



California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form

Statewide and Maternal County of Residence by Race/Ethnicity: 2019

Geography and Race/Ethnicity	TOTAL	ANY BREASTFEEDING			EXCLUSIVE BREASTFEEDING		
		Number	Percent	95% CI Lower-Upper	Number	Percent	95% CI Lower-Upper
CALIFORNIA	390,058	365,859	93.8	(93.7 - 93.9)	273,899	70.2	(70.1 - 70.4)
African American	18,159	15,886	87.5	(87.0 - 88.0)	11,192	61.6	(60.9 - 62.3)
American Indian	649	601	92.6	(90.3 - 94.4)	496	76.4	(73.0 - 79.5)
Asian	54,658	51,271	93.8	(93.6 - 94.0)	35,074	64.2	(63.8 - 64.6)
Multiple Race	15,552	14,440	92.8	(92.4 - 93.2)	11,761	75.6	(74.9 - 76.3)
Pacific Islander	524	469	89.5	(86.6 - 91.8)	341	65.1	(60.9 - 69.0)
Other	5,989	5,440	90.8	(90.1 - 91.5)	3,952	66.0	(64.8 - 67.2)
White	99,850	95,462	95.6	(95.5 - 95.7)	81,849	82.0	(81.7 - 82.2)
Hispanic	184,791	172,915	93.6	(93.5 - 93.7)	122,078	66.1	(65.8 - 66.3)
Missing	9,886	.	.	.	.	.	.
ALAMEDA	15,962	15,408	96.5	(96.2 - 96.8)	12,593	78.9	(78.3 - 79.5)
African American	1,206	1,122	93.0	(91.5 - 94.3)	878	72.8	(70.2 - 75.2)
American Indian	10	10	100.0	(72.2 - 100.0)	.	.	.
Asian	5,033	4,910	97.6	(97.1 - 97.9)	3,979	79.1	(77.9 - 80.2)
Multiple Race	743	711	95.7	(94.0 - 96.9)	613	82.5	(79.6 - 85.1)
Pacific Islander	32	28	87.5	(71.9 - 95.0)	21	65.6	(48.3 - 79.6)
Other	486	468	96.3	(94.2 - 97.6)	372	76.5	(72.6 - 80.1)
White	3,607	3,519	97.6	(97.0 - 98.0)	3,098	85.9	(84.7 - 87.0)
Hispanic	4,127	3,939	95.4	(94.8 - 96.0)	3,045	73.8	(72.4 - 75.1)
Missing	718	.	.	.	.	.	.
ALPINE	4	.	.	.	.	.	.
African American	.	.	.	.	.	.	.
American Indian	2	.	.	.	.	.	.
Asian	.	.	.	.	.	.	.
Multiple Race	.	.	.	.	.	.	.
Pacific Islander	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.
White	.	.	.	.	.	.	.
Hispanic	1	.	.	.	.	.	.
Missing	1	.	.	.	.	.	.

California Department of Public Health
 *Numbers and percents not shown for <10 events
 Data not shown for missing race/ethnicity



