

# Breastfeeding in Minnesota's WIC Program

## Fact Sheet, 2015

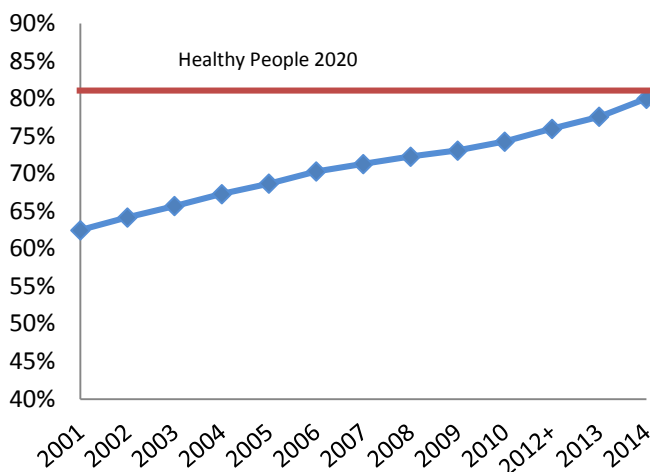
From birth, breastfeeding protects infant health. Evidence of the impact on future health for both mother and baby is growing.<sup>1</sup> Increasing breastfeeding initiation, duration and exclusivity are national goals. Achieving these goals will reduce health care costs and save money for families, employers, and society. Breastfeeding promotion and support is integral to WIC's work to improve maternal and infant health and to reduce health disparities.

The WIC program serves a population at higher risk for not breastfeeding. Creating an environment where women are supported and cared for with evidence-based practices helps ensure more mothers and children get off to the best start.<sup>1</sup>

### Minnesota WIC Breastfeeding Initiation

- Breastfeeding initiation rates have increased steadily across time. Initiation rates increased 29% from 2001 (62%) to 2014 (80%) (Figure 1).<sup>2</sup> From 1990 to 2014, rates doubled from 40% in 1990.<sup>2</sup>
- Minnesota WIC breastfeeding initiation is approaching the Healthy People (HP) 2020 objective of 81.9%.<sup>3</sup>

**Figure 1. Breastfeeding Initiation Among Minnesota WIC Participants<sup>2</sup>**



<sup>+</sup>Starting in 2012, data reflect infants born during the calendar year. Prior to 2012, data were from infants <24 months served during the month of June. WIC transitioned to a new data system in 2011 and so data from 2011 for breastfeeding were omitted.

<sup>++</sup>Duration is calculated as any breastfeeding and as a percent of all infants participating in WIC

