Breastfeeding Updates from MI PRAMS: Initiation, Duration, Reasons for Stopping, and Why Mothers Never Started

Northern Michigan Perinatal Collaborative

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Outline 1

Michigan PRAMS

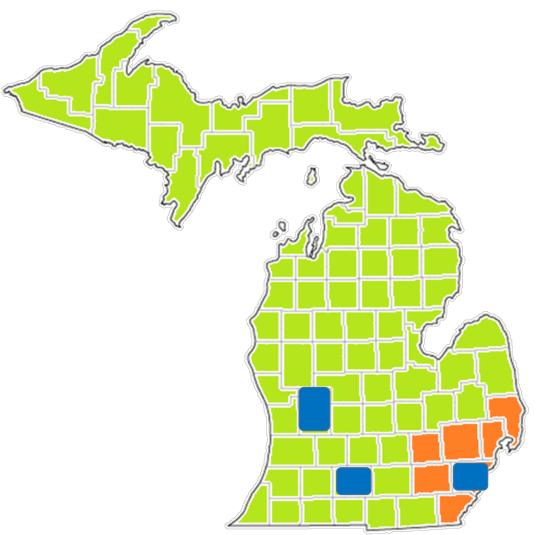
- Initiation and duration
 - Michigan 2005-2016
 - Michigan 2009-2016
 - By race / ethnicity 2009-2016
- Reasons for stopping
 - Michigan 2009-2014
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 - By breastfeeding duration 2009-2014
- Reasons for not initiating
 - Michigan 2016
 - By maternal demographics
 - BF conversations

• QUESTIONS:

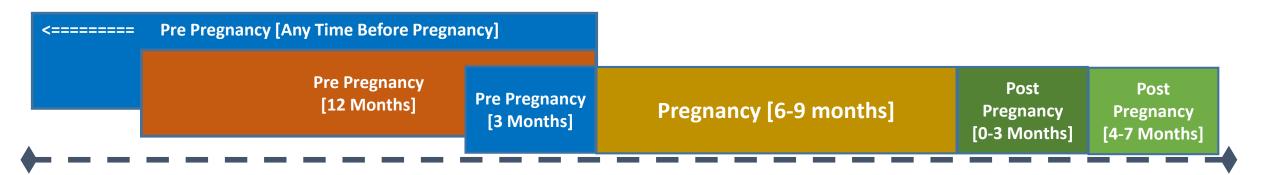
- What makes PRAMS data different from other data sources?
- When do moms complete the PRAMS survey?
- What topics does PRAMS ask?

Data Source - What is PRAMS?

- Pregnancy Risk Assessment Monitoring System
- 2,000 3,600 mothers per year sampled
 - 2012-2014 = 11,009
- 50-60% mothers complete
 - 2012-2014 = 5,664
- Oversample:
 - Low birth weight
 - African American
 - Southeast Michigan [ORANGE]
- Kellogg County Oversamples:
 - Black mothers from three counties
 - Calhoun, Kent, Wayne [BLUE]
- Survey completed 3-9 months post-partum
- Population based survey



