



Strategies to Protect Vulnerable Populations

Working Mothers, Breastfeeding, and the Law

Lindsey Murtagh, JD, MPH, and Anthony D. Moulton, PhD

Workplace barriers contribute to low rates of breastfeeding. Research shows that supportive state laws correlate with higher rates, yet by 2009, only 23 states had adopted any laws to encourage breastfeeding in the workplace.

Federal law provided virtually no protection to working mothers until the 2010 enactment of the “reasonable break time” provision of the Patient Protection and Affordable Care Act. This provision nonetheless leaves many working mothers uncovered, requires break time only to pump for (not feed) children younger than 1 year, and exempts small employers that demonstrate hardship.

Public health professionals should explore ways to improve legal support for all working mothers wishing to breastfeed. Researchers should identify the laws that are most effective and assist policymakers in translating them into policy. (*Am J - Public Health*. 2011;101:217–223. doi:10.2105/AJPH.2009.185280)

BREASTFEEDING YIELDS

important immediate and long-term health benefits for infants and their mothers, including positive impacts on children’s cognitive development and their health

as adults.^{1–3} Breastfeeding is associated with higher productivity and lower absenteeism for breastfeeding mothers and has additional benefits for society (Table 1).^{4–6} The American Academy of Pediatrics recommends exclusive breastfeeding through 6 months postpartum and continued breastfeeding until the infant is aged at least 12 months.¹ Among other organizations, the World Health Organization, the US Surgeon General’s Office, and the American Academy of Family Physicians recommend comparable or longer durations of breastfeeding.^{7–9}

Healthy People 2010 established 5 US breastfeeding goals, none of which have been achieved (Table 2).¹⁰ Of the mothers of children born in 2006, 73.9% initiated breastfeeding, which is close to the *Healthy People 2010* goal of 75%. However, only 43.4% continued breastfeeding for at least 6 months postpartum, only 33.1% continued exclusive breastfeeding at 3 months, and only 13.6% continued exclusive breastfeeding for at least 6 months postpartum.¹¹ Many states’ breastfeeding rates for these mothers were small fractions of the *Healthy People 2010* goals. Breastfeeding rates are low in certain minority groups (especially African Americans, American Indians, and Alaska Natives) and among

low-income, less-educated, and younger women, directly implicating health equity issues.¹²

In 2003, the World Health Organization and UNICEF recommended “enacting imaginative legislation protecting the breastfeeding rights of working women and establishing means for its enforcement” by all governments.^{7(p14)} An analysis of national, aggregate data in the United States found a general association between states’ adoption of laws supporting breastfeeding (not limited to workplace laws) and initiation of breastfeeding and breastfeeding at 6 months.¹³ Here we review federal and state laws relevant to breastfeeding in the workplace, identify gaps and limitations in those laws, and recommend actions to improve the use of law for achieving higher rates of breastfeeding.

WORK AND BREASTFEEDING

Employment of mothers outside the home, especially full-time employment, has a negative influence on duration of breastfeeding.^{14–18} (Employment appears to have a less deleterious effect on initiation of breastfeeding.) Among mothers of infants in their first year, 35.5% work full time and 16.1% work part time outside the home;

for mothers of children aged 12 to 24 months, the rates are 40% and 17%, respectively.¹⁹ Therefore, improving the ability of mothers to breastfeed or to express and store milk in the workplace would likely contribute to higher US breastfeeding rates.

Why work outside the home shortens breastfeeding duration is not completely clear, but factors related to the time surrounding return to work appear critical. One study of women at high risk for not breastfeeding found that those who made plans to return to full-time work during the month before actually doing so had 1.34 times the odds of terminating breastfeeding as mothers who, during the same month, did not plan to return to work. In the month she returns to work, a mother has 2.18 times the odds of quitting breastfeeding as do her nonworking counterparts; in the first month after she starts work, her odds of terminating breastfeeding are 1.32 times that of her nonworking counterparts. However, in the second month after returning to work, her odds of terminating breastfeeding do not differ significantly from those of a woman not working in the same month postpartum.¹⁶ Thus, if employment conditions encourage women to initiate and continue



