

# Maternity Practices in Infant Nutrition and Care In Tennessee —2009 mPINC Survey



More information is at [www.cdc.gov/mpinc](http://www.cdc.gov/mpinc)

This report provides data from the 2009 mPINC survey for Tennessee. It describes specific opportunities to improve mother-baby care at hospitals and birth centers in Tennessee in order to more successfully meet national quality of care standards for perinatal care.

## Breastfeeding is a National Priority

Breastfeeding is associated with decreased risk for infant morbidity and mortality as well as maternal morbidity,<sup>1</sup> and provides optimal infant nutrition. *Healthy People 2020*<sup>2</sup> establishes breastfeeding initiation, continuation, and exclusivity as national priorities.

## Changes in Maternity Care Practices Improve Breastfeeding Rates

Maternity practices in hospitals and birth centers can influence breastfeeding behaviors during a period critical to successful establishment of lactation.<sup>3</sup> Abundant literature, including a Cochrane review, document that institutional changes in maternity care practices to make them more supportive of breastfeeding increase initiation and continuation of breastfeeding.<sup>4</sup>

## Breastfeeding Support in Tennessee Facilities

### Strengths



#### Documentation of Mothers' Feeding Decisions

Staff at all (100%) facilities in Tennessee consistently ask about and record mothers' infant feeding decisions.

Standard documentation of infant feeding decisions is important to adequately support maternal choice.



#### Availability of Prenatal Breastfeeding Instruction

Most facilities (98%) in Tennessee include breastfeeding education as a routine element of their prenatal classes.

Prenatal education about breastfeeding is important because it provides mothers with a better understanding of the benefits and requirements of breastfeeding, resulting in improved breastfeeding rates.

### Needed Improvements



#### Appropriate Use of Breastfeeding Supplements

Only 21% of facilities in Tennessee adhere to standard clinical practice guidelines against routine supplementation with formula, glucose water, or water.

The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) Guidelines for Perinatal Care recommend against routine supplementation because supplementation with formula and/or water makes infants more likely to receive formula at home and stop breastfeeding prematurely.



#### Inclusion of Model Breastfeeding Policy Elements

Only 11% of facilities in Tennessee have comprehensive breastfeeding policies including all model breastfeeding policy components recommended by the Academy of Breastfeeding Medicine (ABM).

The ABM model breastfeeding policy elements are the result of extensive research on best practices to improve breastfeeding outcomes. Facility policies determine the nature of care that is available to patients. Facilities with comprehensive policies consistently have the highest rates of exclusive breastfeeding, regardless of patient population characteristics such as ethnicity, income, and payer status.



#### Provision of Hospital Discharge Planning Support

Only 12% of facilities in Tennessee provide hospital discharge care including a phone call to the patient's home, opportunity for follow-up visit, and referral to community breastfeeding support.

The American Academy of Pediatrics (AAP) clinical practice guidelines recommend examination of the newborn by a qualified health care professional within 48 hours of hospital discharge in order to assess breastfeeding. Ensuring post discharge ambulatory support improves breastfeeding outcomes.



#### Use of Combined Mother/Baby Postpartum Care

Only 21% of facilities in Tennessee report that most healthy full-term infants remain with their mothers for at least 23 hours per day throughout the hospital stay.

Mother-infant contact during the hospital stay helps establish breastfeeding and maintain infant weight, temperature, and health. Rooming-in increases breastfeeding learning opportunities and duration and quality of maternal sleep, and reduces supplemental feeds.

Every two years, CDC administers the national Maternity Practices in Infant Nutrition and Care (mPINC) survey to all hospitals and birth centers in the U.S. that provide maternity care.

Data from this survey can be used to establish evidence-based, breastfeeding-supportive maternity practices as standards of care in hospitals and birth centers across the US. Improved care will help meet *Healthy People 2020* breastfeeding objectives and will help improve maternal and child health nationwide.

National Center for Chronic Disease Prevention and Health Promotion

Division of Nutrition, Physical Activity, and Obesity



# Tennessee Summary —2009 mPINC Survey

**Survey Method** At each facility, the person who is the most knowledgeable about the facility's maternity practices related to healthy newborn feeding and care completes the CDC mPINC survey.

**Response Rate** 83% of the 69 eligible facilities in Tennessee responded to the 2009 mPINC Survey. Each participating facility received its facility-specific mPINC benchmarking report in March 2011.