PRAMS Windows of Measurement

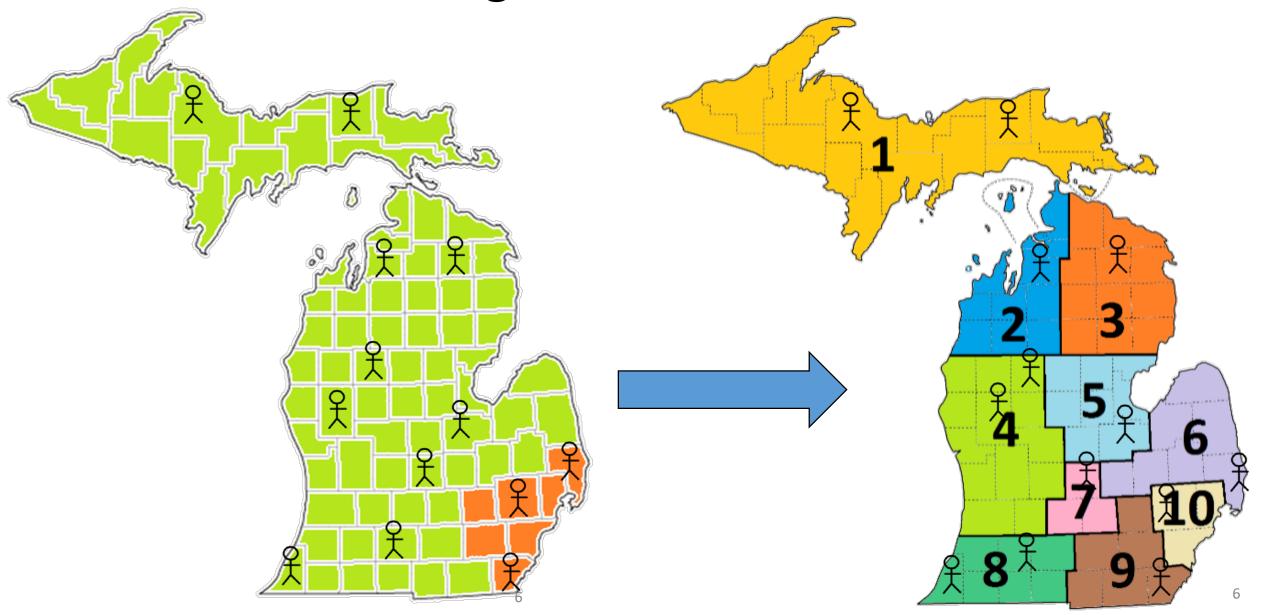


What can PRAMS tell us?

- Topic Map
 - www.Michigan.gov/PRAMS
- Prepregnancy health
- Pregnancy intention
- Physical abuse
- Insurance source
 - Before, During, After
- Substance use
 - Alcohol, tobacco
 - Opiate pain relievers, marijuana
- Mental health
- Home visiting

- Satisfaction with prenatal care
- Content of prenatal care discussions
- Life stressors
- Postpartum contraceptive use
- Intent to vaccinate
- Safe sleep
- ACES
- Partner support
- Housing, food, transportation
- Breastfeeding

Data Source - Regional PRAMS



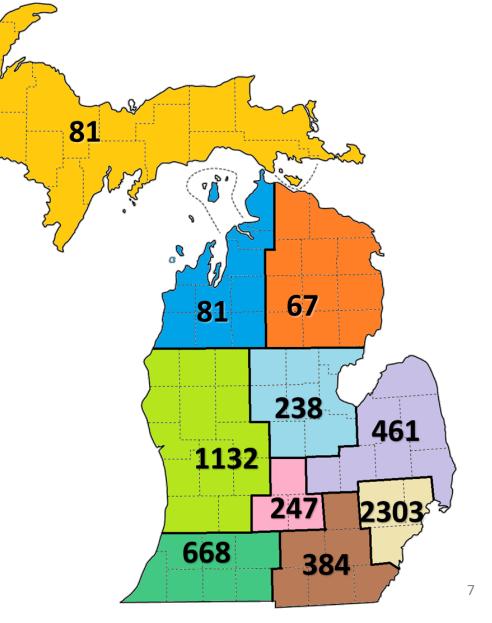
Data Source - Regional PRAMS

Survey responders by region

 More responders = more precise estimates

 More precision = narrower confidence intervals, greater ability to see statistically significant differences

 Data representing smaller regions is less able to describe subgroups



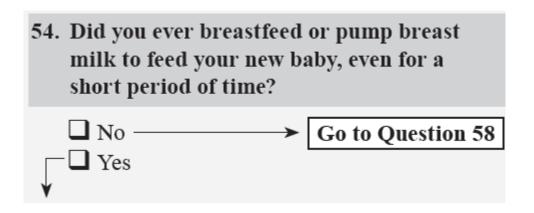
Outline 2

- Michigan PRAMS
- Initiation and duration
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• QUESTIONS:

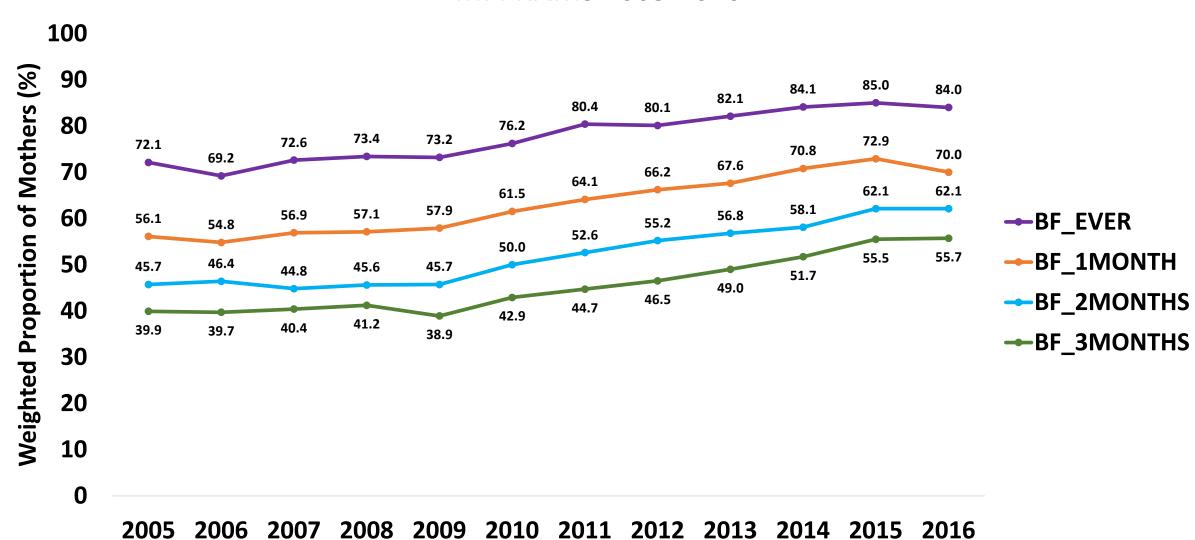
- How many Michigan mothers initiate breastfeeding?
- How many continue for one, two, or three months?
- How do these change over time?
- What are the trends over time for non-Hispanic white and non-Hispanic black mothers?