TABLE 1—Selected Benefits of Breastfeeding

Health Benefits to Child	Health Benefits to Mother	Economic Benefits
Improved cognitive development	Decreased postpartum bleeding	Higher employee productivity and lower absenteeism
Bolstered immune system	Decreased menstrual blood loss	Increased employment retention by working mothers who breastfeed
Reduced incidence and severity of such conditions as bacterial meningitis, diarrhea, and urinary tract infections	Increased child spacing	Family cost savings by avoiding purchase of infant formula
Reduced risk of diabetes, lymphoma, leukemia, hypercholesterolemia, and asthma	Earlier return to prepregnancy weight	Decreased health care costs of \$3.6 billion if breastfeeding rates were raised to <i>Healthy People 2010</i> goals, resulting in savings to public and private insurers
Decreased risk of overweight	Decreased risk of breast and ovarian cancers	

Source. Gartner et al.¹; Harder et al.²; Dietz and Hunter³; US Department of Health and Human Services⁴; Ball and Wright⁵; Bartick and Reinhold⁶; *Healthy People 2010 Midcourse Review*.¹⁰

breastfeeding through the first 2 months of work, they may be more likely to extend breastfeeding duration as recommended through at least the first year.

Women frequently attribute early weaning to unsupportive work environments.²⁰ Lack of privacy and adequate time to express breastmilk are cited as barriers.²¹ Other impediments include employers' perception that the presence of infants in the workplace reduces mothers' productivity, regulations and other rules that bar children from the workplace, and a lack of child care close to the workplace.²¹ Fein et al. compared strategies women use to continue breastfeeding while working and found that breastfeeding an infant directly during working hours was associated with the longest duration, and pumping milk during working hours was the second most successful strategy; neither breastfeeding nor pumping during work hours was associated with the shortest duration.²²

Women's experience of workplace-related barriers to

breastfeeding varies by occupation. Professional women have significantly greater success in breastfeeding than do women in such occupations as retail sales, administrative support, and construction trades.^{14,16,17} Professional women typically have more autonomy, enabling greater privacy to breastfeed and greater freedom to accommodate the timing demands of lactation. They also may have greater access to employer-sponsored lactation programs than do nonprofessional women, even in the same company.²³ Another study found that women in food and health service occupations did

not differ greatly in breastfeeding from professional women; these women likely had flexibility in arranging their work schedules.¹⁶

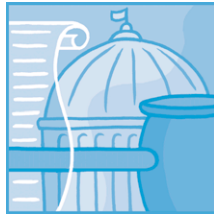
Attempts to encourage breastfeeding in the workplace sort into 3 types: employers' voluntary initiatives, support services offered by nonprofit and other private entities, and government encouragement and requirements. Evidence suggests employers may reap net economic benefits by enabling women to combine work with breastfeeding. The US Department of Health and Human Services' Business Case for Breastfeeding reports that in addition

to improving retention of experienced employees, breastfeeding leads to lower health care spending, decreased absenteeism, increased productivity, improved morale, and positive company image.⁴ A study of a corporate lactation program voluntarily offered by 5 employers found it successful in enabling women to express milk in the workplace.²⁰ These corporations felt offering a lactation benefit was important as a recruitment tool and in retaining female employees. Although such approaches can help, the persistence of low US breastfeeding rates calls for active exploration of additional

TABLE 2—US Breastfeeding Goals and Rates

Rate Category	Ever Breastfed, %	Breastfeeding at 6 Mo, %	Breastfeeding at 12 Mo, %	Exclusive Breastfeeding at 3 Mo, %	Exclusive Breastfeeding at 6 Mo, %
<i>Healthy People 2010</i> goal	75	50	25	40	17
US rates ^a	73.9	43.4	22.7	33.1	13.6
State rates ^a	48.3–92.8	22.7–69.5	8.7–38.4	16.8–56.6	4.6–25.3

Source. *Healthy People 2010*¹⁰; Centers for Disease Control and Prevention.¹¹
^aFor 2006 births.



approaches, including supportive laws that can reach a broader class of employees than do voluntary efforts.

Federal Laws

Working women desiring to breastfeed have sought legal protection in the US Constitution and in 3 federal statutes, but without success. The Patient Protection and Affordable Care Act of 2010, however, includes a provision that promises substantially more support.