**Table 1. Progress in Breastfeeding Initiation and Duration<sup>++</sup> 2012 to 2013 in Minnesota WIC<sup>2</sup>**

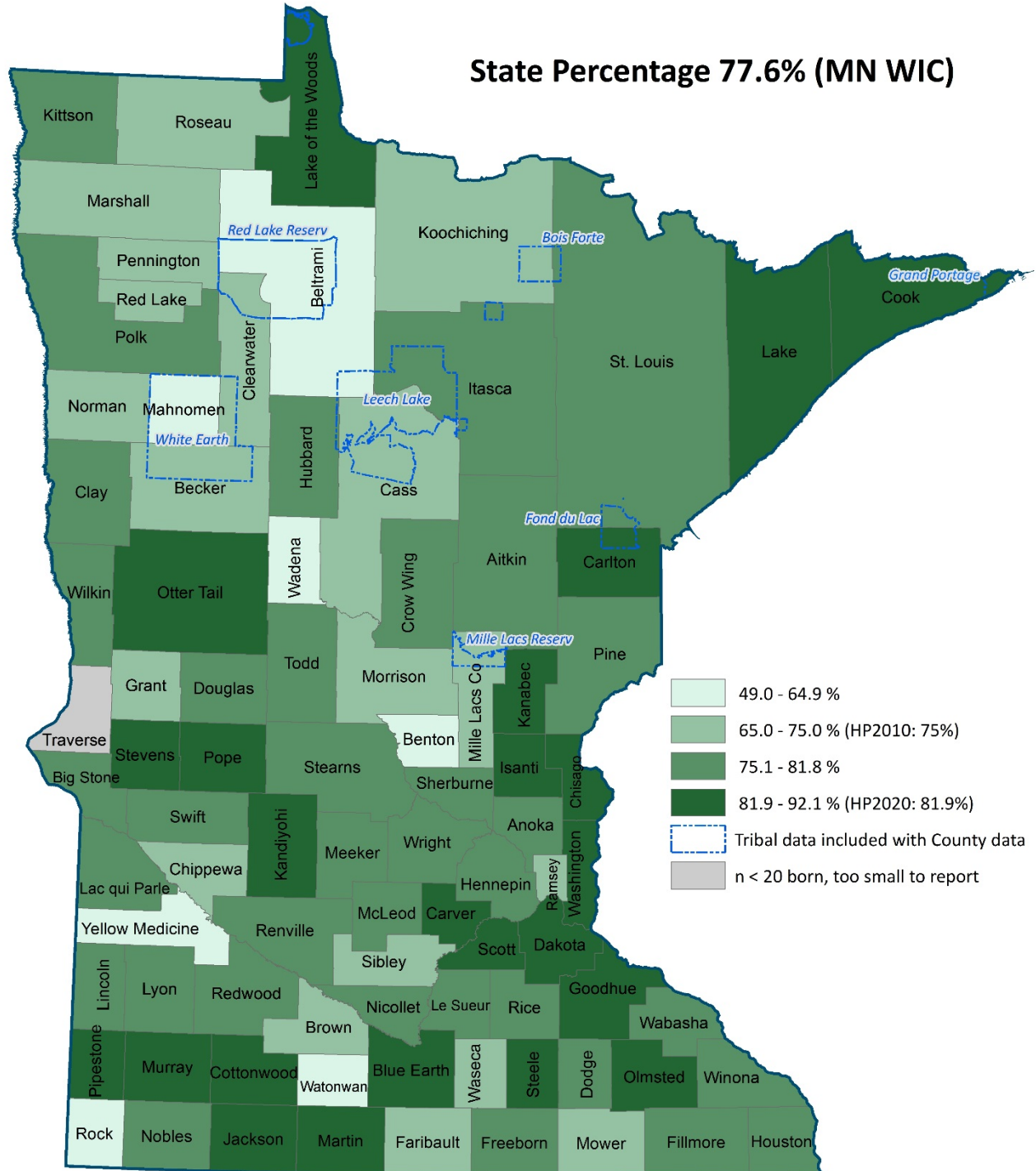
Initiation and Duration	2012	2013	Progress Direction
<b>Initiation</b>	76.0%	77.6%	Improved
<b>1 month</b>	57.7%	60.1%	Improved
<b>3 months</b>	43.2%	47.1%	Improved
<b>6 months</b>	32.1%	34.4%	Improved
<b>12 months</b>	13.6%	24.4%	Improved

### WIC Breastfeeding Promotion and Support

Minnesota WIC continually works to enhance breastfeeding promotion and support services to reduce social and environmental barriers by:

- Promoting and supporting exclusive breastfeeding.
- Responding to questions and providing individualized breastfeeding counseling to pregnant and new mothers.
- Facilitating lactation-related training opportunities for local WIC, hospital and public health staff.
- Offering trained peer breastfeeding counselors hired from communities in which they serve.
- Partnering with the Minnesota Breastfeeding Coalition ([www.mnbreastfeedingcoalition.org](http://www.mnbreastfeedingcoalition.org)) to encourage hospital implementation of evidence-based maternity practices.
- Recognizing breastfeeding friendly hospitals, worksites, health departments and child care ([www.health.state.mn.us/divs/oshii/bf/recognition.html](http://www.health.state.mn.us/divs/oshii/bf/recognition.html)).

# Breastfeeding Initiation in Minnesota WIC by County of Residence, 2013



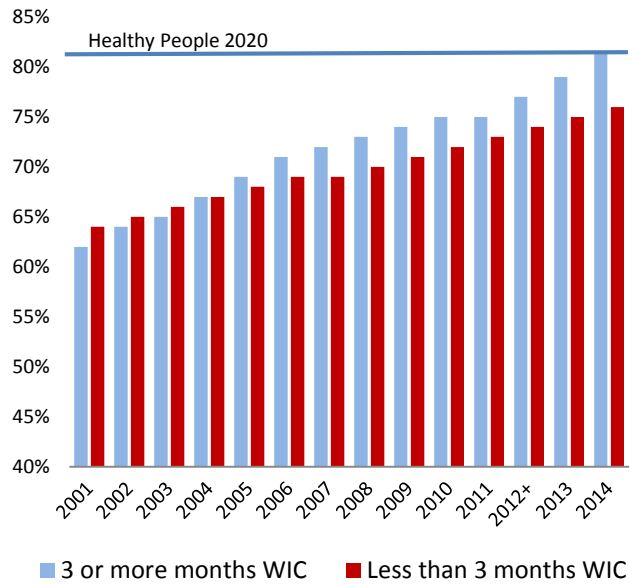
Source: MN-WIC Information System, Births in Calendar Year 2013

