

Factors associated with breastfeeding among women with Medicaid reimbursed births, Iowa 2011

# BREASTFEEDING



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## Fact Sheet Purpose

The purpose of the fact sheet is to highlight the characteristics of women with Medicaid reimbursed births who reported that they were breastfeeding their infants at the time of their hospital discharge. In addition to reporting the demographic characteristics of these women, this report also includes information about the prevalence of breastfeeding and access to pregnancy related care and birth outcomes. This information will be used to guide decision makers in implementing programs that promote and support breastfeeding among the women who rely on Medicaid coverage.

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## Background

Medicaid is a state/federal program that provides health insurance for certain groups of low-income people, including pregnant women. Iowa Medicaid is administered by the Iowa Department of Human Services through Iowa Medicaid Enterprise. In Iowa, pregnant women may be eligible for Medicaid if their household income is below 300 percent of the federal poverty level.

In 2011, the labor and delivery costs for 40 percent of Iowa resident live births were reimbursed by Medicaid (40.2%; n=15,357 of 38,204 births).

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## Data Sources

Data for this report were derived from a matched file of the 2011 birth certificate and Medicaid paid claims for calendar year 2011. We used paid claims for maternal diagnostic related groups (DRGs) 370 through 375. DRGs 370-375 are the reporting categories for vaginal and cesarean deliveries. The birth certificate was used to determine the prevalence of breastfeeding at hospital discharge, maternal demographic characteristics including age, race, ethnicity and level of education, access to pregnancy-related services, and infant birth outcomes. Medicaid status was based on a paid claim for any one of the delivery related DRGs.



## Benefits of Breastfeeding

In a February 2012 publication, the American Academy of Pediatrics (AAP)<sup>1</sup> reaffirmed its recommendation of exclusive breastfeeding for the infant's first six months of life. After six months of age the AAP recommends that breastfeeding be continued for a year or longer as complementary foods are introduced to the infant.

Infants who exclusively breastfeed are at a reduced risk for respiratory tract infections, otitis media, gastrointestinal tract infections, celiac disease, obesity, and type 1 and type 2 diabetes. Preterm infants experience improved neurodevelopmental outcomes when they receive human milk. Infants in the neonatal intensive care unit who receive human milk experience lower rates of prematurity associated retinopathy<sup>1</sup>.

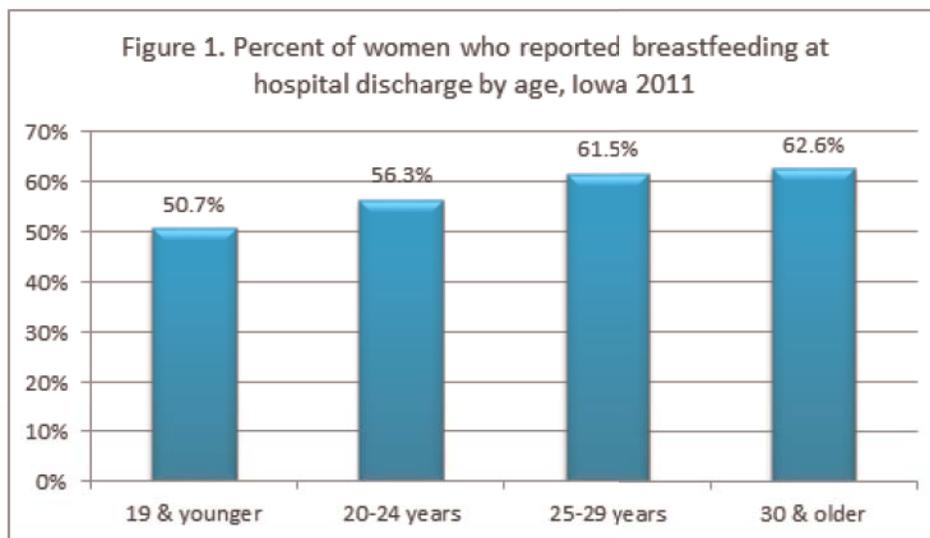
Mothers also benefit by breastfeeding their infants. For example they experience decreased postpartum blood loss and more rapid involution of the uterus. Women who discontinue breastfeeding early are at increased risk for postpartum depression. The rate of child abuse and neglect by mothers has been reported to be greater among mothers who did not breastfeed compared to those who did breastfeed<sup>2</sup>.