US Constitution. In 1981, the US Court of Appeals, Fifth Circuit, found that the Constitution protects a woman's liberty interest in breastfeeding her child.²⁴ The court likened the decision to breastfeed to the protected liberties found in "individual decisions respecting marriage, procreation, contraception, abortion, and family relationships."^{24(p786)} The court held that a public employer's interference with a woman's decision to breastfeed must "further sufficiently important state interests, and [be] closely tailored to effectuate only those interests."^{24(p787)} The initial promise of the ruling, however, did not materialize. In the subsequent procedural history of the case, the trial court upheld the school board regulations that made it impossible for the plaintiff employee to continue breastfeeding during her breaks, even though she had breastfed on-site for 3 months without incident.²⁵ Other judicial circuits have not addressed the question, leaving the Fifth Circuit's ruling an anomaly.

Civil Rights Act and Pregnancy Discrimination Act. Title VII of the Civil Rights Act of 1964 prohibits

employers from discriminating on the basis of gender, but despite breastfeeding's inherent connection to gender, Title VII has not helped breastfeeding mothers. The Supreme Court initially found that Title VII did not even protect women from discrimination on the basis of pregnancy.²⁶ The Pregnancy Discrimination Act (1978) amended Title VII to protect against discrimination "because of or on the basis of pregnancy, childbirth, or related medical conditions."²⁷ Arguably, breastfeeding can be considered a related medical condition. However, federal courts, as summarized in *Derungs v Wal-Mart Stores, Inc.*, have repeatedly found that the Pregnancy Discrimination Act's protection does not extend to discrimination based on breastfeeding.²⁸

Americans With Disabilities Act. Plaintiffs have sought protection for breastfeeding under the Americans with Disabilities Act by having breastfeeding classified as a disability. Title I of the act prohibits employers from discriminating against an individual with a disability "who, with or without reasonable accommodation, can perform the essential functions of the employment position that such individual holds or desires."²⁹ If breastfeeding were classified as a disability, accommodative steps could include providing flexible break time or a location to express milk. However, lactation is a normal condition associated with pregnancy, and courts have consistently held that the disabilities act is almost always inapplicable to pregnancy-related conditions^{30–35} and have explicitly held it is inapplicable to lactation in *Martinez v NBC, Inc.*³⁶

Family Medical Leave Act. By requiring employers to offer leave to new mothers, the Family Medical Leave Act (FMLA) provided working women with perhaps the most significant federal support for breastfeeding before 2010. This act permits eligible employees to take a total of 12 workweeks of leave during any 12-month period for "the birth of a son or daughter of the employee and in order to care for such son or daughter."³⁷ Because longer maternity leave is associated with longer duration of breastfeeding,^{14,38} FMLA leave may facilitate increased breastfeeding duration, but it falls short in 4 critical ways.

First, as of 2000 (the most recent data available), only 56.3% of privately employed women with children aged 18 months or younger were entitled to FMLA leave time.³⁹ The act applies only to employees who have worked for at least 12 months and for a minimum of 1250 hours and to employers of at least 50 employees who reside within 75 miles of the place of work.⁴⁰ It also excludes federal employees in specified categories.³⁹

Second, women who are least likely to be covered by the FMLA are also unlikely to breastfeed. Eligible employees have significantly higher family incomes and educational attainment and are more likely to be older, non-Hispanic White, and married,⁴¹ characteristics associated with increased likelihood of exclusive breastfeeding.¹²

Third, many eligible employees cannot make practical use of FMLA leave because it is unpaid. Because breastfeeding correlates

with income,¹² the mothers least able to afford unpaid leave are those most in need of support to breastfeed.

Fourth, the FLMA does not assist mothers in balancing work and breastfeeding. Absent an express employer–employee agreement, a mother may take FMLA leave only as continuous leave.⁴² This inflexibility bars a mother from using FMLA leave to reduce her hours or take flexible breaks for breastfeeding, actions that could facilitate longer duration of breastfeeding for some working mothers.

State Laws

To identify state laws supportive of breastfeeding in the workplace, we searched Westlaw databases of the statutes of all 50 states, the District of Columbia, and Puerto Rico, with the words "breastfeed," "breast milk," or "lactate" (or variations of "breastfeed" and "lactate") and a word beginning with the stem "employ." To verify inclusiveness, we compared our results with a list of breastfeeding statutes maintained by the National Conference of State Legislatures. Our searches identified all but 2 on that list; those 2 were enacted in 2009 and were not included in Westlaw at the time of our search.