Healthy People 2020 objective is 81.9% for Initiation

## Breastfeeding Initiation and Prenatal Participation in Minnesota WIC

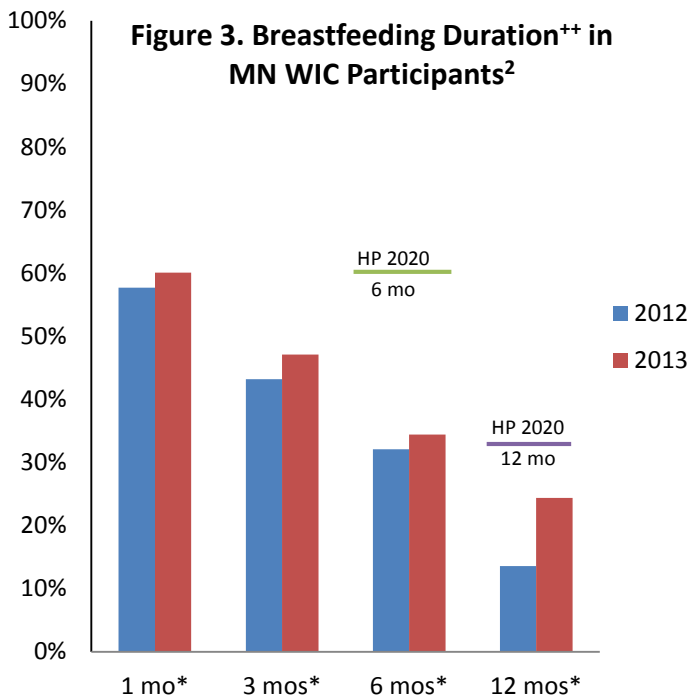
- Breastfeeding initiation is positively associated with prenatal participation in Minnesota WIC.
- Mothers who participated in Minnesota WIC prenatally before their third trimester were more likely to breastfeed<sup>2</sup> and, in 2014, met the Healthy People HP 2020<sup>3</sup> breastfeeding initiation objective of 81.9% (Figure 2).
- Nearly 60% of all women participating in Minnesota WIC enter WIC prior to their third trimester.<sup>2</sup>

