increases occurred among Hispanic (15%) and African-American (11.8%) mothers (Figure 1).
- Higher in-hospital breastfeeding rates mean that more women need support after discharge to meet their breastfeeding goals. The California Department of Public Health, WIC Division has expanded breastfeeding support services, outreach, and education to meet the needs of participants. Figure 3 shows the percentages of fully breastfeeding infants in WIC by age and ethnicity. While the percentage of fully breastfeeding infants declines with infant age, higher rates of fully breastfeeding were seen among all infants in 2015 (solid lines) vs. 2010 (dashed lines).

DATA ARE NEEDED TO BUILD ON CALIFORNIA'S SUCCESS

- Hospitals, public health agencies, and community partners must work together to ensure that staff, administrators, policy-makers, and advocates have the data and skills needed to bring about further evidence-based reforms and expand efforts to support breastfeeding families after hospital discharge. Statewide surveillance systems should be developed to obtain consistent and comparable data on breastfeeding duration and exclusivity throughout the infant's first year of life
- The California Department of Public Health (CDPH) must continue to make in-hospital breastfeeding rates available to the public, to continue to drive quality improvement within hospital systems and to monitor the effects of legislation requiring all hospitals to adopt policies aligned with the 10 Steps to Successful Breastfeeding by 2025.⁹
- Whenever possible, data obtained from evaluation and quality improvement projects should be shared to increase the dissemination of best practices.

*What gets measured, gets managed.
- Peter Drucker*

- The Department of Health Care Services, Insurance and Managed Health Care should work with CDPH and state epidemiologists to identify breastfeeding data that health plans should be required to collect and report annually. Electronic Medical Records should track breastfeeding rates and infant-feeding data.
- Resources and coordinated data systems are needed to ensure that breastfeeding support at WIC is better integrated with health systems serving low income families.
- Policy makers and advocates should use data to guide and implement collective impact methodologies¹⁴ to promote optimal infant-feeding practices into the first year and beyond.

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 1.9% 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.

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