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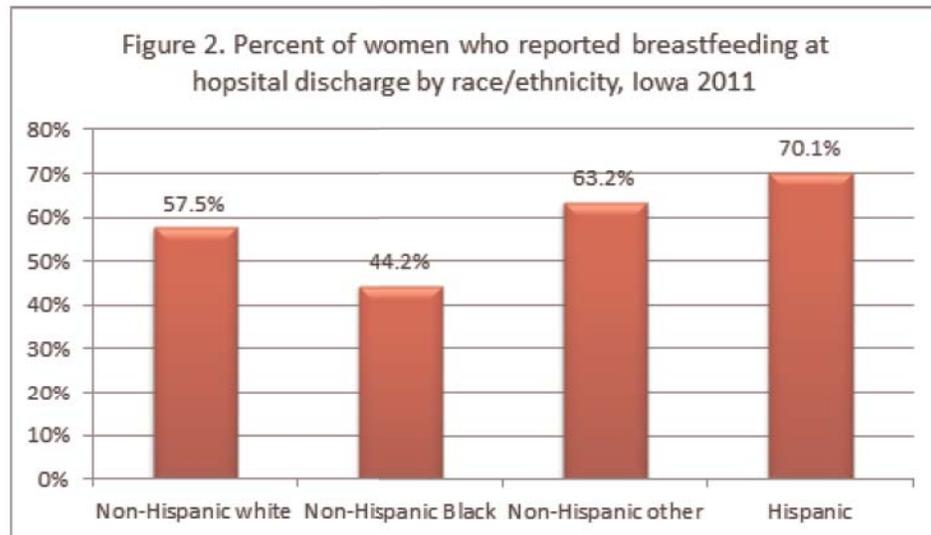
## Results

### Breastfeeding by demographic characteristics

The prevalence of breastfeeding among women with Medicaid reimbursed births has significantly increased from 52.3 percent in 2007 to 58.2 percent in 2011. In 2011, the percent of women who reported that they were breastfeeding their infants at hospital discharge increased as the age of the mother increased (Figure 1). Only 50.7 percent of women ages 19 years and younger reported that they were breastfeeding their infants at hospital discharge, compared to 62.6 percent of women 30 years of age and older.

