

L.A. Health

February 2001

Breastfeeding Practices In Los Angeles County

Extensive research, especially in recent years, documents diverse and compelling benefits to infants, mothers, and families from breastfeeding and the use of human milk for infant feeding.¹ The American Academy of Pediatrics (AAP) recommends breastfeeding as the optimal method for feeding infants because it promotes the best possible health, developmental, and psychosocial outcomes for children.² Breast milk contains maternal antibodies and other immune factors that provide infants with protection against many types of infections, including ear, respiratory, and gastrointestinal infections. In addition, recent studies suggest that breastfeeding may lower the risk of some chronic conditions during childhood, including diabetes, obesity, and asthma and other allergic conditions.¹ Breastfeeding promotes bonding between mother and infant and also offers many health benefits to mothers. For example, breastfeeding reduces post-partum bleeding by stimulating uterine contraction following delivery, helps women lose weight gained during pregnancy, improves post-partum bone remineralization, and reduces the risk of ovarian and pre-menopausal breast cancer.^{1,2}

The percentage of mothers in the United States who initiate breastfeeding has risen from 25% in 1970 to nearly 60% in 1995.³ However, among mothers who begin breastfeeding, approximately two-thirds stop before the infant reaches six months of age. The AAP recommends that infants be breastfed for at least 12 months.²

To focus attention on the public health importance of increasing breastfeeding rates nationally, the U.S. Department of Health and Human Services (DHHS) has established year 2010 goals for breastfeeding: 1) To increase the percentage of mothers who initiate breastfeeding in the early post-partum period to at least 75%;

1. U.S. Department of Health and Human Services (DHHS). *HHS Blueprint for Action on Breastfeeding*, Washington D.C., (2000). DHHS, Office on Women's Health, 2000.

2. American Academy of Pediatrics, Work Group on Breastfeeding. *Breastfeeding and the Use of Human Milk*. *Pediatrics* 1997;100(6):1035-1039.

3. Ryan, AS. *The resurgence of breastfeeding in the United States*. *Pediatrics* 1997;99(4).



COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES
Public Health

The Los Angeles County Health Survey is a biennial, population-based telephone survey that collects information on sociodemographic characteristics, health status, health behaviors, and access to health services among adults and children in the county. The most recent survey was conducted for the Department of Health Services between September 1999 and April 2000 by Field Research Corporation. Support for the survey was also provided by the California Department of Health Services, the Los Angeles County Department of Public Social Services, and Los Angeles County Medicaid Demonstration Project.

The 1999–2000 survey collected information on a random sample of 8,354 adults and 6,016 children. Interviews were offered in English, Spanish, Cantonese, Mandarin, Korean, and Vietnamese. Among households contacted and eligible for participation, the response rate was 55%. To adjust for differential rates of participation, results were weighted by selected demographic variables using 1998 census projections for the Los Angeles County population.

The findings in this report are subject to several limitations. In any survey that includes sampling, some degree of error (referred to as “sampling error”) is introduced by chance alone, even when the sample is chosen randomly. In the present survey, if 50% of the overall sample of adults answered “yes” to a specific question, the sampling error would be plus or minus 1.2 percentage points at the 95% confidence level. This means that if all adults in the population were asked the above question, there is a 95% chance that the result would be between 48.8% and 51.2%. Because the sample sizes of subgroups are smaller than the overall sample, results for these subgroups have larger sampling errors and wider confidence levels. For all results presented in this report, confidence levels are available.

There are a number of other possible sources of error in any survey. For example, questions may be misunderstood, respondents may not provide accurate information, and errors may occur in the processing of data. In addition, surveys administered by telephone miss those who are homeless and others without telephone service. The survey professionals working on this study made every effort to minimize these sources of error.

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2) To increase the percentage who breastfeed six months or longer to at least 50%; and 3) To increase the percentage who breastfeed 12 months or longer to at least 25%.⁴

This report presents findings from the 1999–2000 Los Angeles County Health Survey on breastfeeding practices among mothers in the county. A total of 2,174 randomly selected children aged birth through five years were included in the survey. However, the questions on breastfeeding were restricted to the 2,056 (95%) children for whom the biological mother was available for interview.⁵ In addition, because the children ranged in age from birth through five years but the reported breastfeeding practices occurred during the child’s infancy, the results refer back to the period from approximately 1994–1999.