We found that 23 states, the District of Columbia, and Puerto Rico had enacted 28 statutes containing a total of 51 provisions relevant to breastfeeding in the workplace (Table 3). Of these provisions, 21 focus on break times for breastfeeding or expressing milk, 19 focus on private locations for breastfeeding activities (2 location provisions for



TABLE 3—Provisions of Statutes Relating to Breastfeeding in the Workplace Adopted by 23 States, the District of Columbia, and Puerto Rico

State	Legal Citation (Year of Adoption)	Break Time Provisions ^a	Location and Facilities Provisions ^a	Employment Discrimination Provisions ^a	Infant- and Mother-Friendly Provisions
Arkansas	Ark Code Ann §11-5-116 (2009)	1, ^b 2	1 ^b		
California	Cal [Labor] Code §§1030-1033 (2001)	1, ^b 2	1 ^b		
Colorado	Colo Rev State §§ 8-13.5-101-104 (2008)	1, ^b 2	1, ^b 2		
Connecticut	Conn Gen Stat §31-40w (2001)	3 ^b	1, ^b 2	^b	
District of Columbia	DC Code §2-1401.05 (2007), DC Code §§2-1402.81-83 (2007)	1, ^b 2	1, ^b 2	^b	
Georgia	Ga Code Ann §34-1-6 (1999)	4 ^b	4 ^b		
Hawaii	Haw Rev Stat §§378-2, 10 (1999)	3 ^b		^b	
Illinois	820 Ill Comp Stat 260/ (2001)	1, ^b 2, 5	1 ^b		
Indiana	Ind Code §5-10-6-2 (2008), Ind Code §22-2-14-2 (2008)	1, ^b 2, 6	1, ^b 5		
Maine	Me Rev Stat Ann tit 26, §604 (2009)	1 ^b	1 ^b	^b	
Minnesota	Minn Stat §181.939 (1998)	1, ^b 2	1 ^b		
Mississippi	Miss Code Ann §71-1-55 (2006)	3 ^b			
Montana	Mont Code Ann §§39-2-215-217 (2007)	1, ^b 2, 6	1, ^b 6	6 ^b	
New Mexico	NM Stat §28-20-2 (2007)	1, ^b 5	1, ^b 5		
New York	NY [Labor] Law §206-c (2007)	1 ^b	1 ^b	^b	
North Dakota	ND Cent Code §23-12-17 (2009)				^b
Oklahoma	Okla Stat tit 40, §435 (2006)	4 ^b	4 ^b		
Oregon	Or Rev Stat §§653.075, 0.077, 0.079, 0.253 (2007)	1, ^b 2, 5	1, ^b 2, 5		
Puerto Rico	PR Laws Ann tit 29 §478 et seq (2000, amended 2006)	1 ^b			
Rhode Island	RI Gen Laws §23-13.2-1 (2003, amended 2008)	4 ^b	1, ^b 2		
Tennessee	Tenn Code Ann §50-1-305 (1999)	1, ^b 2	1 ^b		
Texas	Tex [Health] Code Ann §165.003 (1995)				^b
Vermont	Vt Stat Ann tit 21, §305 (2007)	1, ^b 2	1, ^b 2	^b	
Virginia	Va Code Ann §2.2-2639 (2001)			5 ^b	
Washington	Wash Rev Code §43.70.640 (2001)				^b

^a1 = statute requires provision of break time, designated location or facilities, or both; 2 = statute exempts businesses if compliance would create a significant hardship; 3 = statute requires that employees be permitted to use conventional break time to express milk, breastfeed, or both; 4 = statute provides that employers may offer break time or designated locations or facilities; 5 = statute exempts specified classes of small employers (Virginia also excludes employers above a certain size); 6 = statute only applies to public-sector employers.

^bStatute addresses the cited provision.

Indiana: 1 for private and 1 for public employers), 8 prohibit breastfeeding-related employment discrimination, and 3 encourage employers to provide “infant-friendly” or “mother-friendly” workplaces.