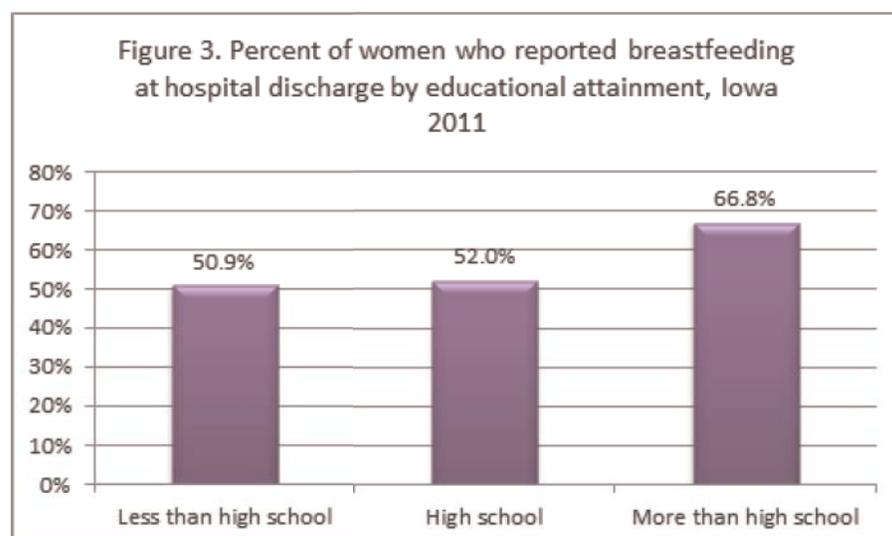


In 2011, 70 percent (70.1%) of Hispanic women reported that they were breastfeeding their infants at hospital discharge, followed by 63.2 percent of non-Hispanic women of other races, and 57.5 percent of non-Hispanic women of other races, and 57.5 percent of non-Hispanic white women (Figure 2). Fewer than one-half (44.2%) of non-Hispanic Black women reported that they were breastfeeding their infants at hospital discharge.



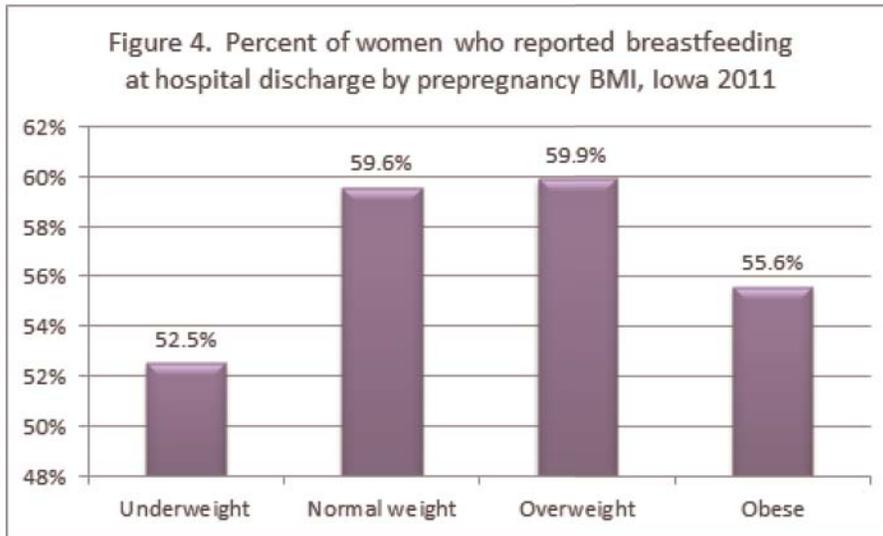
In an examination of breastfeeding at hospital discharge within racial and ethnic groups, by age, the highest percentages of women who reported that they were breastfeeding their infants at hospital discharge were among Hispanic women ages 25-29 (73.6%) and Hispanic women 30 years of age and older (72.4%). The lowest percentage of women who reported that they were breastfeeding their infants at hospital discharge were among non-Hispanic Black women 19 years of age and younger (34.9%).

In 2011, the percentage of women who reported that they were breastfeeding their infants at hospital discharge increased with maternal educational attainment (Figure 3). Sixty-six percent of women with more than a high school education reported that they were breastfeeding their infant at discharge followed by women who attained a high school degree (52.0%) and women with less than a high school education (50.9%).