Table 1. Rates of Breastfeeding in Los Angeles County by Selected Characteristics, 1994–1999

	Initiated Breastfeeding		Breastfeeding at Six Months	
	Percent	(95% CI)	Percent	(95% CI)
All Mothers	79%	±2	40%	±2
Maternal Age at Child’s Birth				
13–19	71%	±6	25%	±5
20–29	79%	±2	42%	±3
30 OR OLDER	83%	±3	44%	±4
Marital Status				
MARRIED OR LIVING TOGETHER	83%	±2	44%	±2
SINGLE ¹	68%	±5	29%	±4
Maternal Education				
LESS THAN HIGH SCHOOL	76%	±3	40%	±4
HIGH SCHOOL GRADUATE	77%	±4	35%	±4
SOME COLLEGE OR TRADE SCHOOL	82%	±3	39%	±4
COLLEGE OR POST GRADUATE DEGREE	87%	±3	51%	±5
Household Income*				
LESS THAN 100% FPL	76%	±3	38%	±4
AT LEAST 100% AND LESS THAN 200% FPL	77%	±3	38%	±4
AT LEAST 200% AND LESS THAN 300% FPL	82%	±4	39%	±5
300% FPL OR ABOVE	88%	±3	50%	±5
Residence (Service Planning Area)				
ANTELOPE VALLEY	79%	±8	42%	±10
SAN FERNANDO	83%	±4	46%	±5
SAN GABRIEL	81%	±4	39%	±5
METRO	81%	±5	37%	±6
WEST	83%	±7	48%	±9
SOUTH	76%	±5	38%	±6
EAST	75%	±5	38%	±6
SOUTH BAY	78%	±5	40%	±6

1. Single includes the categories “Divorced”, “Widowed”, “Separated”, and “Never married”.

*Poverty status is based on the 1999 Federal Poverty Level (FPL). In 1999, the 100% FPL for a family of two adults and two dependents was 16,895 per year, the 200% FPL was 33,790 per year, and the 300% FPL was 50,685 per year.

Source: Los Angeles County Health Survey

4. Healthy People 2010. Washington, DC: U.S. Dept. of Health and Human Services. 2000

5. Six percent of children in the sample were born outside California. Inclusion of these children in the analysis did not appreciably change the findings. The survey did not allow us to identify children born in California but outside Los Angeles County.

Rates of Breastfeeding in Los Angeles County

- The percentage of mothers in Los Angeles County who initiated breastfeeding in 1994–1999 was 79% (Table 1).
- However, the percentage of mothers in the county who breastfed at least six months was only 40%, and the percentage of mothers who breastfed 12 months or longer was only 18%.
- Teenage mothers (aged 13–19 years) were less likely to initiate breastfeeding and less likely to breastfeed at least six months than were older mothers (Table 1).

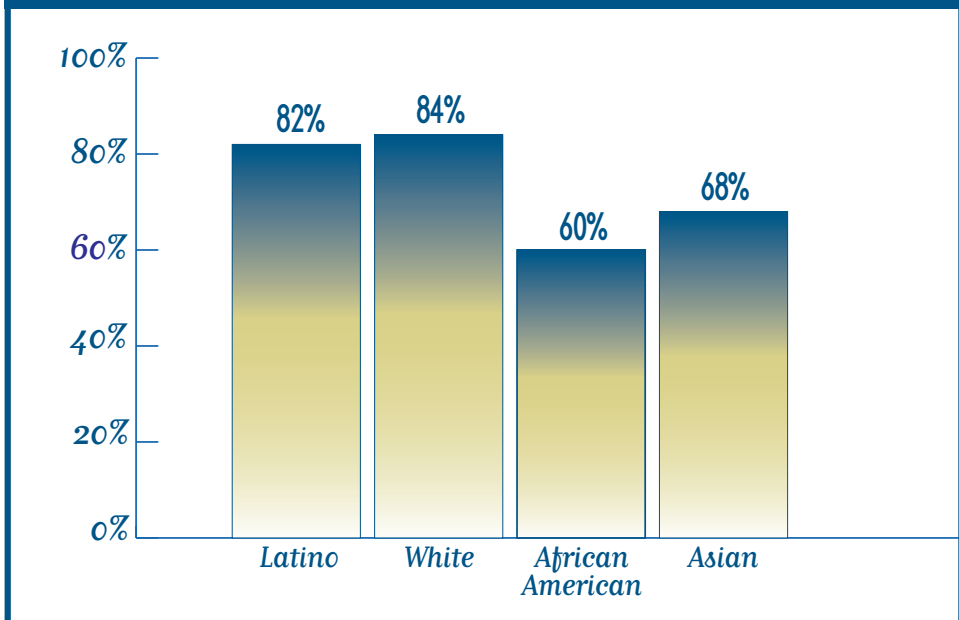
→ White and Latino mothers⁶ were more likely to initiate breastfeeding (84% and 82% respectively) than African-American (60%) and Asian/Pacific Islander (68%) mothers (Figure 1). White and Latino mothers were also more likely to continue breastfeeding at least six months (50% and 42% respectively) than African-American (22%) and Asian/Pacific Islander mothers (25%) (Figure 2).