Breastfeeding Initiation and Duration

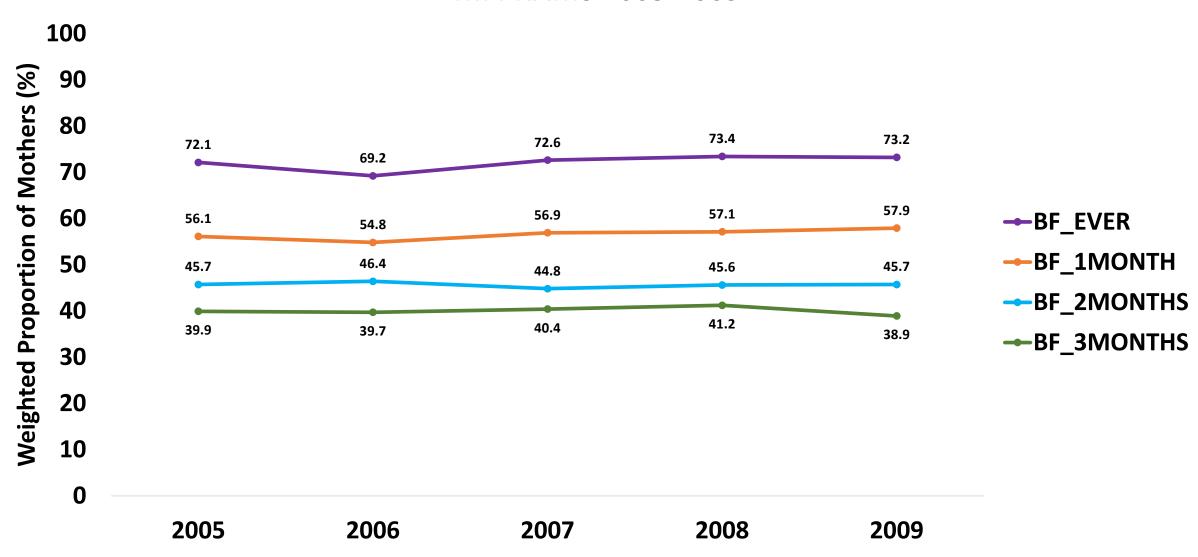




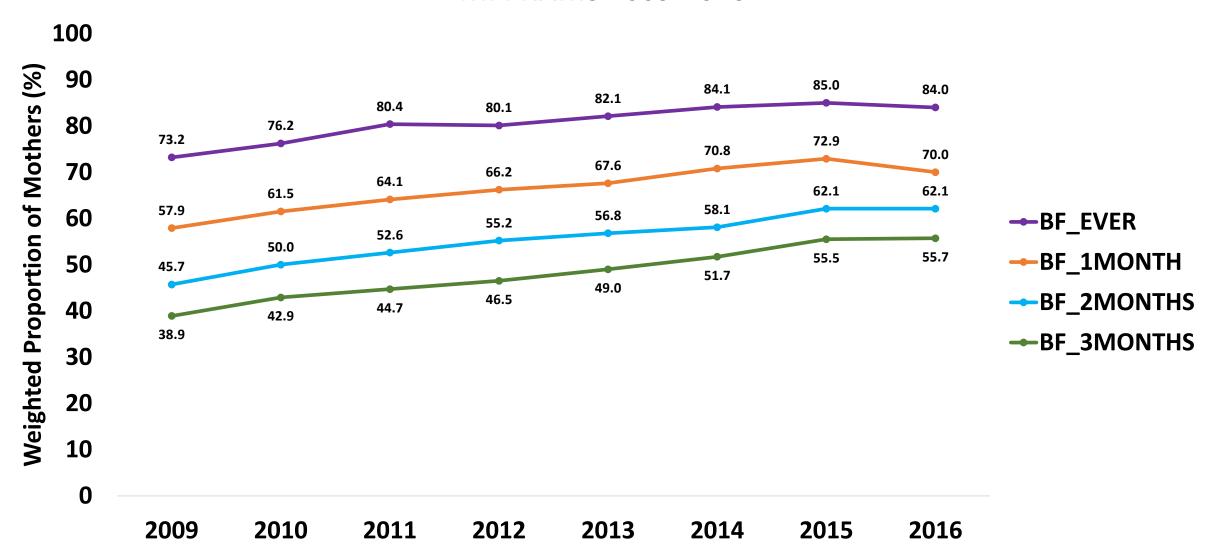
Breastfeeding Initiation and Duration MI PRAMS 2005-2016