**Figure 2. Breastfeeding Initiation by Months of Prenatal Participation<sup>2</sup>**



## Breastfeeding Duration in Minnesota WIC

**Figure 3. Breastfeeding Duration<sup>++</sup> in MN WIC Participants<sup>2</sup>**



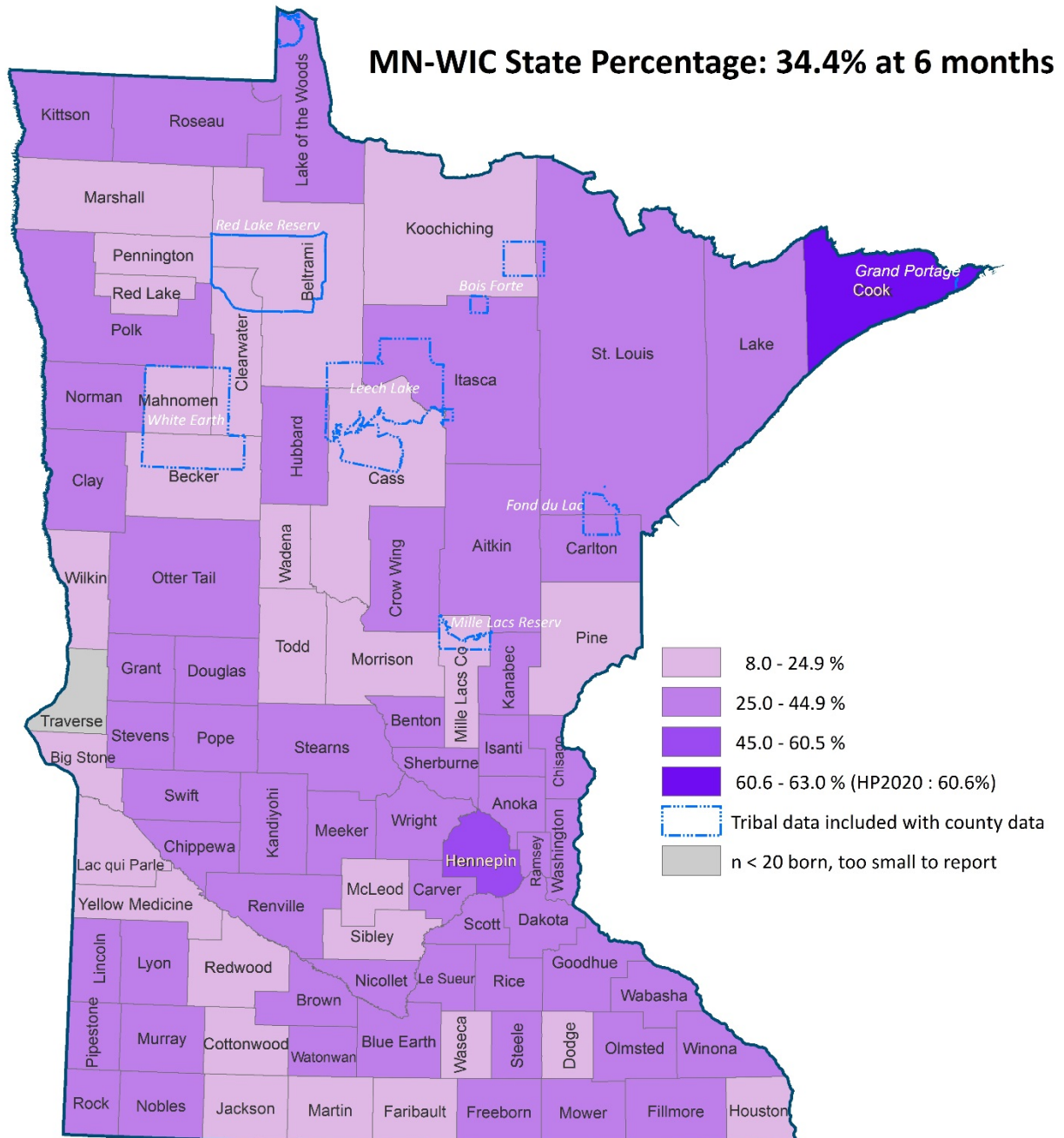
\*p<0.05

- Breastfeeding duration significantly improved between 2012 and 2013 for all time periods (Figure 3).
- Six and twelve month duration rates remain well below the HP 2020 objectives of 60.6% and 34.1% respectively.<sup>3</sup> (Figure 3).

### Exclusive Breastfeeding

Both duration and exclusivity of breastfeeding are important for health.<sup>1</sup> Minnesota WIC is working to promote and support exclusive breastfeeding and to expand collection of exclusivity data. Increases in exclusivity will lead to increases in duration.