California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form

Statewide and Maternal County of Residence by Race/Ethnicity: 2019

Geography and Race/Ethnicity	TOTAL	ANY BREASTFEEDING			EXCLUSIVE BREASTFEEDING		
		Number	Percent	95% CI Lower-Upper	Number	Percent	95% CI Lower-Upper
SOLANO	4,204	4,018	95.6	(94.9 - 96.2)	3,410	81.1	(79.9 - 82.3)
African American	481	447	92.9	(90.3 - 94.9)	346	71.9	(67.8 - 75.8)
American Indian	13	13	100.0	(77.2 - 100.0)	11	84.6	(57.8 - 95.7)
Asian	486	477	98.1	(96.5 - 99.0)	387	79.6	(75.8 - 83.0)
Multiple Race	360	340	94.4	(91.6 - 96.4)	291	80.8	(76.5 - 84.6)
Pacific Islander	11	.	.	.	.	.	.
Other	58	52	89.7	(79.2 - 95.2)	45	77.6	(65.3 - 86.4)
White	1,167	1,112	95.3	(93.9 - 96.4)	998	85.5	(83.4 - 87.4)
Hispanic	1,509	1,452	96.2	(95.1 - 97.1)	1,224	81.1	(79.1 - 83.0)
Missing	119	.	.	.	.	.	.
SONOMA	3,757	3,629	96.6	(96.0 - 97.1)	3,125	83.2	(81.9 - 84.3)
African American	30	29	96.7	(83.3 - 99.4)	25	83.3	(66.4 - 92.7)
American Indian	14	13	92.9	(68.5 - 98.7)	11	78.6	(52.4 - 92.4)
Asian	143	139	97.2	(93.0 - 98.9)	115	80.4	(73.2 - 86.1)
Multiple Race	162	159	98.1	(94.7 - 99.4)	138	85.2	(78.9 - 89.8)
Pacific Islander	6	.	.	.	.	.	.
Other	19	16	84.2	(62.4 - 94.5)	10	52.6	(31.7 - 72.7)
White	1,645	1,593	96.8	(95.9 - 97.6)	1,449	88.1	(86.4 - 89.6)
Hispanic	1,589	1,528	96.2	(95.1 - 97.0)	1,247	78.5	(76.4 - 80.4)
Missing	149	.	.	.	.	.	.
STANISLAUS	6,521	5,810	89.1	(88.3 - 89.8)	4,233	64.9	(63.7 - 66.1)
African American	151	114	75.5	(68.1 - 81.7)	75	49.7	(41.8 - 57.6)
American Indian	12	11	91.7	(64.6 - 98.5)	10	83.3	(55.2 - 95.3)
Asian	235	214	91.1	(86.7 - 94.1)	135	57.4	(51.1 - 63.6)
Multiple Race	208	185	88.9	(84.0 - 92.5)	139	66.8	(60.2 - 72.9)
Pacific Islander	10	.	.	.	.	.	.
Other	110	102	92.7	(86.3 - 96.3)	63	57.3	(47.9 - 66.1)
White	1,862	1,682	90.3	(88.9 - 91.6)	1,324	71.1	(69.0 - 73.1)
Hispanic	3,776	3,349	88.7	(87.6 - 89.7)	2,376	62.9	(61.4 - 64.5)
Missing	157	.	.	.	.	.	.

California Department of Public Health
 *Numbers and percents not shown for <10 events
 Data not shown for missing race/ethnicity



California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form Statewide and Maternal County of Residence by Race/Ethnicity: 2019

Geography and Race/Ethnicity	TOTAL	ANY BREASTFEEDING			EXCLUSIVE BREASTFEEDING		
		Number	Percent	95% CI	Number	Percent	95% CI
				Lower-Upper			Lower-Upper
SUTTER	1,058	1,006	95.1	(93.6 - 96.2)	742	70.1	(67.3 - 72.8)
African American	18	17	94.4	(74.2 - 99.0)	10	55.6	(33.7 - 75.4)
American Indian	2	.	.	.	.	.	.
Asian	155	149	96.1	(91.8 - 98.2)	86	55.5	(47.6 - 63.1)
Multiple Race	52	48	92.3	(81.8 - 97.0)	38	73.1	(59.7 - 83.2)
Pacific Islander	1	.	.	.	.	.	.
Other	35	33	94.3	(81.4 - 98.4)	19	54.3	(38.2 - 69.5)
White	369	344	93.2	(90.2 - 95.4)	298	80.8	(76.4 - 84.5)
Hispanic	396	382	96.5	(94.2 - 97.9)	265	66.9	(62.1 - 71.4)
Missing	30	.	.	.	.	.	.
TEHAMA	610	576	94.4	(92.3 - 96.0)	465	76.2	(72.7 - 79.4)
African American	1	.	.	.	.	.	.
American Indian	3	.	.	.	.	.	.
Asian	1	.	.	.	.	.	.
Multiple Race	38	33	86.8	(72.7 - 94.2)	27	71.1	(55.2 - 83.0)
Pacific Islander	.	.	.	.	.	.	.
Other	4	.	.	.	.	.	.
White	323	306	94.7	(91.7 - 96.7)	264	81.7	(77.2 - 85.6)
Hispanic	231	220	95.2	(91.7 - 97.3)	163	70.6	(64.4 - 76.1)
Missing	9	.	.	.	.	.	.
TRINITY	80	75	93.8	(86.2 - 97.3)	66	82.5	(72.7 - 89.3)
African American	.	.	.	.	.	.	.
American Indian	.	.	.	.	.	.	.
Asian	2	.	.	.	.	.	.
Multiple Race	7	.	.	.	.	.	.
Pacific Islander	.	.	.	.	.	.	.
Other	2	.	.	.	.	.	.
White	63	59	93.7	(84.8 - 97.5)	52	82.5	(71.4 - 90.0)
Hispanic	5	.	.	.	.	.	.
Missing	1	.	.	.	.	.	.