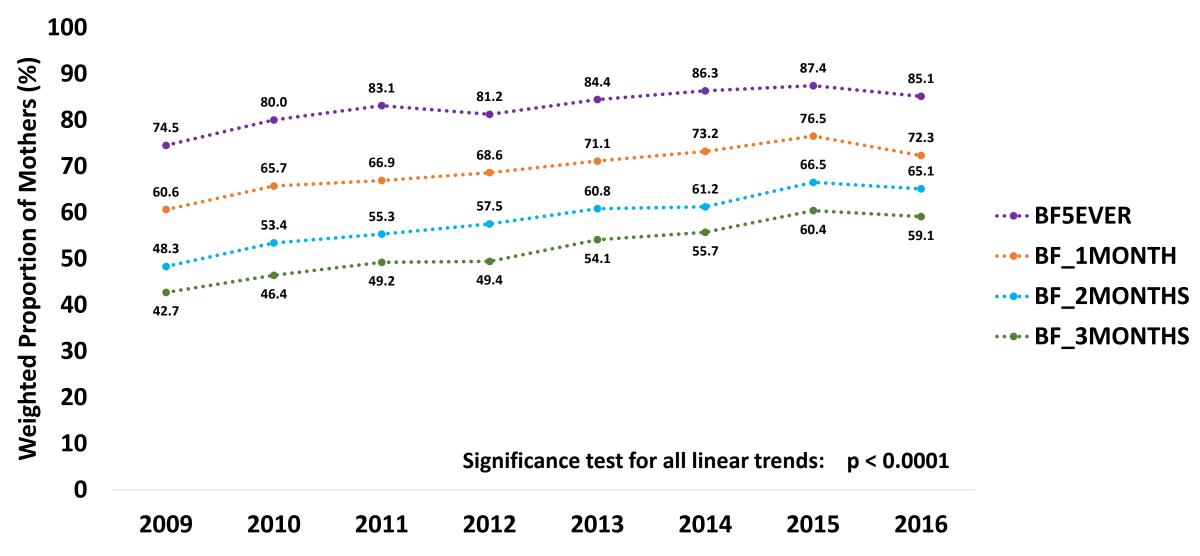
Breastfeeding Initiation and Duration MI PRAMS 2005-2009



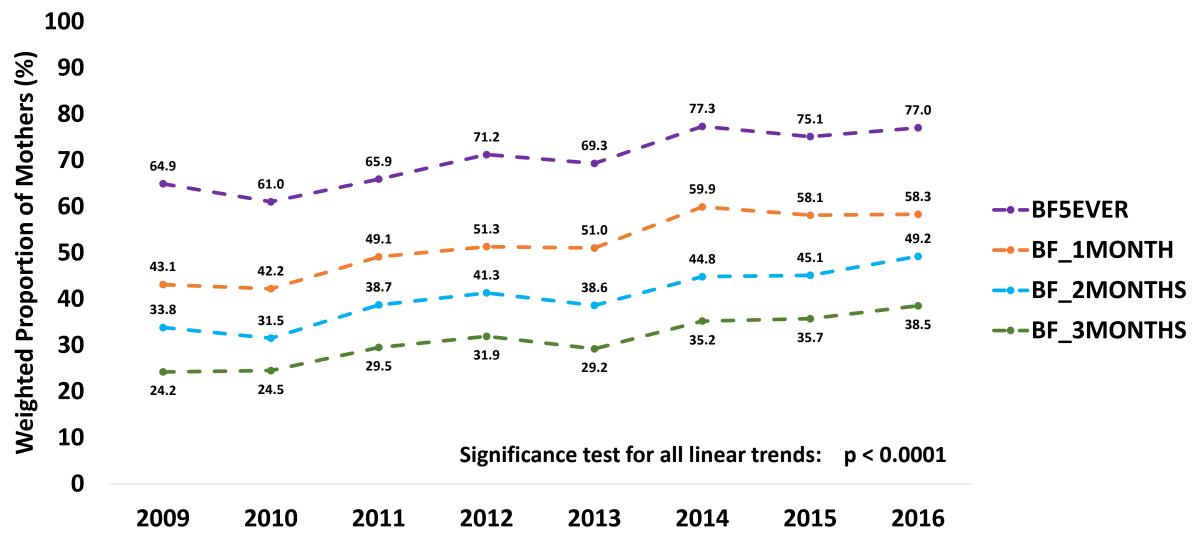
Breastfeeding Initiation and Duration MI PRAMS 2009-2016