# Breastfeeding Duration at 6 months in Minnesota WIC by County of Residence, 2013

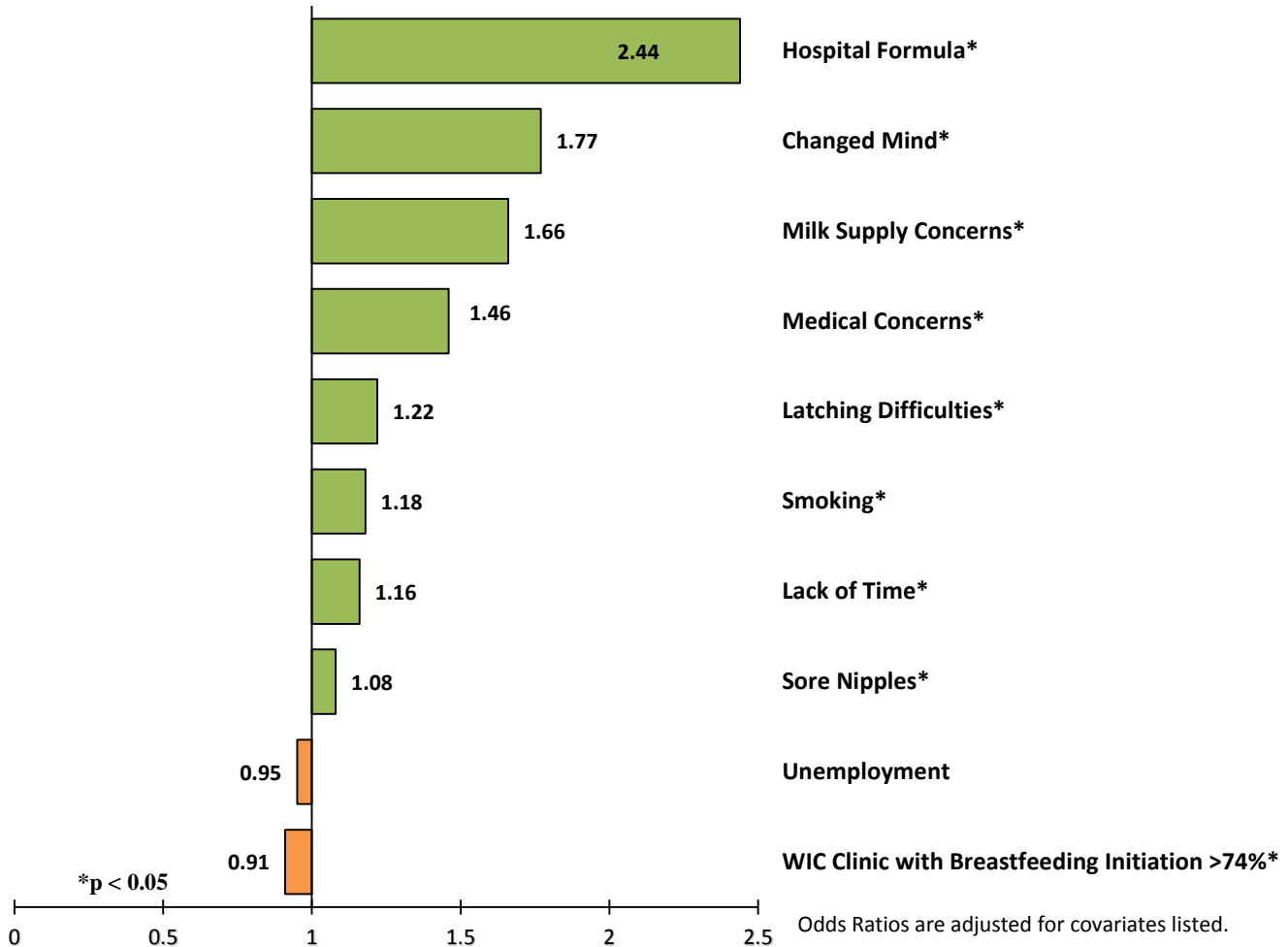


Source: MN-WIC Information System, Births in Calendar Year 2013

Healthy People 2020 objective is 60.6% at 6 months

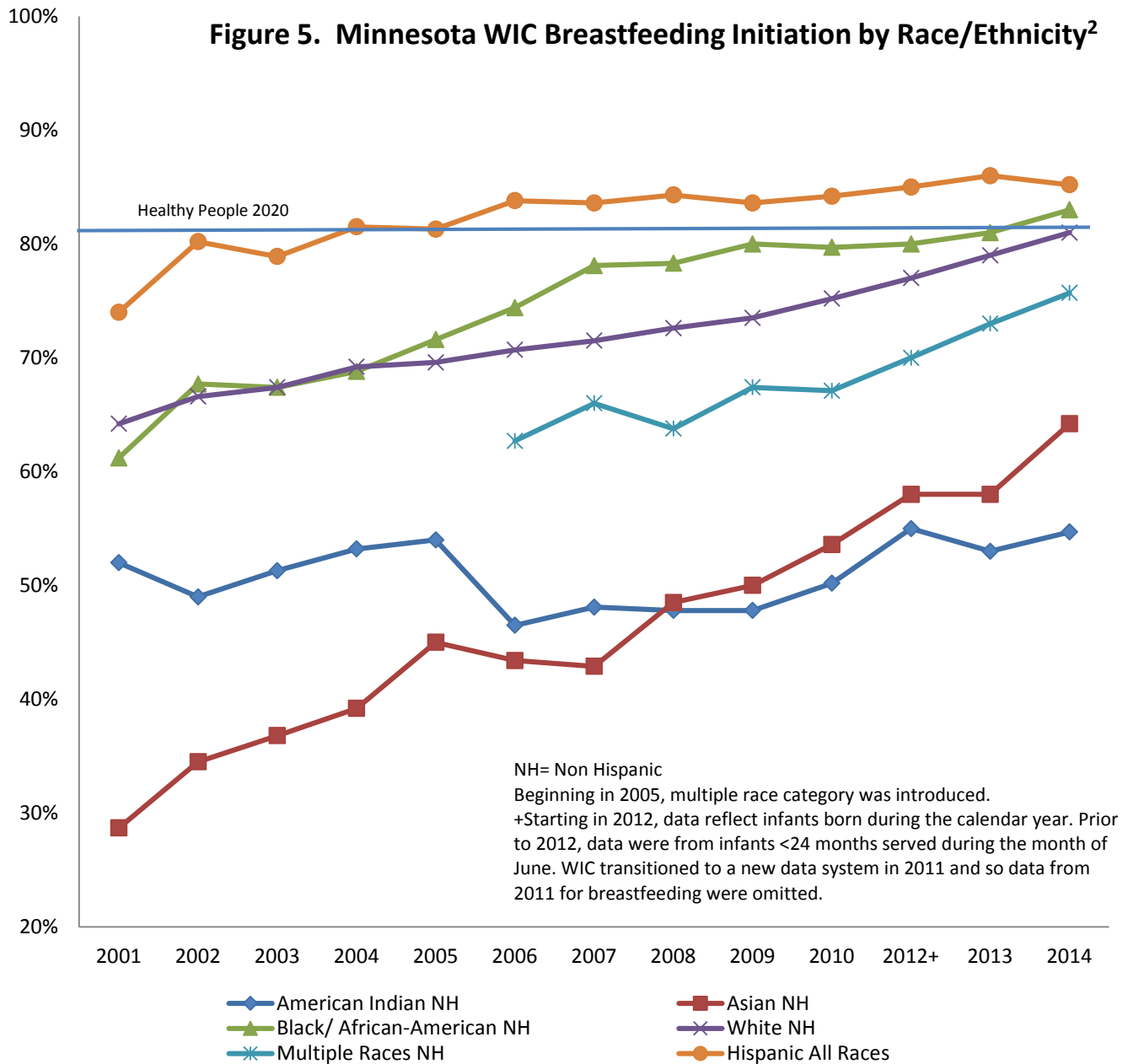
## Predictors of Stopping Breastfeeding in Minnesota WIC