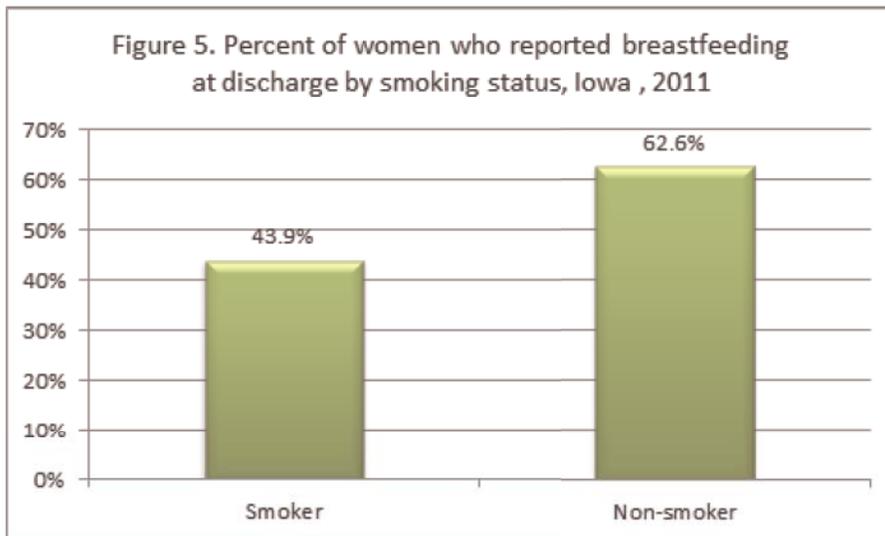


## Breastfeeding by maternal behaviors

The percentage of women who reported that they were breastfeeding their infants at discharge varied by the women's pre-pregnancy body mass index (BMI) (Figure 4). The percent of women who reported that they were breastfeeding their infants at discharge were nearly identical among normal weight women (59.6%) and overweight women (59.9%). In contrast, the percent of women who reported that they were breastfeeding their infants at discharge was lowest among underweight women (52.5%), followed by 55.6 percent of obese women.

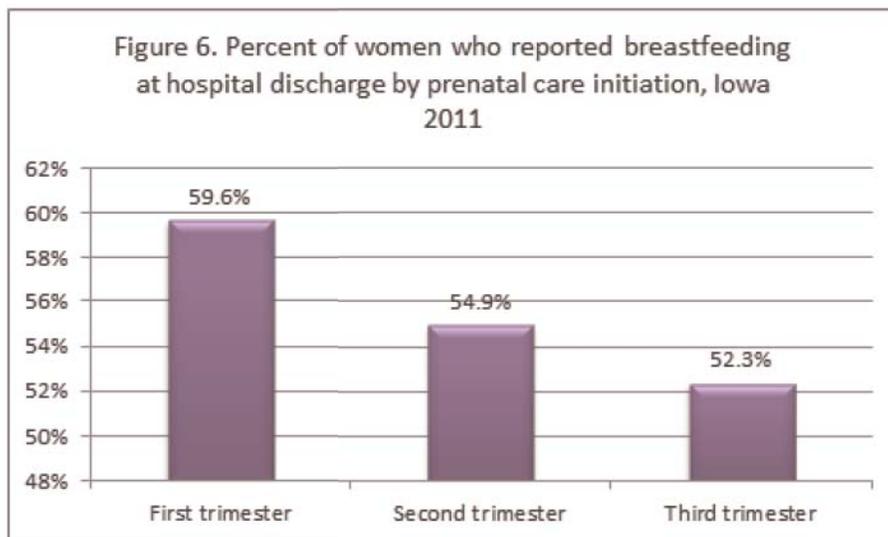


The percentage of women who reported that they were breastfeeding their infants at hospital discharge was much lower among women who reported that they continued to smoke during their third trimester of pregnancy compared to women who reported that they were either non-smokers or had quit smoking by their third trimester (43.9% and 62.6%, respectively) (Figure 5).



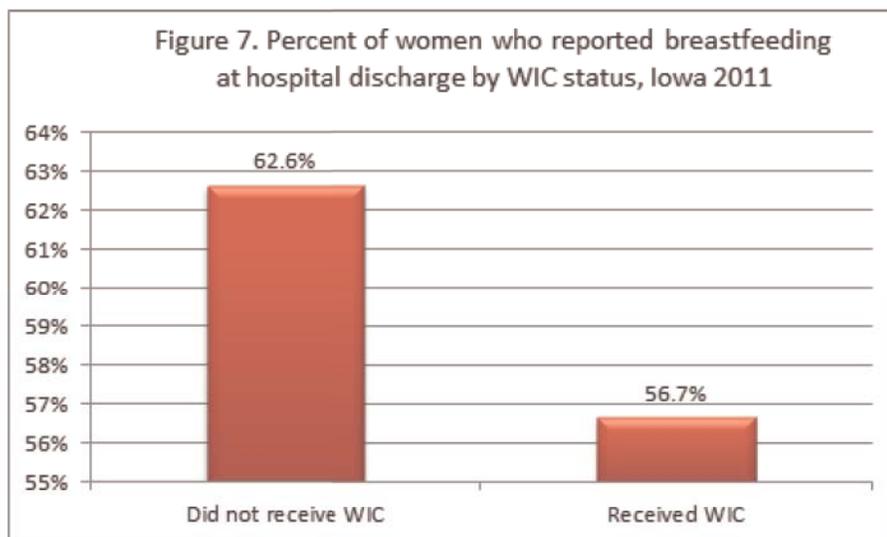
## Breastfeeding by prenatal care Initiation and WIC participation