Breastfeeding Initiation and Duration - Non-Hispanic White Mothers MI PRAMS 2009-2016



Breastfeeding Initiation and Duration - Non-Hispanic Black Mothers MI PRAMS 2009-2016



Answers: Initiation and Duration

- Breastfeeding rates static for 2005-2009
- Initiation and one, two, three month duration increasing 2010-2016
 - Improving for non-Hispanic White mothers
 - Is the rate of improvement slowing?
 - Improving for non-Hispanic Black mothers

Outline 3

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• QUESTIONS:

- Why do women stop breastfeeding?
- How many reasons do women cite for stopping breastfeeding?
- Do reasons for stopping differ by race / ethnicity?
- Do reasons for stopping vary by breastfeeding duration?

Reasons for Stopping

57.	What were your reasons for stopping breastfeeding?			
	Check ALL that apply			
	 My baby had difficulty latching or nursing Breast milk alone did not satisfy my baby I thought my baby was not gaining enough weight My nipples were sore, cracked, or bleeding It was too hard, painful, or too time consuming I thought I was not producing enough milk, or my milk dried up 			

I had too many other household duties
☐ I felt it was the right time to stop
breastfeeding
I got sick or I had to stop for medical
reasons
☐ I went back to work or school
☐ My baby was jaundiced (yellowing of the
skin or whites of the eyes)
☐ Other — Please tell us:

Reasons for Stopping Breastfeeding, MI PRAMS 2009 - 2014

Reason	Weighted Percent	95% Confidence Interval	Number of Mothers Per Year
Wasn't Producing Enough Milk	47.8	(45.8-49.8)	20,156
Breastmilk Didn't Satisfy Baby	37.0	(35.1-39.0)	15,597
Baby Had Difficulty Nursing / Latching	32.2	(30.4-34.1)	13,596
Too Hard / Painful / Time Consuming	25.5	(23.8-27.3)	10,763
Nipples Were Sore / Cracked / Bleeding	20.3	(18.7-22.0)	8,565
Other Reason	20.3	(18.7-21.9)	8,543
Went Back to Work / School	18.8	(17.4-20.4)	7,946
Too Many Household Duties	12.4	(11.2-13.7)	5,226
Baby Wasn't Gaining Weight	10.3	(9.1-11.6)	4,349
It Was Right Time to Stop	9.0	(8.0-10.1)	3,793
Baby Was Jaundiced	7.7	(6.7-8.8)	3,236
I Was Sick	7.4	(6.4-8.5)	3,131

Reasons for Stopping Breastfeeding by Race / Ethnicity MI PRAMS 2009 - 2014

	Relative Rank			
Reason	State	Non-Hispanic White	Non-Hispanic Black	
Mother felt she was not producing enough milk	#1	#1	#1	
Breast milk alone did not satisfy baby	#2	#2	#3	
Baby had difficulty nursing or latching	#3	#3	#4	
Too hard, painful, time consuming	#4	#4	#2	
Nipples were sore, cracked, or bleeding	#5	#5	#6	
Went back to work or school	#6	#6	#5	

Reasons for Stopping Breastfeeding by Duration

- Early Stoppers
 - Initiated
 - Stopped before 1 month
- 1. Baby difficulty nursing / latching
- 2. Not enough milk
- 3. Hard/painful/time
- 4. Milk didn't satisfy
- 5. Nipples sore / cracked / bleeding

- Mid Stoppers
 - Initiated
 - Stopped between
 1 and 2 months
- 1. Not enough milk
- 2. Milk didn't satisfy
- 3. Baby difficulty nursing/latching
- 4. Hard/painful/time
- 5. Back to work/school

- Late Stoppers
 - Initiated
 - Stopped after 2 months
- 1. Not enough milk
- 2. Milk didn't satisfy
- 3. Back to work/school
- 4. Hard/painful/time
- 5. Baby difficulty nursing/latching

