The Missouri Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing, population-based surveillance system that monitors specific maternal behaviors and experiences before and during pregnancy and two months postpartum. PRAMS collects data from women who have had a recent live birth through a mailed survey and telephone follow-up for non-respondents. For this fact sheet, PRAMS data from 2007-2008 were used, resulting in a sample size of 2,741 women who had a recent live birth. The survey response rate was 64%.

What is Missouri PRAMS?

The Missouri Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing, population-based surveillance system that monitors specific maternal behaviors and experiences before and during pregnancy and two months postpartum. PRAMS collects data from women who have had a recent live birth through a mailed survey and telephone follow-up for non-respondents.

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Importance of Breastfeeding

The advantages of breastfeeding for the infant, the mother and the community are well documented. Among infants, breastfeeding is associated with a reduction in the risk of acute otitis media, non-specific gastroenteritis, hospitalization due to lower respiratory tract diseases, atopic dermatitis, asthma, overweight or obesity in adolescence and adult life, type 1 and type 2 diabetes, childhood leukemia, sudden infant death syndrome (SIDS), and necrotizing enterocolitis.

The benefits of breastfeeding for mothers include decreased postpartum bleeding, a more rapid decline in size of the uterus following birth, decreased menstrual blood loss, increased child spacing, a reduced risk of developing gestational diabetes, decreased risk of breast cancer, and lower risk of ovarian cancer.

The community benefits of breastfeeding include the potential for a $3.6 billion reduction in annual health care costs in the United States, lower costs for public health programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and a decline in parental employee absenteeism, which leads to an associated loss of income.

The American Academy of Pediatrics (AAP) recommends infants be breastfed exclusively for the first six months of life and continue for at least the first year of life and beyond as long as mutually desired by mother and child.

The U.S. Department of Health and Human Services developed Healthy People (HP) 2020 objectives that aim to increase the proportion of infants who are breastfed to 81.9% in the early postpartum period, to 60.5% at six months, to 34.1% at one year, to 44.3% exclusively through three months, and to 23.7% exclusively through six months.

Breastfeeding Services in Missouri

The Missouri Department of Health and Senior Services (DHSS) provides breastfeeding support through multiple programs. The Missouri Show Me 5 program will begin in 2011 to encourage hospitals to support mothers in breastfeeding initiation and continuation. The Building Blocks of Missouri and Community-Based Home Visting Programs provide home visits and breastfeeding support to low-income mothers. WIC encourages breastfeeding by providing: breastfeeding peer counseling support through 61 local WIC providers; more variety and larger quantities of food to fully breastfeeding mothers and infants; manual breast pumps and loaned hospital-grade electric breast pumps; and other services, such as lactation consultant support, prenatal breastfeeding classes, breastfeeding support groups, and after-hours phone support.

Results*

Breastfeeding Initiation

During 2007-2008, 27.7% of Missouri mothers never initiated breastfeeding, which is
still about 10\% from reaching the HP 2020 objective of 18.1\% or fewer. The groups furthest from the target and least likely to breastfeed included those who were black, under 20 years of age, unmarried, enrolled in WIC, on Medicaid, less than high school educated, and living in a rural area (see Figure 1). However, caution should be taken when interpreting these results. This does not necessarily mean that WIC is a barrier to breastfeeding, but it does mean that the groups least likely to breastfeed also happen to be the groups who enroll in WIC (note this throughout this fact sheet).

The top three reasons mothers gave for stopping breastfeeding were:
- "I thought I was not producing enough milk"
- "Breastmilk alone did not satisfy my baby"
- "My baby had difficulty nursing"

Breastfeeding Duration

Of the mothers who ever breastfed, 37.7\% stopped breastfeeding prior to two months, by the time of the survey. The groups of mothers most likely to stop prior to two months included those who were black, under 20 years of age, unmarried, enrolled in WIC, on Medicaid, less than high school educated, and living in a rural area (see Figure 2). These are the same groups least likely to ever breastfeed.

Barriers to Continue Breastfeeding

The most common reasons mothers gave for stopping breastfeeding, once initiated, included the following: "I thought I was not producing enough milk," "breastmilk alone did not satisfy my baby," and "my baby had difficulty nursing" (see Figure 3, which includes only the top four reasons).
**Barriers to Initiate Breastfeeding**

The most common reasons mothers gave for not initiating breastfeeding included the following: "I didn't like breastfeeding," "I had other children to take care of," and "I went back to work or school" (see Figure 4, which includes only the top three reasons).

Mothers' most common experiences in the hospital after giving birth included: "the hospital gave me a gift pack with formula," "my baby used a pacifier in the hospital," "my baby was not fed only breastmilk in the hospital," "I did not breastfeed my baby in the first hour after my baby was born," and "hospital staff did not help me learn how to breastfeed" (see Figure 5, which includes the top five experiences).

The groups of mothers least likely to have a discussion with their health care provider about breastfeeding included those who were age 30 and older, married, at least high school educated, in the "other" racial/ethnic group, living in an urban area, and on private insurance (see Figure 6).

The majority (96.0%) of mothers enrolled in WIC in each demographic group received information on breastfeeding during WIC visits. The percentage of mothers in each group was nearly equal, with overlapping confidence intervals.

The top three reasons mothers gave for not initiating breastfeeding included:

- "I didn't like breastfeeding"
- "I had other children to take care of"
- "I went back to work or school"
Missouri still has some progress to make in order to reach the HP 2020 objective for breastfeeding initiation, and more than one-third of mothers who ever breastfeed, stop prior to two months.

The same groups of mothers who were least likely to ever breastfeed were also most likely to stop breastfeeding before two months. These groups included those who were: black, less than 20 years of age, unmarried, enrolled in WIC, on Medicaid, less than high school educated, and living in a rural area. These data will be useful for developing targeted materials and interventions, as well as examining current approaches for reaching these groups of women.

The most common reason indicated by mothers for not initiating breastfeeding was, "I didn't like breastfeeding." It may be useful to investigate why women did not like breastfeeding in order to create more effective interventions. Among the women who initiated breastfeeding, the most common reason noted for stopping breastfeeding was, "I thought I was not producing enough milk." This information may be used to create more targeted education. Women's most common breastfeeding experience in the hospital was, "the hospital gave me a gift pack with formula." This indicates the need for collaboration with hospitals and health care workers to support breastfeeding mothers.

It is recommended that this information be used by those working in breastfeeding promotion or maternal and child health to inform policy and focus breastfeeding promotion efforts on the women at highest risk for not breastfeeding and stopping breastfeeding early. Improving breastfeeding practices should lead to better health for women, infants and communities overall.

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Acknowledgements
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