California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form

Statewide and Maternal County of Residence by Race/Ethnicity: 2019

Geography and Race/Ethnicity	TOTAL	ANY BREASTFEEDING			EXCLUSIVE BREASTFEEDING		
		Number	Percent	95% CI Lower-Upper	Number	Percent	95% CI Lower-Upper
TULARE	5,799	5,267	90.8	(90.1 - 91.5)	3,247	56.0	(54.7 - 57.3)
African American	50	44	88.0	(76.2 - 94.4)	28	56.0	(42.3 - 68.8)
American Indian	15	14	93.3	(70.2 - 98.8)	12	80.0	(54.8 - 93.0)
Asian	90	75	83.3	(74.3 - 89.6)	42	46.7	(36.7 - 56.9)
Multiple Race	105	96	91.4	(84.5 - 95.4)	68	64.8	(55.3 - 73.2)
Pacific Islander	2	.	.	.	.	.	.
Other	34	31	91.2	(77.0 - 97.0)	15	44.1	(28.9 - 60.5)
White	1,019	937	92.0	(90.1 - 93.5)	705	69.2	(66.3 - 71.9)
Hispanic	4,343	3,941	90.7	(89.8 - 91.6)	2,305	53.1	(51.6 - 54.6)
Missing	141	.	.	.	.	.	.
TUOLUMNE	403	392	97.3	(95.2 - 98.5)	338	83.9	(80.0 - 87.1)
African American	.	.	.	.	.	.	.
American Indian	2	.	.	.	.	.	.
Asian	2	.	.	.	.	.	.
Multiple Race	18	18	100.0	(82.4 - 100.0)	16	88.9	(67.2 - 96.9)
Pacific Islander	1	.	.	.	.	.	.
Other	.	.	.	.	.	.	.
White	315	307	97.5	(95.1 - 98.7)	271	86.0	(81.8 - 89.4)
Hispanic	50	50	100.0	(92.9 - 100.0)	39	78.0	(64.8 - 87.2)
Missing	15	.	.	.	.	.	.
VENTURA	7,666	7,376	96.2	(95.8 - 96.6)	6,198	80.9	(80.0 - 81.7)
African American	93	87	93.5	(86.6 - 97.0)	73	78.5	(69.1 - 85.6)
American Indian	4	.	.	.	.	.	.
Asian	339	325	95.9	(93.2 - 97.5)	263	77.6	(72.8 - 81.7)
Multiple Race	226	217	96.0	(92.6 - 97.9)	184	81.4	(75.8 - 85.9)
Pacific Islander	6	.	.	.	.	.	.
Other	49	47	95.9	(86.3 - 98.9)	42	85.7	(73.3 - 92.9)
White	2,422	2,350	97.0	(96.3 - 97.6)	2,125	87.7	(86.4 - 89.0)
Hispanic	4,360	4,178	95.8	(95.2 - 96.4)	3,376	77.4	(76.2 - 78.6)
Missing	167	.	.	.	.	.	.