Growing Impact of Work / School



Answers: Reasons for Stopping

- The reasons women stop are fairly consistent
 - Not enough milk
 - Baby not satisfied by breastmilk alone
- More black mothers report breastfeeding being too hard, painful, time consuming as a contributor to stopping
- "Early" stoppers more likely to report baby having problems latching
- Returning to work / school grows in importance with longer duration

Outline 4

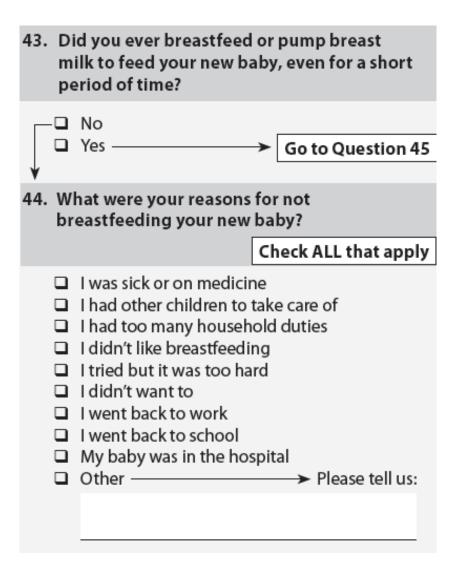
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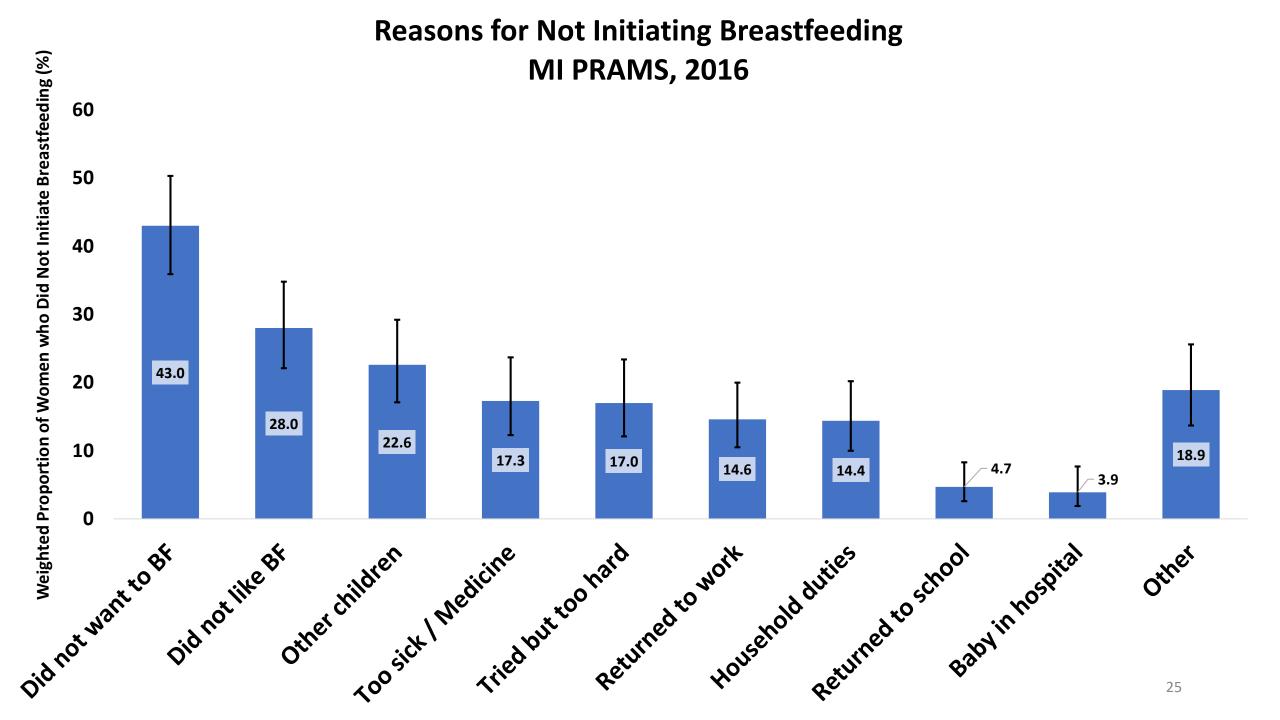
• QUESTIONS:

- Why do women never start breastfeeding?
- How many reasons do women cite for not initiating breastfeeding?
- Is there a relationship between breastfeeding information sources and initiation?