Figure 4. Predictors for Stopping Breastfeeding Before Three Months Adjusted Odds Ratios<sup>4</sup>



- Breastfed infants fed formula in the hospital were 144% more likely to have stopped breastfeeding by three months than those not receiving formula in the hospital (Figure 4).<sup>2</sup>
- In 2010, 50% of Minnesota WIC breastfed newborns received formula while in the hospital.<sup>2, 4</sup>
- Mothers changing their mind, decreased milk supply and medical concerns were the next most common reasons associated with stopping breastfeeding before three months (Figure 4).<sup>4</sup>
- Smoking rates, based on community level data, were significantly associated with not continuing to breastfeed at three months (Figure 4).
- Attending a WIC clinic with breastfeeding initiation rates higher than the 2009 national average for breastfeeding initiation (74%) was positively associated with breastfeeding at three months (Figure 4).<sup>4</sup>

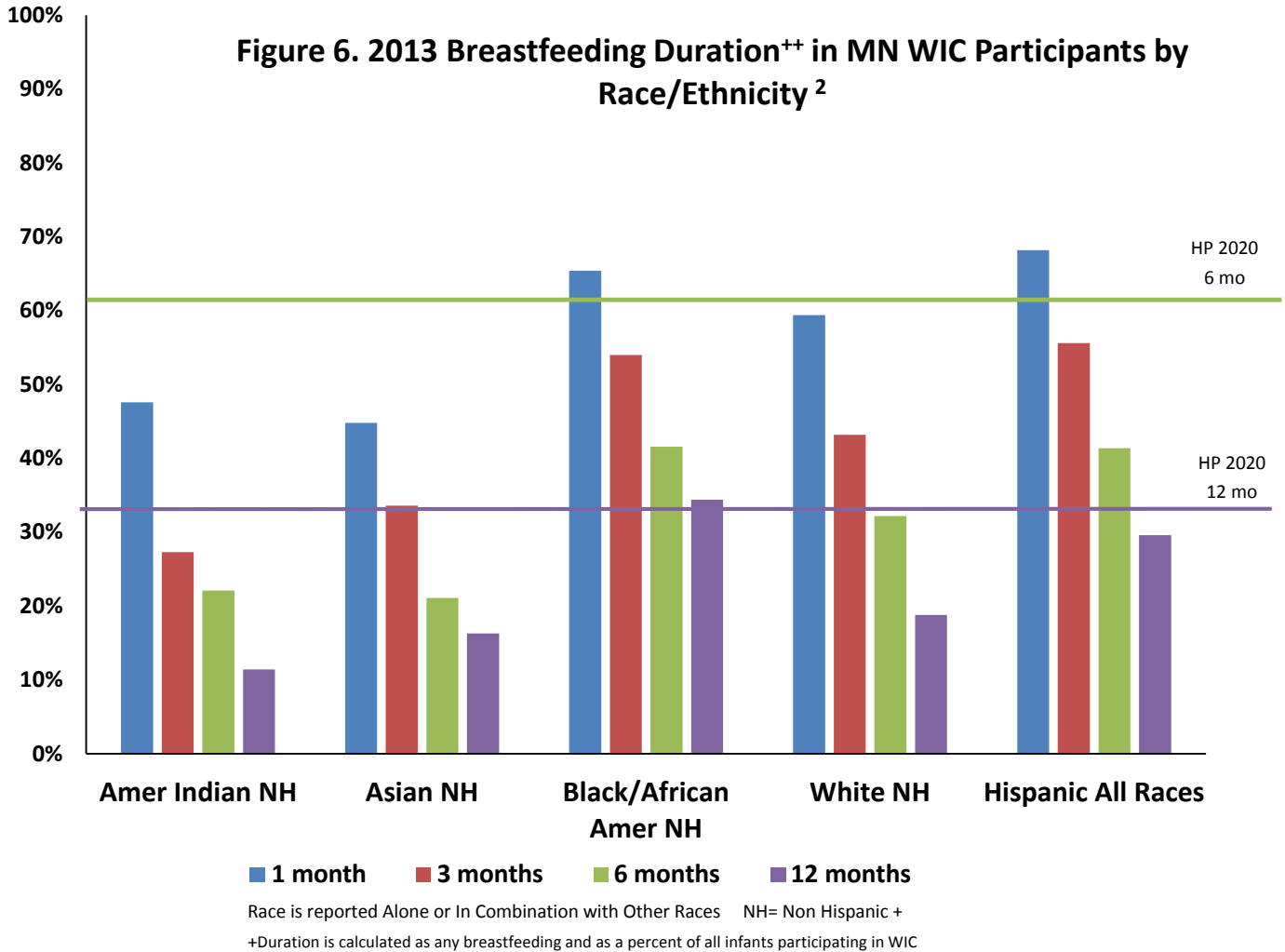
## Health Inequities: Breastfeeding Initiation