California Department of Public Health
 *Numbers and percents not shown for <10 events
 Data not shown for missing race/ethnicity



California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form Statewide and Maternal County of Residence by Race/Ethnicity: 2019

Geography and Race/Ethnicity	TOTAL	ANY BREASTFEEDING			EXCLUSIVE BREASTFEEDING		
		Number	Percent	95% CI Lower-Upper	Number	Percent	95% CI Lower-Upper
YOLO	1,816	1,750	96.4	(95.4 - 97.1)	1,519	83.6	(81.9 - 85.3)
African American	46	43	93.5	(82.5 - 97.8)	28	60.9	(46.5 - 73.6)
American Indian	3	.	.	.	.	.	.
Asian	180	177	98.3	(95.2 - 99.4)	143	79.4	(73.0 - 84.7)
Multiple Race	116	110	94.8	(89.2 - 97.6)	93	80.2	(72.0 - 86.4)
Pacific Islander	.	.	.	.	.	.	.
Other	51	48	94.1	(84.1 - 98.0)	41	80.4	(67.5 - 89.0)
White	644	628	97.5	(96.0 - 98.5)	558	86.6	(83.8 - 89.1)
Hispanic	720	687	95.4	(93.6 - 96.7)	606	84.2	(81.3 - 86.7)
Missing	56	.	.	.	.	.	.
YUBA	1,002	923	92.1	(90.3 - 93.6)	724	72.3	(69.4 - 74.9)
African American	32	29	90.6	(75.8 - 96.8)	19	59.4	(42.3 - 74.5)
American Indian	1	.	.	.	.	.	.
Asian	45	37	82.2	(68.7 - 90.7)	22	48.9	(35.0 - 63.0)
Multiple Race	67	60	89.6	(80.0 - 94.8)	45	67.2	(55.3 - 77.2)
Pacific Islander	2	.	.	.	.	.	.
Other	29	17	58.6	(40.7 - 74.5)	10	34.5	(19.9 - 52.7)
White	479	448	93.5	(91.0 - 95.4)	375	78.3	(74.4 - 81.7)
Hispanic	326	308	94.5	(91.4 - 96.5)	233	71.5	(66.3 - 76.1)
Missing	21	.	.	.	.	.	.



California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form Statewide and Maternal County of Residence by Race/Ethnicity: 2019

Data Source: California Department of Public Health, Center for Family Health, Genetic Disease Screening Program, Newborn Screening Data, 2019

Prepared by: California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division

All nonmilitary hospitals providing maternity services are required to complete the Newborn Screening Test Form.

Note 1: 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 four categories to describe 'all feeding since birth':

(1) Only Human Milk; (2) Only Formula; (3) Human Milk & Formula; (4) NPO.

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 indicating "nothing by mouth" and those receiving total parenteral nutrition (TPN) at time of specimen collection.

Note 2: Excludes data for infants that were in an Neonatal Intensive Care Unit (NICU) nursery at the time of specimen collection.

Note 3: Excludes data for infants with missing county of residence.

Note 4: Infant race/ethnicity is based upon mother and father race/ethnicity as reported on the birth certificate and recorded on the Newborn Screening Test Form. Data for individual race groups exclude persons of Hispanic ethnicity.

Data for cases with missing race/ethnicity are not shown, but are included in the totals.

Note 5: Data are not shown for less than 10 events.

Note 6: 95% confidence intervals are shown in parentheses. Confidence intervals were computed using the Wilson Score formula.

Newcombe, R.G. (1998). Two-sided confidence intervals for the single proportion: comparison of seven methods.

Statistics in Medicine, 17: 857-872.