A higher percentage of women who initiated prenatal care (PNC) within their first trimester of pregnancy reported that they were breastfeeding their infants at hospital discharge, compared to women who initiated prenatal care later in pregnancy. Fifty-nine percent (59.6%) of women who initiated PNC during their first trimester reported that they were breastfeeding their infant at hospital discharge compared to 54.9 percent of women who initiated PNC in their second trimester, and 52.3 percent of women who did not initiate PNC until their third trimester.



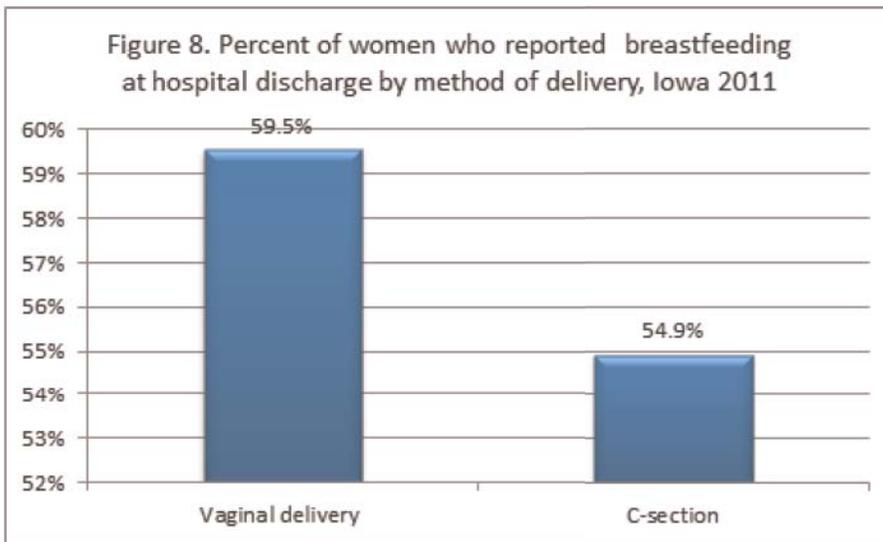
The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a nutrition program for babies, children under the age of 5, pregnant women, breastfeeding women, and women who have had a baby in the last six months. WIC helps families by providing healthy foods, nutrition education, and referrals to other health care agencies.

Many women who are eligible for Medicaid reimbursement for deliveries are also eligible to receive WIC services. The WIC program promotes breastfeeding and provides breastfeeding support to WIC participants. In 2011, a lower percentage of WIC participants with Medicaid reimbursed births reported that they were breastfeeding their infants at hospital discharge compared to women with Medicaid reimbursed births who were not WIC participants (56.7% vs. 62.6%) (Figure 7).