### There are significant differences in Minnesota WIC breastfeeding duration by race/ethnicity.

- Asian women, most of whom were Hmong, increased breastfeeding initiation by 120% from 2001 (29%) to 2014 (64%) (Figure 5).<sup>2</sup>
- Hispanic and Black/African-American groups met the 2020 HP Objectives<sup>3</sup> for breastfeeding initiation (Figure 5).
- The Black/African American group is nearly 50% foreign born.<sup>5</sup> According to the PRAMS survey, the Minnesota initiation rate for foreign born Black women, from 2009 to 2011, was 94.4% compared to 73.9% for African-American women.<sup>6</sup>
- American Indian participants had lower breastfeeding initiation rates than other groups (Figure 5).

## Health Inequities: Breastfeeding Duration



### Breastfeeding duration differs significant by race/ethnicity in Minnesota WIC.

- Black/African American NH and Hispanic groups had the highest duration rates for all time frames.
- All groups experienced a decline in breastfeeding rates between one and three months.
- The decrease between one and three months duration was significantly larger in both the American Indian and White groups (Figure 6).
- No groups met the HP 2020 objective of 60.6<sup>3</sup> for duration at six months.
- Black/African American NH groups met the 2020 HP objective<sup>3</sup> for duration at twelve months. American Indian, White and Asian NH women had the lowest twelve month duration rates (Figure 6).

#### Early Breastfeeding Support

Breastfeeding support for a mother during her infant's first month of life can promote longer breastfeeding duration. Minnesota WIC provides breastfeeding education and support which is respectful of cultures and individuals.

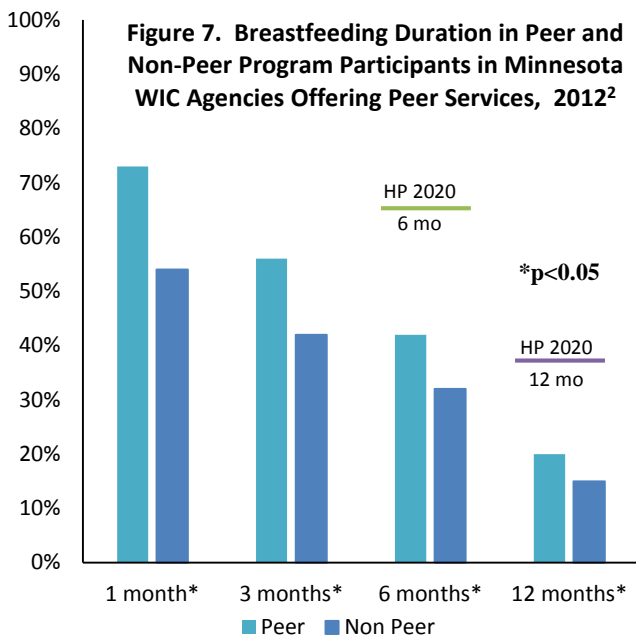
## Minnesota Peer Breastfeeding Support Program