→ Latina mothers born in the United States were less likely to initiate breastfeeding (73%) than those not born in the U.S. (86%). U.S.-born Latinas were also less likely to breastfeed at least six months (29%) than non-U.S.-born Latinas (47%).

→ Mothers who were married or living with a partner were more likely to initiate breastfeeding (83%) than mothers who were single (i.e., divorced, separated, widowed, or never married) (68%). Mothers who were married or living with a partner were also more likely to breastfeed at least six months (44%) than those who were single (29%).

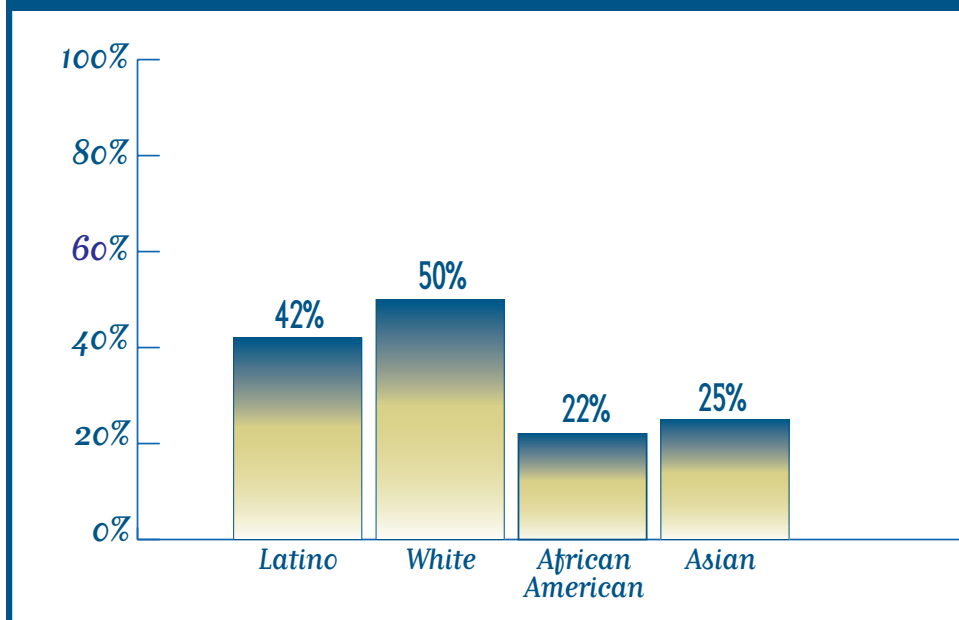
→ Breastfeeding rates were higher among mothers with more years of formal education than those with fewer years of education (Table 1).

Figure 1. Prevalence of Breastfeeding Initiation by Race/Ethnicity, 1994–99



Source: Los Angeles County Health Survey

Figure 2. Prevalence of Breastfeeding Six Months or Longer by Race/Ethnicity, 1994–99



Source: Los Angeles County Health Survey

6. Because racial/ethnic information was not collected on all mothers, the racial/ethnic comparisons are based on the race/ethnicity of the child. Among mothers for whom race/ethnicity data were available (n=1,642), 92% reported their child's race/ethnicity to be the same as their own.



→ Among mothers living below 300% of the federal poverty level, 78% initiated breastfeeding and 38% breastfed at least six months. In comparison, among mothers living at or above 300% of the federal poverty level, 88% initiated breastfeeding and 51% breastfed at least six months (Table 1).

→ 67% of mothers participated in the Special Supplemental Program for Women, Infants and Children (WIC). Breastfeeding initiation among WIC participants was 77% and among non-WIC participants was 85%. The percentage of mothers who breastfed at least six months was 39% among WIC participants and 43% among non-participants. However, when the analysis was restricted to mothers living below 200% of the federal poverty level, no differences in breastfeeding rates were observed between the two groups.

Temporal trends in breastfeeding were examined by considering breastfeeding practices in relation to the child's age at the time of the survey (i.e., children aged five years were assumed to have been born and breastfed in 1994, those four years of age born and breastfed in 1995, etc.).

→ The percentage of mothers who initiated breastfeeding increased from 74% in 1994 to 84% in 1999. The percentage of mothers who breastfed at least six months increased from 36% in 1994 to 44% in 1999 (this latter increase was not statistically significant).

Reasons for Not Breastfeeding

→ Among mothers who did not initiate breastfeeding, 72% reported that a preference for bottle-feeding was a reason they did not breastfeed. In addition, 26% reported that physical or medical difficulties was a reason they did not breastfeed, 20% that job or scheduling difficulties was a reason, and 14% reported that they did not know how to breastfeed (Note: respondents could choose more than one reason).

Timing of Decision to Breastfeed

- Among mothers who initiated breastfeeding, 50% reported that they made the decision to breastfeed prior to their pregnancy, 41% made the decision during their pregnancy, and 10% decided after their babies were born.
- Among non-breastfeeding mothers, 31% reported that they made their decision not to breastfeed prior to their pregnancy, 19% during their pregnancy, and 50% after their babies were born (Figure 3).

Social Support to Breastfeed

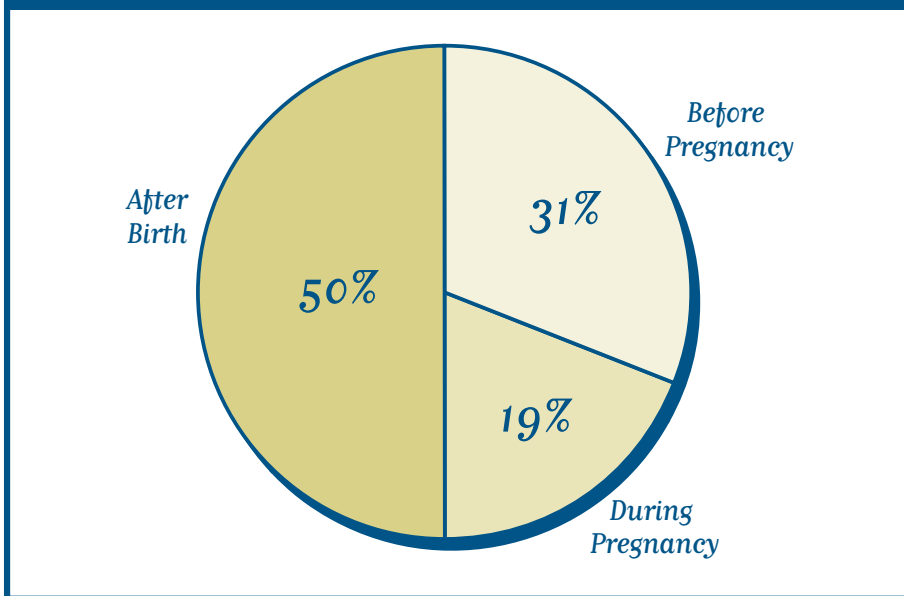
Mothers were asked whether a doctor, nurse, or other health professional encouraged them to breastfeed after giving birth and while still in the hospital. Mothers who had initiated breastfeeding were also asked how much support or encouragement they received from health professionals, family, or friends after leaving the hospital.

- Among all mothers, 74% reported receiving encouragement to breastfeed while in the hospital.
- Mothers who initiated breastfeeding were more likely to report receiving encouragement to breastfeed while in the hospital (76%) than were mothers who did not breastfeed (65%).
- Mothers who breastfed for three months or longer were more likely to report receiving support or encouragement after leaving the hospital (78%) than were mothers who breastfed less than three months (68%).

Discussion

The survey findings indicate that, from 1994 to 1999, the rate of breastfeeding initiation among Los Angeles County mothers was nearly 80%, a substantially higher rate than that reported nationally in 1995 (60%).³ Initiation of breastfeeding was much more common among whites and Latinas than African-Americans and Asians/Pacific Islanders, a pattern that has also been observed nationally.³ In addition, Latino mothers born outside the United States were more likely than U.S.-born Latinas to initiate breastfeeding, suggesting that the process of acculturation may act to discourage breastfeeding in some settings.

Figure 3: Timing of Decision Not to Breastfeed Among Non-Breastfeeding Mothers, 1994–99



Source: Los Angeles County Health Survey

The percentage of mothers who breastfed at least six months (40%) was also considerably higher than that reported nationally in 1995 (21%).³ However, only about one-half of mothers who initiated breastfeeding continued these feedings for at least six months. The discontinuation of breastfeeding over the first six months was even more pronounced among African-Americans, Asians/Pacific Islanders, teens, and single mothers. In addition, fewer than one in five mothers breastfed for 12 months or longer.

These findings highlight the need for widespread efforts to promote breastfeeding among mothers in the county. The decisions about whether to breastfeed and for how long to breastfeed are influenced by a wide range of factors, including community norms and values, family and other social supports, personal attitudes and beliefs, knowledge about the benefits of breastfeeding, and the medical conditions of the mother and infant. Although nearly 75% of mothers reported encouragement to breastfeed from a health care provider while in the hospital for the birth of their children, half of those who elected not to breastfeed reported making this decision after the baby's birth. These findings suggest that more effective strategies are needed in the hospital setting to promote the successful initiation of breastfeeding with some mothers. The DHHS Office on Women's Health recently published guidelines on practices for successful breastfeeding services at hospitals and other maternity centers.¹

A number of factors have been identified to explain the low rate of breastfeeding among African-American mothers nationally, including lack of access to information and education about breastfeeding, more negative views of breastfeeding among African-American women, and less family and other social support for breastfeeding.¹ One recent study documented the important influence of the infant's father and grandmother on African-American women's intentions to breastfeed, highlighting the importance of including husbands, partners, and other influential family members in breastfeeding promotion activities.⁷ Support provided by a health care provider was also an independent predictor of intention to breastfeed, highlighting the important role of the health care community in promoting breastfeeding.

Because the survey only collected information on maternal employment at the time of interview, we could not assess the relationship between employment and breastfeeding practices. However, other studies have found that outside employment



7. Bentley ME, Caulfield LE, Gross SM, et al. Sources of influence on intention to breastfeed among African-American women at entry to WIC. *J Hum Lac* 1999;15(1):27-34.

Resources

following childbirth is associated with earlier cessation of breastfeeding.^{8,9} Nationally, approximately one-third of employed mothers return to work within three months and two-thirds within six months after childbirth, suggesting that efforts to increase breastfeeding rates will require strategies to create more supportive work environments for breastfeeding.¹

The survey had several other important limitations. First, the information collected on breastfeeding practices covered a relatively long time period (1994–1999) with varying lengths of recall depending on the child’s age at interview. The increased rate of breastfeeding observed over the five-year period should be viewed with caution given that mothers of infants and toddlers may have been more prone to provide a socially desirable response related to breastfeeding than mothers of older children. Second, the survey did not collect information on formula feeding and, therefore, did not allow for distinguishing between infants who were exclusively breastfed during the first six months versus those who were breastfed but received much of their nutrition from formula or other sources. Third, comparisons of breastfeeding rates across service planning areas (SPAs) should be made cautiously given the relatively small sample sizes in some SPAs.

In summary, the survey found that a relatively high percentage of mothers in Los Angeles County initiate breastfeeding although this is not the case across all sub-groups. In addition, a much lower percentage of mothers continue breastfeeding beyond six months and relatively few continue through 12 months. The findings suggest that efforts are needed in the county to increase breastfeeding rates and should be targeted most intensively to African-American and Asian populations and to other vulnerable groups, including single and teen mothers.

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8. Gielen AC, Faden RR, O’Campo P, Brown H, Paige DM. Maternal employment during the early postpartum period: effects on initiation and continuation of breastfeeding. *Pediatrics* 1999;87:298-305.

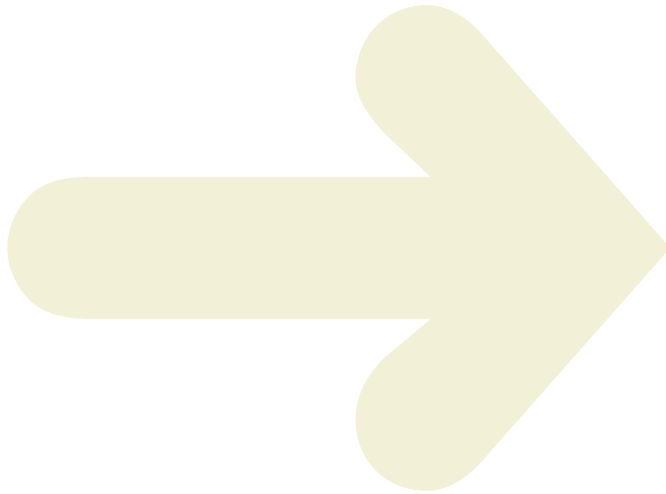
9. Ryan AS, Martinez GA. Breastfeeding and the working mother: a profile. *Pediatrics* 1989;83:524-531.



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Summary:

LOS ANGELES COUNTY HEALTH SURVEY

Issue 3

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