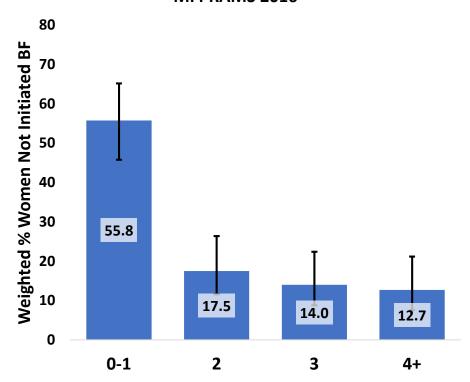
Reasons for Not Initiating

- New question in 2016
- Valuable information for planning how to better support women in starting to breastfeed





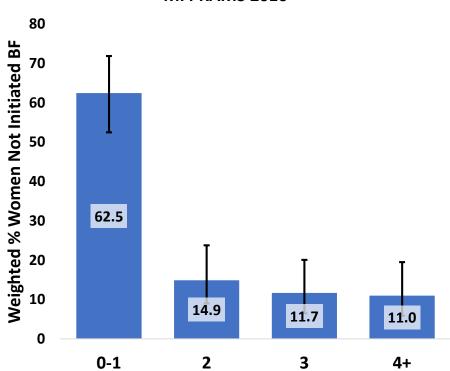
Number of Reasons Not Initiated BF MI PRAMS 2016



- Median number of reasons
- 0.88, 95% CI: 0.75 1.08

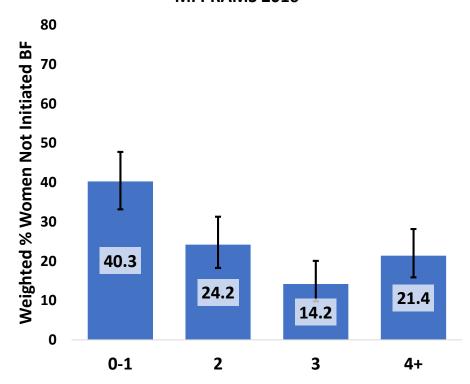
- Most moms had just one reason that they reported for not initiating breastfeeding
- About 1/3 had two or three reasons they did not start
- About 1/8 had many reasons [4 or more] for not starting breastfeeding

Number of Reasons Not Initiated BF, NH-White MI PRAMS 2016



- Median number of reasons
- 0.78, 95% CI: 0.63 0.95

Number of Reasons Not Initiated BF, NH-Black MI PRAMS 2016



- Median number of reasons
- 1.40, 95% CI: 1.10 1.70

42.	Before or after your new baby was born, did you receive information about breastfeeding from any of the following sources? For each one, check No if you did not receive information from this source or Yes if you did.			
a. b.	My doctor			
c.	A breastfeeding or lactation specialist \Box			
d.	My baby's doctor or health care provider			
e.	A breastfeeding support group			
f.	A breastfeeding hotline or toll-free number			
g.	Family or friends			
h.	Other			

Other

Breastfeeding information sources before or after delivery, MI PRAMS, 2016					
	Sample Freq	Weight Freq	Weight Percent	95% CI	RSE
Mom's doctor	1,440	86,507	81.9	(79.4-84.2)	6.7
Nurse or midwife	1,291	79,390	76.0	(73.3-78.5)	5.5
Breastfeeding or lactation specialist	1,247	74,491	71.1	(68.3-73.8)	4.9
Baby's doctor	1,175	70,236	68.4	(65.4-71.2)	4.6
Family or friends	1,009	63,097	60.8	(57.8-63.7)	3.9
Breastfeeding support group	459	25,194	24.6	(22.1-27.3)	5.4
Hotline or toll-free number	191	10,940	10.8	(9.0-12.8)	9.0