Break time provisions. Lactating mothers must breastfeed their infants or express milk regularly to maintain a supply of milk

adequate to continue breastfeeding. For working women, pumping and breastfeeding during work are associated with longer duration of breastfeeding.²² Laws ensuring that women have the time and freedom to pump or breastfeed in the workplace thus can be beneficial.

Break time may be especially helpful for mothers paid by the hour, since salaried employees are

more likely already to have the autonomy to take breaks to breastfeed or express milk. Employees who cannot afford reductions in pay, however, may be unable to take advantage of such breaks. Indiana is the only jurisdiction requiring public employers to compensate employees for breastfeeding breaks they take in addition to standard breaks.

The strongest break time laws (15) require employers to provide break time, although 12 of those exempt employers that show a significant degree of burden. Three states have weaker provisions mandating that women be allowed to pump but not requiring breastfeeding break time. (Two of those states do not require any breaks.) The 3 weakest statutes merely



state that employers may offer breaks for women to express or breastfeed, imposing no break time obligations on employers.

Variations in the 21 break time statutes may influence their relative effectiveness:

- Three apply to both breastfeeding and pumping; 18 apply only to pumping.
- Three exempt small employers (defined in different terms). Although less limiting than FMLA exemptions, these statutes may leave many employed mothers unprotected.
- The Indiana and Montana laws only apply to public employers.

Laws that require breastfeeding break time likely are especially valuable in states that do not require employers to provide rest or meal breaks.

Location and facilities provisions. Having to express milk in a toilet stall is a barrier to continued breastfeeding after a return to work and can lead to premature weaning.⁴³ Sixteen of the 18 state location and facilities laws are virtually identical, requiring that an employer provide a location for breastfeeding activities and that it (1) not be a toilet stall, and in some cases also not be a bathroom (with 1 exception); (2) be private; and (3) be close to the workspace (with 3 exceptions; Indiana's law also applies only to public employers). Some jurisdictions also require that the space be clean (5) and secure (3). The remaining 2 location and facilities statutes state only that employers may provide a location in which women can express milk in private.

Providing women with pumping equipment increases breastfeeding duration after they return to work.²⁰ No states require employers to provide lactating employees with such equipment. Employers may have an incentive to do so, however, because high-grade breast pumps reduce expressing time. Indiana requires public and private employers above a certain size to provide employees with access to a refrigerator or other cold storage space in which to store expressed breastmilk.

Employment discrimination provisions. Eight jurisdictions prohibit employment discrimination based on expression of milk and, in some cases, on breastfeeding in the workplace. Six states and the District of Columbia broadly prohibit employers from discriminating on the basis of breastfeeding activities or breastfeeding status. Virginia's much more limited law only prohibits employers with more than 5 and fewer than 15 employees from discharging an employee because of lactation status.

Infant- or mother-friendly workplace designations. Three states limit their statutory approaches to workplace breastfeeding to authorizing employers to designate their workplaces as mother friendly (Texas) or infant friendly (North Dakota, Washington) if they adopt policies supporting flexible work schedules, locations for breastfeeding, access to a water supply (e.g., a sink), and access to hygienic storage for breastmilk.

Information on implementation of the North Dakota statute, which became effective August 1, 2009,

was not available at the time of our research. Lack of funding has muted the impact of the Texas (J. Stagg, MSN, RN, personal communication, October 2009) and Washington⁴⁴ laws by preventing issuance of procedures to implement the program.

These laws assume that employers want a mother- or infant-friendly reputation because it attracts or retains women employees or for other reasons. To influence national rates of breastfeeding among working mothers, however, large proportions of employers must have that desire. Although employers may benefit from breastfeeding, research suggests that a small minority see value in promoting breastfeeding.⁴⁵

In the absence of federal legal protection, 23 states, the District of Columbia, and Puerto Rico had enacted laws by late 2009 that (1) target specific barriers such as lack of adequate time to pump and lack of access to a private place to pump, (2) prohibit employers from discriminating against breastfeeding employees, or (3) attempt more generally to create incentives for employers to establish work environments supportive of breastfeeding. These laws vary greatly across states and include provisions that likely dilute their effectiveness. Only 12 states' laws appear to have enforcement provisions.