**Tennessee's Composite Quality Practice Score\*** **60**  
(out of 100)

**Tennessee's Composite Rank<sup>†</sup>** **40**  
(out of 52)

mPINC Dimension of Care	TN Quality Practice Subscore*	Ideal Response to mPINC Survey Question	Percent of TN Facilities with Ideal Response	TN Item Rank <sup>†</sup>
<b>Labor and Delivery Care</b>	<b>59</b>	Initial skin-to-skin contact is ≥30 min w/in 1 hour (vaginal births)	37	33
		Initial skin-to-skin contact is ≥30 min w/in 2 hours (cesarean births)	28	29
		Initial breastfeeding opportunity is w/in 1 hour (vaginal births)	47	37
		Initial breastfeeding opportunity is w/in 2 hours (cesarean births)	32	38
		Routine procedures are performed skin-to-skin	5	49
<b>Feeding of Breastfed Infants</b>	<b>75</b>	Initial feeding is breast milk (vaginal births)	68	38
		Initial feeding is breast milk (cesarean births)	56	39
		Supplemental feedings to breastfeeding infants are rare	21	22
		Water and glucose water are not used	68	36
<b>Breastfeeding Assistance</b>	<b>77</b>	Infant feeding decision is documented in the patient chart	100	-
		Staff provide breastfeeding advice & instructions to patients	91	-
		Staff teach breastfeeding cues to patients	81	27
		Staff teach patients not to limit suckling time	27	48
		Staff directly observe & assess breastfeeding	86	18
		Staff use a standard feeding assessment tool	59	27
<b>Contact Between Mother and Infant</b>	<b>63</b>	Mother-infant pairs are not separated for postpartum transition	30	47
		Mother-infant pairs room-in at night	67	29
		Mother-infant pairs are not separated during the hospital stay	21	35
		Infant procedures, assessment, and care are in the patient room	2	22
		Non-rooming-in infants are brought to mothers at night for feeding	76	36
<b>Facility Discharge Care</b>	<b>28</b>	Staff provide appropriate discharge planning (referrals & other multi-modal support)	12	46
		Discharge packs containing infant formula samples and marketing products are not given to breastfeeding patients	27	27
<b>Staff Training</b>	<b>52</b>	New staff receive appropriate breastfeeding education	4	41
		Current staff receive appropriate breastfeeding education	8	42
		Staff received breastfeeding education in the past year	48	20
		Assessment of staff competency in breastfeeding management & support is at least annual	64	9
<b>Structural &amp; Organizational Aspects of Care Delivery</b>	<b>66</b>	Breastfeeding policy includes all 10 model policy elements	11	29
		Breastfeeding policy is effectively communicated	72	30
		Facility documents infant feeding rates in patient population	63	30
		Facility provides breastfeeding support to employees	58	29
		Facility does not receive infant formula free of charge	11	21
		Breastfeeding is included in prenatal patient education	98	-
		Facility has a designated staff member responsible for coordination of lactation care	56	45

\* Quality Practice scores range from 0 to 100 for each question, dimension of care, facility, and state. The highest, best possible score for each is 100. Each facility and state's "Composite Quality Practice Score" is made up of subscores for practices in each of 7 dimensions of care.

<sup>†</sup> Ranks range from 1 to 52, with 1 being the highest rank. In case of a tie, both are given the same rank.

- State ranks are not shown for survey questions with 90% or more facilities reporting ideal responses.

## References

- Ip S, Chung M, Raman G, et al. Breastfeeding and maternal and infant health outcomes in developed countries. Rockville, MD: US Dept of Health and Human Services, Agency for Healthcare Research and Quality; 2007.
- US Dept of Health and Human Services. Healthy People 2020 Summary of Objectives: Maternal, Infant, and Child Health. Available at <http://www.healthypeople.gov/2020/topics/objectives/2020/pdfs/MaternalChildHealth.pdf>
- DiGirolamo AM, Grummer-Strawn LM, Fein S. Effect of maternity care practices on breastfeeding. Pediatrics 2008;122, Supp 2:S43-9.
- Fairbank L, O'Meara S, Renfrew MJ, Woolridge M, Snowden AJ, Lister-Sharp D. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. Health Technology Assessment 2000;4:1-171.

## Improvement is Needed in Maternity Care Practices and Policies in Tennessee.

Many opportunities exist to protect, promote, and support breastfeeding mothers and infants in Tennessee.

### Take action on this critical need—consider the following:

- Examine Tennessee regulations for maternity facilities and evaluate their evidence base; revise if necessary.
- Sponsor a Tennessee-wide summit of key decision-making staff at maternity facilities to highlight the importance of evidence-based practices for breastfeeding.
- Pay for hospital staff across Tennessee to participate in 18-hour training courses in breastfeeding.
- Establish links among maternity facilities and community breastfeeding support networks in Tennessee.
- Identify and implement programs within hospital settings—choose one widespread practice and adjust it to be evidence-based and supportive of breastfeeding.
- Integrate maternity care into related hospital-wide Quality Improvement efforts across Tennessee.
- Promote Tennessee-wide utilization of the Joint Commission's Perinatal Care Core Measure Set including exclusive breastfeeding at discharge in hospital data collection.

### Questions about the mPINC survey?

Information about the mPINC survey, benchmark reports, scoring methods, and complete references are available at: [www.cdc.gov/mpinc](http://www.cdc.gov/mpinc)

#### For more information:

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