230

13,833

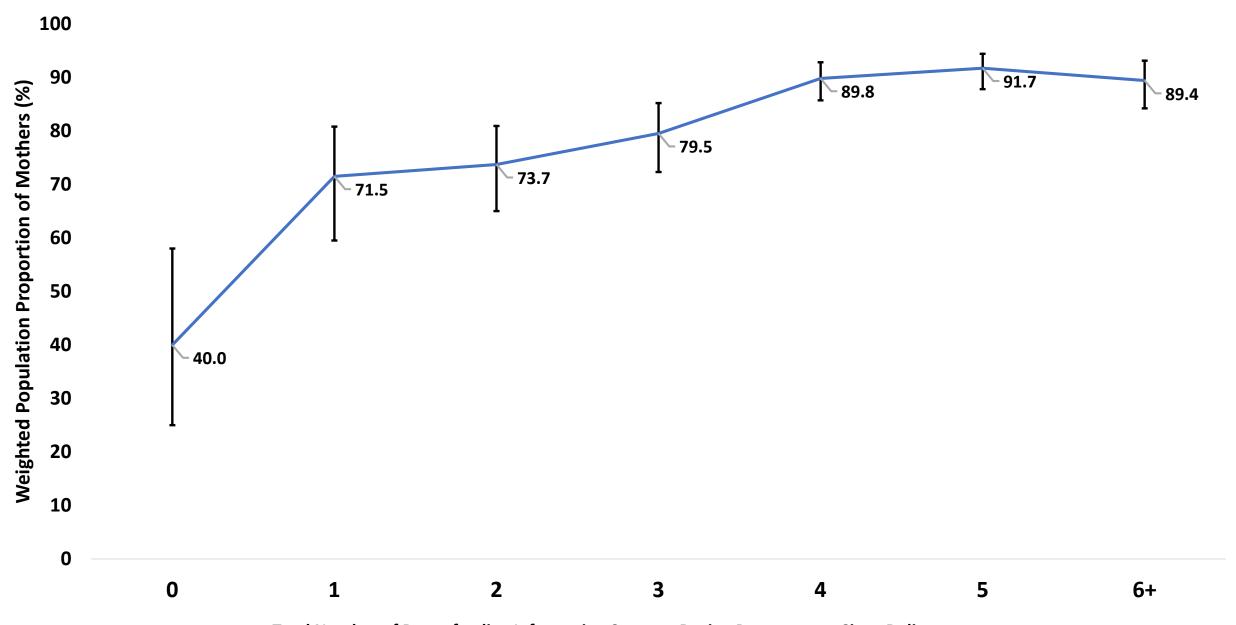
16.7

(14.3-19.5)

7.9

Total number of breastfeeding information sources, MI PRAMS, 2016						
Number of Sources of Breastfeeding Information	Sample Freq	Weight Freq	Weight Percent	95% CI	RSE	
0-1	154	10,619	9.9	(8.2-11.9)	9.4	
2-3	450	28,919	26.9	(24.3-29.6)	5.1	
4-5	791	50,357	46.8	(43.8-49.8)	3.3	
6+	337	17,668	16.4	(14.4-18.7)	6.6	

Breastfeeding Initiation by Number of Sources of Breastfeeding Information MI PRAMS 2016



Total Number of Breastfeeding Information Sources, During Pregnancy or Since Delivery

Answers: Reasons for Not Starting

- Among women who did not start breastfeeding, the most frequently cited reasons were:
 - Mom did not want to breastfeed
 - Mom did not like breastfeeding
 - Other children to take care of
- Given a choice of several reasons why, most mothers choose just one
 - Non-Hispanic Black mothers cite more reasons for not initiating
- Number of information sources for breastfeeding inversely associated with initiation
 - Mothers receiving BF info from few sources are less likely to initiate
 - Mothers receiving BF info from many sources more likely to initiate
 - Possible confounding by insurance type, engagement with care, mom's excitement around breastfeeding

Every Drop Matters!

WILEY Maternal & Child Nutrition

ORIGINAL ARTICLE

Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs

Melissa C. Bartick^{1,2} | Eleanor Bimla Schwarz³ | Brittany D. Green⁴ | Briana J. Jegier⁵ | Arnold G. Reinhold⁶ | Tarah T. Colaizy⁷ | Debra L. Bogen⁸ | Andrew J. Schaefer⁹ | Alison M. Stuebe^{10,11}

- Number needed to treat to prevent:
 - One infant death = 2,764
 - One woman's death = 761
 - One maternal or child death = 597

MI PRAMS People

MDHHS

- Chris Fussman, MS
- Patricia McKane, DVM MPH
- Jill Hardy
 - Abby Wallace
 - Omar Said
- Mei You, MS
- Carol Davis
- Virginia Ganzevoort
- Karen Andruszewski
- Marji Cyrul State BF Plan

- CDC
 - Tanya Williams MPH
- Rutgers Bloustein Center for Survey Research (2016 -->)
 - Nancy Wolff
 - Vanessa Loyola | Griselda Villanueva
- Michigan State University Office for Survey Research
 - (1987 2015)
- Larry Hembroff Survey Consulting

Conclusion

- The mission of Michigan PRAMS is to <u>collect</u> high-quality data and <u>provide</u> analytic products that help <u>facilitate</u> positive changes for Michigan mothers and babies.
- If these results have been useful for you or your organization, please let us know! Your reports of how PRAMS data has been useful to your organization are vital to keeping PRAMS running.
- If you need different analyses to help make positive changes for the mothers and babies that you serve, please contact me!
- HaakP@Michigan.gov