A New Legal Landscape in 2010

Set against this backdrop of minimal federal legal protection and highly variable legal protection across the states, section 4207 of the Patient Protection

and Affordable Care Act of 2010 (PL 111–148) changed the relevant legal landscape in important and beneficial ways.⁴⁶ The act requires all employers to provide, on an employee's request, "reasonable break time" for her to express milk for (but not to breastfeed) a child aged up to 1 year and a private location other than a bathroom for that purpose. Employers need not pay wages for such breaks. Employers of fewer than 50 employees that demonstrate hardship in complying with the law may be exempted.

Section 4207 amends the Fair Labor Standards Act of 1938, which sets national minimum wage and overtime rules. It applies only to employees covered by the act's overtime provisions, as detailed in Section 213.⁴⁷ The protections apply to employees who work for hourly wages. They do not apply to salaried employees, many of whom typically have better breastfeeding accommodations. Nor do they apply to certain other classes of employees, such as administrative employees, elementary and secondary school teachers, and many agricultural workers.

Section 4207 is significant for 2 principal reasons. First, from the public health perspective, it is likely to improve eligible mothers' ability to express milk, which means that their children are likely to enjoy better health, the central goal of breastfeeding, as a result. Second, from the legal perspective, Section 4207 is the first federal law to require accommodation for mothers who wish to continue breastfeeding while working outside the home. Congress's decision to use the Fair Labor Standards



Act as the legislative vehicle makes breastfeeding accommodation an integral part of the nation's labor laws. Further, by mandating a nationally uniform floor, Congress holds that all eligible mothers should have at least a minimum level of accommodation, including workers in the many states that offer no legal accommodation at all. Women in states with more protective worksite breastfeeding laws will benefit from their states' added protection.

As with most laws, the impact of Section 4207 will depend on many factors. These factors include the provisions of the implementing Department of Labor regulations, education and technical assistance to employers, and enforcement of the law. Employer compliance will be important, as will provision of information to eligible women by state and local agencies, advocacy groups, and nonprofit organizations.

RECOMMENDATIONS

The workplace poses serious impediments to continued breastfeeding by mothers who return to work postpartum. Yet federal law before 2010 offered those mothers little support, and only 23 states, the District of Columbia, and Puerto Rico had adopted related statutes, some of them essentially symbolic or hortatory in nature. A majority of states have no laws supportive of breastfeeding by working mothers.

With more than one third of all mothers of children younger than 2 years working full time outside the home, the United States is more likely to improve its low

breastfeeding rates if it seeks the help of legislation. Congress took an important step in that direction with enactment of the Fair Labor Standards Act's reasonable break time provision. Although Congress could have preempted stronger existing and future state laws, it chose not to. The resulting new legal landscape presents public health professionals with an array of policy options to consider in moving toward the goal of accommodating the lactation (feeding as well as breastmilk expression) needs of all working mothers.

Options to maximize the benefit of the new federal law include informing eligible mothers and employers about it and advocating for resources needed to implement and enforce it. State law-oriented options could include identifying classes of mothers who are ineligible for Section 4207 and state accommodation, identifying facilities and services (such as lactation rooms and pumping equipment) that contribute to longer breastfeeding duration, and developing state or municipal laws to address those gaps and needs.

The issue of discrimination against mothers who wish to breastfeed in the workplace requires a different legal approach. The broad body of discrimination law indicates that breastfeeding antidiscrimination laws may offer the greatest deterrent to overt employer retaliation when intent to discriminate can be most easily proven in court. Such laws may have less impact on subtle forms of discrimination or systemic barriers if intent cannot be proven. Policymakers should consider adopting both accommodation

laws and antidiscrimination laws, as some states already do.

Another need is for applied research. We located no evaluations of the impact state (or other) breastfeeding laws have on the duration of breastfeeding or the mechanisms through which they operate. A 2007 review identified no randomized or quasi-randomized clinical trials evaluating any type of workplace breastfeeding intervention, including legal interventions.⁴⁸ We also are unaware of empirical studies of the effect of laws on such important, related elements as women's perception of support for breastfeeding in the workplace and employers' perception of the benefits they may realize from employees' continued breastfeeding.