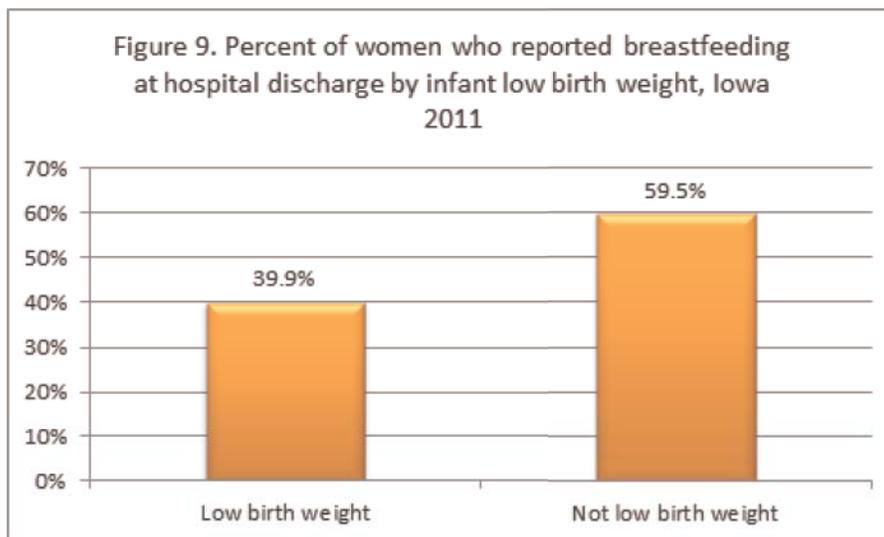
## Breastfeeding by method of delivery

In 2011, about twenty-nine percent (29.4%) of deliveries reimbursed by Medicaid were cesarean sections. A lower percentage of women who delivered their infants via a cesarean-section reported that they were breastfeeding their infant at hospital discharge, compared to women who delivered their infants vaginally (54.9% vs. 59.5%) (Figure 8).

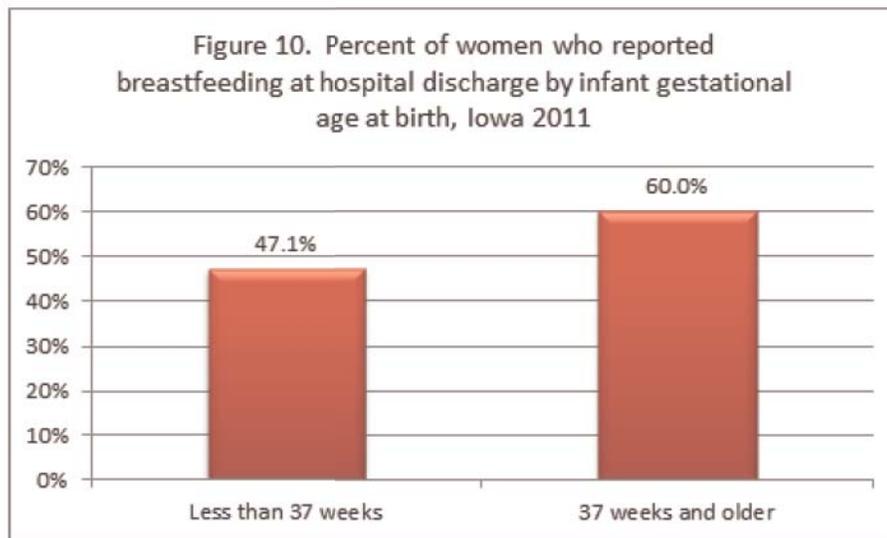


## Breastfeeding by infant birth outcome

Women who experienced an adverse birth outcome such, as having a low birth weight (LBW) infant or delivering their infant early reported breastfeeding at a lower percentage than women who had not experienced an adverse birth outcome. Among women who delivered a LBW infant, 39 percent (39.9%) reported that they were breastfeeding their infants at hospital discharge (Figure 9). In contrast, among women who delivered an infant not considered to be LBW, 59 percent (59.5%) reported that they were breastfeeding their infants at hospital discharge.



In a similar pattern, among women who delivered an infant prior to 37 weeks gestation, 47 percent (47.1%) reported that they were breastfeeding their infants at hospital discharge (Figure 10). Among women who delivered an infant older than 37 weeks gestation, 60 percent (60.0%) reported that they were breastfeeding their infants at hospital discharge.



## Discussion

According to the Breastfeeding Report Card – United States 2012<sup>3</sup> published by the Centers for Disease Control and Prevention, nearly 80 percent (79.3%) of women in Iowa reported that they ever breastfed their infants. In spite of the benefits of breastfeeding for both mothers and babies, the percentage of women with Medicaid reimbursed births overall and by sub-groups is much lower than that reported for Iowa overall.