Many local WIC agencies offer peer counseling services to pregnant and breastfeeding mothers. WIC peer counseling has been shown to be effective in improving breastfeeding initiation and duration rates.<sup>7</sup>

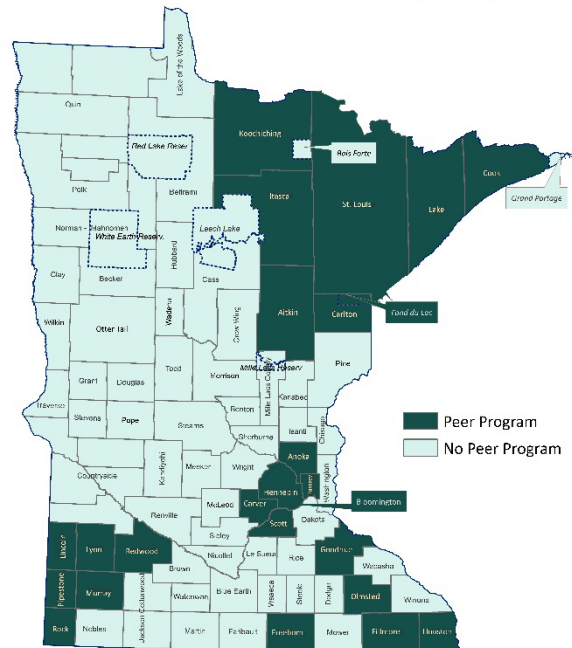
Peer counselors are mothers with personal experience breastfeeding their own infants. Peers are trained in breastfeeding management and counseling skills and strive to help each mother reach her personal breastfeeding goals.

Peer counselors are recruited and hired from the communities they serve and often speak the same language. They have similar life circumstances and experiences as their clients. They connect mother-to-mother with their clients and are a trusted source of information and support.

Peer counselors contact mothers monthly during pregnancy, more frequently around the time of the baby's birth or when problems arise, and up until the baby weans or reaches their first birthday.



Participation in Minnesota WIC Peer Breastfeeding Support Programs, 2015



- Infants with mothers enrolled in WIC prenatally and who participated in the Minnesota WIC Peer Breastfeeding Support program had significantly higher duration rates compared with women not receiving peer support in agencies offering peer services. (Figure 7).<sup>2</sup>

**Bibliography**

1. U.S. DHHS. *The Surgeon General's Call to Action to Support Breastfeeding*. Washington, DC: U.S. DHHS, Office of the Surgeon General; 2011. [www.surgeongeneral.gov/topics/breastfeeding/calltoactiontosupportbreastfeeding.pdf](http://www.surgeongeneral.gov/topics/breastfeeding/calltoactiontosupportbreastfeeding.pdf). Accessed Nov. 2015.
2. Minnesota Department of Health. Minnesota WIC Information System.
3. Healthy People 2020 - Improving the Health of Americans. U.S. DHSS [www.healthypeople.gov/2020/default.aspx](http://www.healthypeople.gov/2020/default.aspx). Accessed Nov. 2015.
4. Fernstrom K, Johnson M B., Geppert J, Oberg CN, Himes JH. *Breastfeeding duration in Minnesota WIC infants exposed to formula in the hospital*. Poster. Pediatric Academic Society, 2013, Washington DC.
5. Minnesota Department of Health. *Comparison of births to Black/African American women born in the United States and Africa, Minnesota 2006-2010*. Vital Signs, October 2013. [www.health.state.mn.us/divs/chs/vitalsigns/usafribabirths20062010.pdf](http://www.health.state.mn.us/divs/chs/vitalsigns/usafribabirths20062010.pdf). Accessed Nov. 2015.
6. Minnesota Department of Health. Pregnancy Risk Assessment Monitoring System (PRAMS).
7. U.S. Department of Agriculture, Food and Nutrition Service. *Using Loving Support to implement best practices in peer counseling*. Beststart Social Marketing; 2004. [https://wicworks.fns.usda.gov/wicworks/Learning\\_Center/research\\_brief.pdf](https://wicworks.fns.usda.gov/wicworks/Learning_Center/research_brief.pdf). Accessed Nov. 2015.



For more information contact:  
[Mary.B.Johnson@state.mn.us](mailto:Mary.B.Johnson@state.mn.us)  
 651-201-4406  
[Joni.Geppert@state.mn.us](mailto:Joni.Geppert@state.mn.us)  
 651-201-3632  
[Marcia.McCoy@state.mn.us](mailto:Marcia.McCoy@state.mn.us)  
 651-201-4905