Although the effectiveness of these laws in prolonging breastfeeding has not been ascertained, they appropriately target an activity—employment outside the home—that research shows is negatively correlated with duration. Research is needed to determine the effectiveness of these laws. The results should be disseminated nationally to federal, state, tribal, and local policymakers for their use in eliminating or reducing employment-related barriers to breastfeeding. ■

About the Authors

Lindsey Murtagh is with the Department of Health and Policy Management, Harvard School of Public Health, Boston, MA.

Anthony D. Moulton is with the Centers for Disease Control and Prevention, Atlanta, GA.

Correspondence should be sent to Lynn Blewett, Department of Health Policy and Management, Harvard School of Public Health, 677 Huntington Ave, Boston, MA 02115 (e-mail: lmurtagh@jd09.harvard.edu). Reprints can be ordered at

<http://www.ajph.org> by clicking the "Reprints/Eprints" link.

This article was accepted May 22, 2010.

Contributors

Both authors conceptualized the study, interpreted the results, and wrote the article. L. Murtagh conducted the research and performed the data analysis.

Acknowledgments

We acknowledge helpful suggestions on earlier drafts of the article by Laurence Grummer-Strawn, PhD, and Meredith Reynolds, PhD, Centers for Disease Control and Prevention (CDC); Michelle Mello, JD, PhD, Harvard School of Public Health; Sharona Hoffman, JD, Case Western Reserve University School of Law; and Judith Monroe, MD, Indiana State Health Department. We also acknowledge useful suggestions and research assistance from Lindsay Culp, MPH, CDC.

Note: The findings and conclusions in this paper are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.

Human Participant Protection

No protocol approval was required because no human participants were involved in this research.

References

- Gartner LM, Morton J, Lawrence RA, et al. Breastfeeding and the use of human milk. *Pediatrics*. 2005;115(2):496–506.
- Harder T, Bergmann R, Kallischnigg G, Plagemann A. Duration of breastfeeding and risk of overweight: a meta-analysis. *Am J Epidemiol*. 2005;162(5):397–403.
- Dietz WH, Hunter AS. Legal preparedness for obesity prevention and control: the public health framework for action. *J Law Med Ethics*. 2009;37(Suppl 1):9–14.
- US Dept of Health and Human Services. The business case for breastfeeding. Available at: <http://www.womenshealth.gov/breastfeeding/programs/business-case/index.cfm>. Accessed February 4, 2010.
- Ball TM, Wright AL. Health care costs of formula-feeding in the first year of life. *Pediatrics*. 1999;103(4 pt 2):870–876.