Data regarding some sub-groups in the report indicate that further study may be informative to program managers. For example, only 44.2 percent of non-Hispanic Black women reported that

they were breastfeeding their infants at hospital discharge, compared to 70.1 percent of Hispanic women (Figure 2). A more in depth study might reveal the underlying reasons for this dramatic difference in the two disparate populations.

While much of the information in the report is expected, the percentage of women who reported breastfeeding at hospital discharge by WIC status is counter-intuitive. Program managers will likely be interested in drilling deeper into the reasons why a higher percentage of non-WIC participants breast-feed than WIC participants.

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## What is the Iowa Medicaid – Birth Certificate Match Project?

The Iowa Medicaid - Birth Certificate Match Project is supported by an inter-departmental agreement between the Iowa Department of Human Services and the Iowa Department of Public Health/Bureaus of Family Health and Health Statistics. The purpose of the project is to describe the characteristics of pregnant Medicaid recipients, their behaviors during pregnancy and at hospital discharge, their receipt of pregnancy related services, and their birth outcomes. This information can be used to improve programs and policies to benefit Medicaid recipients.

In addition, the IDPH would like to acknowledge the Maternal and Child Health Epidemiology Program, Applied Sciences Branch, Division of Reproductive Health, National Center for Chronic Disease Prevention and Public Health Promotion, Centers for Disease Control and Prevention for analytic support and preparation of this fact sheet.

## Recommendations

### For Women:

- Develop a plan for breastfeeding before delivery.
- Identify support persons in carrying-out your plan.
- Identify potential barriers to breastfeeding and determine how they can be overcome.
- Talk to your supervisor about your need to express milk during work hours.
- Discuss your plan with your health care provider before delivery so that your baby is given the opportunity to breastfeed as soon as possible after delivery.
- If you participate in WIC, ask about the breastfeeding peer counselors in your area.

### For Employers<sup>6</sup>:

- Provide dedicated, private space with an electrical outlet for women to express milk or provide women with breaks to breast feed their infants.
- Be flexible with breaks. Women need about 15 minutes, 2-3 times during an eight hour period to express milk.
- Be supportive and provide education. Breastfeeding can reduce absenteeism due to caring for sick babies and breastfed babies have fewer insurance claims.

### For Providers<sup>4,5</sup>:

- Inform all pregnant women about the benefits and management of breastfeeding.
- Encourage breastfeeding on demand.
- Give no pacifiers or artificial nipples to breastfeeding infants.
- Help mothers initiate breastfeeding within one hour of birth.
- Foster the establishment of breastfeeding support groups and refer mothers to them on discharge.
- Encourage and support women, regardless of birth outcome, to breastfeed their infants.

### ADDITIONAL INFORMATION

For additional information or to obtain copies of this fact sheet, write or call the Iowa Department of Public Health, Bureau of Family Health, at 321 E. 12th Street, Des Moines, IA 50309 or toll-free at 1-800-383-3826.

<sup>1</sup> Eidelman AI, Schanler RJ, et al. (2012). Breastfeeding and the Use of Human Milk. *Pediatrics*. 129(3): doi: 10.1542/peds.2011-3552.

<sup>2</sup> Strathearn L., Mamun, AA., Najman, JM., O'Callaghan MJ. (2009). Does breastfeeding protect against substantiated child abuse and neglect? *Pediatrics*: 123(2): 483-93.

<sup>3</sup> <http://www.cdc.gov/breastfeeding/data/reportcard.htm>

<sup>4</sup> <http://www.unicef.org/programme/breastfeeding/baby.htm>

<sup>5</sup> Baby-Friendly USA. Guidelines and Evaluation Criteria for Facilities Seeking Baby-Friendly Designation. Sandwich, MA: Baby-Friendly USA, 2010.

<sup>6</sup> *Easy Steps to Supporting Breastfeeding Employees* Published in 2008 by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau.