

# Questions and Answers about Breastfeeding in the Workplace: A Sloan Work and Family Research Network Fact Sheet

#### Introduction

Introduction: The Sloan Work and Family Research Network has prepared Fact Sheets that provide statistical answers to some important questions about work-family and work-life issues. This Fact Sheet includes statistics about Breastfeeding and Work. (Last updated: July 2010)

#### How prevalent is breastfeeding in the U.S.?

**Fact 1** "More than 70% of new mothers now follow their doctor's advice to breastfeed immediately after birth" (Slavit, 2009).

■ Fact 2 Among infants born in 2006, "73.9 were ever –breastfed, 43.4% were still breast feeding at 6 months of age, and 22.7% were breastfeeding at 1 year of age. 33.1% were exclusively breastfed through 3 months of age, and 13.6% were exclusively breasted through 6 months of age" (Centers for Disease Control and Prevention, 2010, <u>http://www.cdc.gov/breastfeeding/faq/index.htm</u>).

**Fact 3** "One in four breastfed infants are supplemented with infant formula within 2 days of birth. The corresponding rates of formula supplementation among infants who breastfed at least 3 and 6 months were 38% and 45%, respectively" (Centers for Disease Control and Prevention, 2010, <a href="http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm">http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm</a>).

What are the demographic disparities among women who breastfeed?

**Fact 1** "Disparities in breastfeeding continue to exist, with non-Hispanic black and socioeconomically disadvantaged groups having lower breastfeeding rates" (Centers for Disease Control and Prevention, 2010, <a href="http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm">http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm</a>).

**Fact 2** A 2006 study indicated that, "73.8% of non-Hispanic white children were ever breastfed compared with 56.5% of non-Hispanic black children. Disparities between black and white children existed within most socioeconomic subgroups studied" (Centers for Disease Control and Prevention, 2010, <a href="http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm">http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm</a>).

**Fact 3** Among children born in 2006, based on provisional breastfeeding rates by socio-economic factors, 82.1% Hispanic or Latino, 76.5% White and 59.9% Black or African American children reported ever breastfeeding

http://www.bc.edu/wfnetwork

(Centers for Disease Control and Prevention, 2010, <a href="http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm">http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm</a>).

SLOAN WORK AND FAMILY

Research

**Fact 4** Among children born in 2006, based on provisional breastfeeding rates by socio-economic factors, 48.5% Hispanic or Latino, 45.8% White and 29.3% Black or African American children reported breastfeeding at 6 months of age (Centers for Disease Control and Prevention, 2010, <a href="http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm">http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm</a>).

**Fact 5** Among children born in 2006, based on provisional breastfeeding rates by socio-economic factors, 27.2% Hispanic or Latino, 24.1% White and 12.9% Black or African American children reported breastfeeding at 12 months of age (Centers for Disease Control and Prevention, 2010, <a href="http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm">http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm</a>).

**Fact 6** "Low-income women, among whom African American and Hispanic women are overrepresented, are more likely than their higher-income counterparts to return to work earlier and to be engaged in jobs that make it challenging for them to continue breastfeeding" (Shealy, Li, Benton-Davis, & Grummer-Strawn, 2005).

# What are the health benefits of breastfeeding?

**Fact 1** "During the first several months of life, infants who are breastfed exclusively receive stronger protection against infection than those who are not. A longer duration of breastfeeding may also provide a stronger protective effect" (Slavit, 2009).

**Fact 2** Research reports that breastfeeding lowers the risk for children of ear infections, respiratory infections, dermatitis, gastrointestinal disorders, asthma, obesity, Type 1 and 2 Diabetes (U.S. Department of Health and Human Services, 2000).

**Fact 3** Research reports that breastfeeding lowers the risk for the mother of weight gain, maternal postpartum depression, cancers (breast, ovarian, endometrial), Type 2 Diabetes, and osteoporosis (Department of Health and Human Services, 2000).

**Fact 4** Infants breastfed exclusively for at least 6 months are significantly less likely to contract pneumonia or otitis media (an ear infection) than infants not exclusively breastfed for at least 6 months (Chantry, Howard, & Auinger, 2006).

**Fact 5** "Babies who are not breastfed visit the physician more often, spend more days in the hospital, and require more prescriptions than breastfed infants" (U.S. Department of Health and Human Services, 2008).

**Fact 6** The 2005 American Academy of Pediatrics policy statement indicated that, "Research in developed and developing countries of the world, including middle-class populations in developed countries, provides strong evidence that human milk feeding decreases the incidence and/or severity of a wide range of infectious diseases including bacterial meningitis, bacteremia, diarrhea, respiratory tract infection, necrotizing



enterocolitis, otitis media, urinary tract infection, and late-onset sepsis in preterm infants" (American Academy of Pediatrics, 2005).

## How does work impact the prevalence of breastfeeding?

**Fact 1** In 2009, 56.6 % of mothers with children under 1 year of age were employed. Nearly 70% of those mothers were employed full-time (U.S. Department of Labor, 2010).

**Fact 2** In 2009, 61.1% of women with children under the age of 3 are employed (U.S. Department of Labor, 2010).

**Fact 3** One-third of working mothers return to work within three months of the birth of their child and two-thirds return within six months (Biagioli, 2003).

**Fact 4** "Women employed at 4 months breastfed roughly 8 weeks less than those not employed at 4 months" (McKinley & Hyde, 2004).

**Fact 5** Only 25% of employed women with children under age 1 combine working and breastfeeding for at least a month (Slavit, 2009).

**Fact 6** "At 6 months after delivery, full-time employment had a significant effect on breastfeeding. Specifically, 26.1% of full-time employed mothers were still breastfeeding, compared with 36.6% and 35.0% of those working part time or not employed outside the home, respectively" (Ryan, Zhou, & Arensberg, 2006).

### What is the business case for combining breastfeeding and work?

**Fact 1** "Only twenty-five percent of the illnesses causing one day absences from work occurred in breastfed babies while 75% occurred in formula-fed babies" (Cohen, Mrtek, & Mrtek, 1995).

■ Fact 2 Breast feeding can reduce medical costs for mother and child. "In the first year of life, after adjusting for confounders, there were 2033 excess office visits, 212 excess days of hospitalization, and 609 excess prescriptions for these three illnesses [lower respiratory tract illnesses, otitis media, and gastrointestinal illness] per 1000 never-breastfed infants compared with 1000 infants exclusively breastfed for at least 3 months" (Ball & Wright, 1999).

**Fact 3** Offering family-centered programs to help employees balance family and work commitments can positively impact retention rates, resulting in potential cost savings to the company. A study of multiple companies with lactation support programs found an average retention rate of 94% (Ortiz, McGilligan, & Kelly, 2004).

http://www.bc.edu/wfnetwork



**Fact 4** "The availability of employer- sponsored child care increased the likelihood of breastfeeding six months after birth by 47 percent. In addition, working an additional eight hours at home per week, at the mean, increased the probability of breastfeeding initiation by 8 percent and breastfeeding six months after birth by 16.8 percent" (Jacknowitz, 2008).

**Fact 5** "If 90% of US families could comply with the medical recommendations to breastfeed exclusively for 6 months, the United States could save \$13 billion/year and prevent an excess 911 deaths annually, 95% of which would be of infants" (Bartick & Reinhold, 2010).

**Fact 6** "With 80% compliance [medical recommendations to breastfeed exclusively], savings would be \$10.5 billion, with 741 deaths prevented. If the Healthy People 2010 goals were met, savings would be \$2.2 billion, with 142 deaths prevented" (Bartick & Reinhold, 2010).

# How does breastfeeding among women returning to work differ in countries around the world?

**Fact 1** "The rate of breastfeeding after returning to work [in Taiwan] was only 10.6%, much lower than the national average of 16.7% at three months postpartum" (Chen, Wu, & Chie, 2006).

■ Fact 2 A study interviewed 344 women with children between the ages 6 months and 3 years from five different villages in the north of Jordan. Participant reports on demographics, first 6 months infant feeding patterns, and their knowledge of breastfeeding. "This cross-sectional study demonstrated an initiation rate of breastfeeding of 88.6%. Over 58% were full and over 30% were mixed breastfeeders. These rates [in Jordan] are higher than those reported in the USA for the same ages, but less than those reported in other Middle Eastern countries" (Khassawneh Khader, Amarin, & Alkafajei, 2006).

**Fact 3** Out of the 180 countries studied in a 2007 study, it was found that "107 countries protect working women's right to breastfeed; in at least 73 of these countries the breaks are paid...The U.S. does not guarantee the right to breastfeed" (Heymann, Earle, & Hayes, 2007).

### How has breastfeeding and the workplace been impacted by state legislation?

**Fact 1** "Forty-four states, the District of Columbia and the Virgin Islands have laws with language specifically allowing women to breastfeed in any public or private location (AL, AK, AZ, AR, CA, CO, CT, DE, FL, GA, HI, IL, IN, IA, KS, KY, LA, ME, MD, MA, MN, MS, MO, MT, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SC, TN, TX, UT, VT, WA, WI and WY)" (National Conference of State Legislatures, 2010).

**Fact 2** "Twenty-eight states, the District of Columbia and the Virgin Islands exempt breastfeeding from public indecency laws (ASL, AZ, AR, FL, IL, KY, LA, MA, MI, MN, MS, MT, NV, NH, NY, NC, ND, OK, PA, RI, SC, SD, TN, UT, VA, WA, WI and WY)" (National Conference of State Legislatures, 2010).



**Fact 3** "Twenty-four states, the District of Columbia and Puerto Rico have laws related to breastfeeding in the workplace (AR, CA, CO, CT, GA, HI, IL,IN, ME, MN, MS, MT, NM, NY, ND, OK, OR, RI, TN, TX, VT, VA, WA and WY)" (National Conference of State Legislatures, 2010).

**Fact 4** "Five states and Puerto Rico have implemented or encouraged the development of a breastfeeding awareness education campaign (CA, IL, MN, MO, and VT)" (National Conference of State Legislatures, 2010).

The Network has additional resources related to this topic.

- Visit a topic page on Breastfeeding and Work at: <u>http://wfnetwork.bc.edu/topic.php?id=37</u> Topic pages provide resources/information including statistics, definitions, overviews & briefs, bills & statutes, interviews, teaching resources, audio/video, suggested readings and links.
- Visit our database of academic literature with citations and annotations of literature related to the issue of Breastfeeding and Work. You can connect to this database at: <a href="http://library.bc.edu/F?func=find-b-0&local\_base=BCL\_WF">http://library.bc.edu/F?func=find-b-0&local\_base=BCL\_WF</a>



American Academy of Pediatrics. (2005). Breastfeeding and the use of human milk. *Pediatrics*, 115(2), 496-506.

"The benefits of breastfeeding for the infant, the mother, and the community are summarized, and recommendations to guide the pediatrician and other health care professionals in assisting mothers in the initiation and maintenance of breastfeeding for healthy term infants and high-risk infants are presented" (p. 496).

Ball, T. M., & Wright, A. L. (1999). Health care costs of formula-feeding in the first year of life. *Pediatrics*, 103(4), 870-876.

"Frequency of health service utilization for three illnesses (lower respiratory tract illnesses, otitis media, and gastrointestinal illness) in the first year of life was assessed in relation to duration of exclusive breastfeeding in the Tucson Children's Respiratory Study (n = 944) and the Dundee Community Study (Scottish study, n = 644). Infants in both studies were healthy at birth and represented nonselected, population-based samples. Children were classified as never breastfed, partially breastfed, or exclusively breastfed, based on their feeding status during the first 3 months of life" (p. 870). A questionnaire collected information on maternal education and maternal smoking during the first year and a medical record review was conducted to provide confirm child's illness and care.

Bartick, M., & Reinhold, A. (2010). The burden of suboptimal breastfeeding in the United States: A pediatric cost analysis. *Pediatrics*, *125*(5), e1048- e1056.

This study was based on data collected for the 2007 breastfeeding report from the Agency for Healthcare Research and Quality.

http://www.bc.edu/wfnetwork

140 Commonwealth Avenue, 3 Lake St. Building | Chestnut Hill, MA 02467 (e) wfnetwork@bc.edu • (p) 617-552-1708 • (f) 617-552-9202





Biagioli, F. (2003). Returning to work while breastfeeding. American Family Physician, 68(11), 2201-2208.

A brief created by the American Academy of Family Physicians on the effects of returning to work on breastfeeding. The brief also mentions current legislative and workplace initiatives that address the issue.

Centers for Disease Control and Prevention. (2010, March). Breastfeeding among U.S. children born 1999-2006, CDC National Immunization Survey. Atlanta, GA: Author. Retrieved from http://www.cdc.gov/breastfeeding/data/NIS\_data/index.htm

This study used data collected from the 2006 National Immunization Survey (NIS). The NIS uses random-digit dialing to survey households with children aged 19-35 months in all 50 states and the District of Columbia. The household telephone survey asks questions about childhood immunization and is followed by a mail survey of the children's providers.

Centers for Disease Control and Prevention. (2007). Support for breastfeeding in the workplace. Atlanta, GA: Author. Retrieved from http://www.cdc.gov/breastfeeding/pdf/BF\_guide\_2.pdf

A brief overview of the many ways employers can support breastfeeding in the workplace and a discussion of effective programs that currently exist.

Chantry, C. J., Howard, C. R., & Auinger, P. (2006). Full breastfeeding duration and associated decrease in respiratory tract infection in US Children. Pediatrics, 117(2), 425-432.

"Secondary analysis of data from the National Health and Nutrition Examination Survey III, a nationally representative cross-sectional home survey conducted from 1988 to 1994, was performed" (p. 425).

Chen, Y.C., Wu, Y., & Chie, W. (2006). Effects of work-related factors on the breastfeeding behavior of working mothers in a Taiwanese semiconductor manufacturer: a cross-sectional survey. BMC Public Health, 6. Retrieved from http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1538587&blobtype=pdf

"This study was conducted at a large Taiwanese semiconductor manufacturer in August-September 2003. Questionnaires were used to collect data on female employees' breastfeeding behavior, child rearing and work status when raising their most recently born child. A total of 998 valid questionnaires were collected, giving a response rate of 75.3%" (p. 1).

Cohen, R., Mrtek, M. B., & Mrtek, R. G. (1995). Comparison of maternal absenteeism and infant illness rates among breastfeeding and formula-feeding women in two corporations. American Journal on Health Promotion, 10(2), 148-153.

"A total of 101 mothers were studied in the two companies; 59 fed breast milk, and 42 used commercial formula. Fifty-six women from the utility company volunteered; 28 fed breast milk, and 28 fed formula. At the aeronautics company, 31 breastfeeding and 14 formula-feeding mothers volunteered" (p. 149).

Heymann, J., Earle, A., & Hayes, J. (2007). How does the U.S. rank in work policies for individuals and families? Retrieved from Council on Contemporary Families: http://www.contemporaryfamilies.org/work-family/rank.html

"The public policies for working families in 180 countries were systematically compared by analyzing data from a wide range of government, private, and academic sources."

http://www.bc.edu/wfnetwork



Jacknowitz, A. (2008). The role of workplace characteristics in breastfeeding practices. *Women & Health, 47*(2), 87–111.

"The effects of the perception of the availability of employer- sponsored child care, the perception of the availability of a flexible schedule, hours worked at home, and worked a fixed schedule on breastfeeding outcomes were estimated using a sample of 1,506 births from the National Longitudinal Survey of Youth 1979 and the Children of the National Longitudinal Survey of Youth 1979" (p. 87).

Khassawneh, M., Khader, Y., Amarin, Z., & Alkafajei, A. (2006). Knowledge, attitude and practice of breastfeeding in the north of Jordan: a cross-sectional study. *International Breastfeeding Journal, (1)*17, Retrieved from <a href="http://www.internationalbreastfeedingjournal.com/content/pdf/1746-4358-1-17.pdf">http://www.internationalbreastfeedingjournal.com/content/pdf/1746-4358-1-17.pdf</a>

"A cross sectional study was carried out between 15 July 2003 and 15 August 2003. A total of 344 women with children aged between 6 months and 3 years from five different villages in the north of Jordan were randomly selected and interviewed. Information regarding participants' demographics, infant feeding in first six months of life, knowledge and attitude towards breastfeeding was collected."

McKinley, N. M., & Hyde, J. S. (2004). Personal attitudes or structural factors? A contextual analysis of breastfeeding duration. *Psychology of Women Quarterly, 28*(4), 388–399.

The data for this study was taken from the Wisconsin Maternity Leave and Health (WMLH) Project, "a longitudinal study that followed 570 women beginning in the middle trimester of pregnancy through the first year after the birth of the child" (p. 390).

National Conference of State Legislatures. (2010, March). Breastfeeding laws (Report No. 14389). Washington, DC. Retrieved from <a href="http://www.ncsl.org/default.aspx?tabid=14389#Res">http://www.ncsl.org/default.aspx?tabid=14389#Res</a>

In accordance with President Obama's signing of the Patient Protection and Affordable Care Act, this report summarizes the current implementation of breastfeeding laws that protect employees at the state level.

Ortiz, J., McGilligan, K, & Kelly, P. (2004). Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program. *Pediatric Nursing*, *30*(2), 111–119).

This retrospective study reviewed the lactation consultants' charts of women who had enrolled in a Corporate Lactation Program (CLP). From five service-oriented corporations, "462 [employed] women in the study gave birth between 4/19/93 and 12/31/97 and were followed until the last infant was weaned in August of 1999. Charts were kept by CLCs from the day the employee joined the CLP until the day she decided she no longer needed the services of the program. Telephone consults and onsite contacts with the participants were recorded in the CLCs' charts" (p. 112).

Ryan, A. S., Zhou, W., & Arensberg, M. B. (2006). The effect of employment status on breastfeeding in the United States. *Women's Health issues, 16*(5), 243–251.

This study used data collected from the Ross Laboratories Mothers Survey (RMS), a large, national survey, designed to determine patterns of milk feeding during infancy. From a sample of new mothers (n= 228,000), this study focused on "the prevalence of the initiation and duration of breastfeeding to 6 months after delivery in 2003 among women who were employed full time, who worked part time, or who were not employed outside the home" (p. 243).

Shealy, K. R, Li R., Benton-Davis S., & Grummer-Strawn L. M. (2005). The CDC Guide to breastfeeding interventions. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved from <a href="http://www.cdc.gov/breastfeeding/pdf/breastfeeding\_interventions.pdf">http://www.cdc.gov/breastfeeding/pdf/breastfeeding\_interventions.pdf</a>

http://www.bc.edu/wfnetwork

140 Commonwealth Avenue, 3 Lake St. Building | Chestnut Hill, MA 02467 (e) wfnetwork@bc.edu • (p) 617-552-1708 • (f) 617-552-9202



Slavit, W. (2009). Investing in workplace breastfeeding programs and policies: An employer's toolkit. Washington, DC: Center for Prevention and Health Services, National Business Group on Health.

WORK

This report encourages employers to support their employees' breastfeeding practices and promote family-friendly workplace policies by citing the business benefits. A comprehensive toolkit highlights tips for employers to support breastfeeding women and offers information and resources for breastfeeding employees.

U.S. Department of Health and Human Services. (2000). HHS blueprint for action on breastfeeding. Washington, DC: U.S. Department of Health and Human Services, Office on Women's health. Retrieved from http://www.womenshealth.gov/archive/breastfeeding/programs/blueprints/bluprntbk2.pdf

"The Blueprint for Action introduces an action plan for breastfeeding based on education, training, awareness, support and research. The plan includes key recommendations that were refined by the members and reviewers of the Subcommittee on Breastfeeding during their deliberations of science-based findings."

U.S. Department of Health and Human Services. (2008). The business case for breastfeeding: For business managers. Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau. Retrieved from

http://www.womenshealth.gov/breastfeeding/programs/business-case/breastfeeding-businesscase-for-managers.pdf

This brief highlights the business case for breastfeeding by summarizing the significant benefits companies may experience, and offers steps for employers to support breastfeeding and family-friendly workplace policies.

U.S. Department of Labor. (2010, May). Employment characteristics of families in 2009 (USDL-10-0721). Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Retrieved from http://www.bls.gov/news.release/pdf/famee.pdf

"The data on employment, unemployment, and family relationships are collected as part of the Current Population Survey (CPS), a monthly sample survey of approximately 60,000 households. Families include married-couple families, as well as families maintained by a man or woman with no spouse present."