6. Bartick M, Reinhold A. The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. *Pediatrics*. 2010;125(5):e1048–e1056.
7. World Health Organization/UNICEF. Global strategy for infant and young children feeding. 2003. Available at: http://www.who.int/child_adolescent_health/documents/9241562218/en. Accessed February 4, 2010.
8. Galson SK. The 25th anniversary of the Surgeon General's Workshop on Breastfeeding and Human Lactation: the status of breastfeeding today. *Public Health Rep*. 2009;124(3):356–358.
9. American Academy of Family Physicians. Breastfeeding, family physicians supporting (position paper). Available at: <http://www.aafp.org/online/en/home/policy/policies/b/breastfeedingpositionpaper.html>. Accessed February 4, 2010.
10. *Healthy People 2010 Midcourse Review*. Washington DC: US Dept of Health and Human Services; 2006. Also available at: <http://web.health.gov/healthypeople/document>. Accessed October 6, 2010.
11. Centers for Disease Control and Prevention. Breastfeeding report card—United States, 2009. Available at: http://www.cdc.gov/BREASTFEEDING/DATA/report_card.htm. Accessed February 4, 2010.
12. Centers for Disease Control and Prevention. Breastfeeding among U.S. children born 1999–2006, CDC National Immunization Survey. Available at: http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm. Accessed September 22, 2009.
13. Kogan MD, Singh GK, Dee DL, Belanoff C, Grummer-Strawn LM. Multivariate analysis of state variation in breastfeeding rates in the United States. *Am J Public Health*. 2008;98(10):1872–1880.
14. Calnen G. Paid maternity leave and its impact on breastfeeding in the United States: an historic, economic, political and social perspective. *Breastfeed Med*. 2007; 2(1):34–44.
15. Fein SB, Roe B. The effect of work status on initiation and duration of breastfeeding. *Am J Public Health*. 1998;88(7): 1042–1046.
16. Kimbro RT. On-the-job moms: work and breastfeeding initiation and duration for a sample of low-income women. *Matern Child Health J*. 2006;10(1):19–26.
17. Kurinij N, Shiono PH, Ezrine SF, Rhoads GG. Does maternal employment affect breast-feeding? *Am J Public Health*. 1989;79(9):1247–1250.
18. Ryan AS, Zhou W, Arensberg MB. The effect of employment status on breastfeeding in the United States. *Womens Health Issues*. 2006;16(5):243–251.
19. Bureau of Labor Statistics, US Dept of Labor. Employment characteristics of families in 2008. Available at: <http://www.bls.gov/news.release/pdf/famee.pdf>. Accessed October 16, 2009.
20. Ortiz J, McGilligan K, Kelly P. Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program. *Pediatr Nurs*. 2004;30(2):111–119.
21. Raju TNK. Continued barriers for breast-feeding in public and the workplace. *J Pediatr*. 2006;148(5):677–679.
22. Fein SB, Mandal B, Roe BE. Success of strategies for combining employment and breastfeeding. *Pediatrics*. 2008; 122(Suppl 2):S56–S62.
23. Hansen L. A comprehensive framework for accommodating nursing mothers in the workplace. *Rutgers Law Rev*. 2007; 59(4):885–916.
24. *Dike v School Board of Orange County, Florida*, 650 F2d 783 (5th Cir 1981).
25. Shdaimah CS. Why breastfeeding is (also) a legal issue. *Hastings Womens Law J*. 1999;10(2):409–443.
26. *Gen Elec Co v Gilbert*, 429 US 125 (1976).
27. 42 USCA §§ 2000e(k), 2000e-2(a) (2009).
28. *Derungs v Wal-Mart Stores, Inc*, 374 F3d 428 (6th Cir 2004).
29. 42 USCA §§ 12111(8) (2009).
30. *Kucharski v Cort Furniture Rental*, 536 FSupp2d 196 (DConn 2007).
31. *Minotti v Port Authority of NY and NJ*, 116 FSupp2d 513 (SDNY 2000).
32. *Conley v United Parcel Service*, 88 FSupp2d 16 (EDNY 2000).
33. *Gabriel v City of Chicago*, 9 FSupp2d 974 (NDIll 1998).
34. *Gudenkauf v Stauffer Communications, Inc*, 922 FSupp 465 (DKan 1996).
35. *Villarreal v JE Merit Constructors, Inc*, 895 FSupp 149 (SDTex 1995).
36. *Martinez v NBC, Inc*, 49 FSupp 2d 305 (SDNY 1999).
37. 29 USCA §§2612(a)(1)(A) (2009).
38. Roe B, Whittington LA, Fein SB, Teisl MF. Is there competition between breast-feeding and maternal employment? *Demography*. 1999;36(2):157–171.
39. Waldfogel J. Family and medical leave: evidence from the 2000 surveys. *Mon Labor Rev*. 2001;124(9):17–23.
40. 29 USCA §2611(2) (2009).
41. Galtry J. The impact on breastfeeding of labour market policy and practice in Ireland, Sweden, and the USA. *Soc Sci Med*. 2003;57(1):167–177.
42. Goodman EA. Breastfeeding or bust: the need for legislation to protect a mother's right to express breast milk at work. *Cardozo Womens Law J*. 2003; 10(1):146–174.
43. Johnston ML, Esposito N. Barriers and facilitators for breastfeeding among working women in the United States. *J Obstet Gynecol Neonatal Nurs*. 2007; 36(1):9–20.
44. Breastfeeding Coalition of Washington. Washington State breastfeeding legislation. Available at: http://www.breastfeedingwa.org/wa_leg. Accessed October 16, 2009.
45. Libbus MK, Bullock LF. Breastfeeding and employment: an assessment of employer attitudes. *J Hum Lact*. 2002; 18(3):247–251.
46. Patient Protection and Affordable Care Act, Pub L No. 111–148, §4207 (2010).
47. 29 USCA §213 (2009).
48. Abdulwadud OA, Snow ME. Interventions in the workplace to support breastfeeding for women in employment. *Cochrane Database Syst Rev*. 2007;(3): CD006177.