



**What is the mPINC Survey?** The Maternity Practices in Infant Nutrition and Care (mPINC) Survey is a national survey from the Centers for Disease Control and Prevention (CDC) that assesses infant feeding care processes, policies, and staffing expectations in maternity care settings.

**What is in this report?** This report summarizes results from all Tennessee facilities that participated in the 2013 mPINC Survey and identifies opportunities to improve mother-baby care at hospitals and birth centers and related health outcomes throughout Tennessee.

**Who participates in the mPINC survey?** All hospitals with maternity services and all free-standing birth centers in the United States are invited to participate in CDC's mPINC survey every two years.

Tennessee's mPINC Score:

67

In Tennessee, 85% of 68 eligible facilities participated in CDC's 2013 mPINC Survey.

### Tennessee Highlights: 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.



**Provision of Breastfeeding Advice and Counseling**

Staff at 93% facilities in Tennessee provide breastfeeding advice and instructions to patients who are breastfeeding, or intend to breastfeed.

The American Academy of Pediatrics (AAP) recommends pediatricians provide patients with complete, current information on the benefits and methods of breastfeeding to ensure that the feeding decision is a fully informed one. Patient education is important in order to establish breastfeeding.

### Tennessee Highlights: Opportunities for Improvement



**Appropriate Use of Breastfeeding Supplements**

Only 19% 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 16% 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.



**Protection of Patients from Formula Marketing**

Only 42% of facilities in Tennessee adhere to clinical and public health recommendations against distributing formula company discharge packs.

Distribution of discharge packs contributes to premature breastfeeding discontinuation. The ACOG, AAP, American Public Health Association (APHA), and the federal Government Accountability Office (GAO) all identify this practice as inappropriate in medical environments and recommend against it.



**Provision of Hospital Discharge Planning Support**

Only 17% 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.

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.

There are many opportunities to protect, promote, and support breastfeeding in Tennessee. Opportunities such as those listed below can help Tennessee bring ideal maternity care practices to all Tennessee hospitals.

### Change opportunities:

- Examine Tennessee regulations for maternity facilities and evaluate their evidence base.
- Sponsor a Tennessee-wide summit of key decision-making staff at maternity facilities to highlight the importance of evidence-based practices for breastfeeding.
- Encourage and support hospital staff across Tennessee to be trained in providing care that supports mothers to breastfeed.
- Establish links among maternity facilities and community breastfeeding support networks in Tennessee.
- Implement evidence-based practices in medical care settings across Tennessee that support mothers' efforts to breastfeed.
- Integrate maternity care into related hospital-wide Quality Improvement efforts across Tennessee.
- Promote utilization of the Joint Commission's Perinatal Care Core Measure Set including exclusive breast milk feeding at hospital discharge in Tennessee hospital data collection systems.

### Questions about the mPINC survey?

Information about the mPINC survey, results, reports, scoring, and history is at: [www.cdc.gov/mpinc](http://www.cdc.gov/mpinc)

### For more information:

Centers for Disease Control and Prevention  
Division of Nutrition, Physical Activity, and Obesity  
Atlanta, GA USA

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## Tennessee's 2013 Survey Results

67

Tennessee's State mPINC Score  
(out of 100)\*

Tennessee's State mPINC Rank  
(out of 53)<sup>†</sup>

49

mPINC Care Dimension	Care Dimension Subscore*	Ideal Response to mPINC Survey Question	Percent of TN Facilities with Ideal Response	Item Rank <sup>†</sup>
Labor and Delivery Care	69	Initial skin-to-skin contact is at least 30 min w/in 1 hour (vaginal births)	57	45
		Initial skin-to-skin contact is at least 30 min w/in 2 hours (cesarean births)	44	44
		Initial breastfeeding opportunity is w/in 1 hour (vaginal births)	52	46
		Initial breastfeeding opportunity is w/in 2 hours (cesarean births)	52	38
		Routine procedures are performed skin-to-skin	26	44
Feeding of Breastfed Infants	80	Initial feeding is breast milk (vaginal births)	65	48
		Initial feeding is breast milk (cesarean births)	59	46
		Supplemental feedings to breastfeeding infants are rare	19	40
Breast-feeding Assistance	82	Water and glucose water are not used	85	34
		Infant feeding decision is documented in the patient chart	100	---
		Staff provide breastfeeding advice & instructions to patients	93	---
		Staff teach breastfeeding cues to patients	90	---
		Staff teach patients not to limit suckling time	42	46
		Staff directly observe & assess breastfeeding	81	40
Contact Between Mother and Infant	70	Staff use a standard feeding assessment tool	66	37
		Staff rarely provide pacifiers to breastfeeding infants	29	43
		Mother-infant pairs are not separated for postpartum transition	54	46
		Mother-infant pairs room-in at night	82	39
		Mother-infant pairs are not separated during the hospital stay	32	34
Facility Discharge Care	39	Infant procedures, assessment, and care are in the patient room	4	39
		Non-rooming-in infants are brought to mothers at night for feeding	87	34
		Staff provide appropriate discharge planning (referrals & other multi-modal support)	17	47
		Discharge packs containing infant formula samples and marketing products are not given to breastfeeding patients	42	47
Staff Training	62	New staff receive appropriate breastfeeding education	6	48
		Current staff receive appropriate breastfeeding education	23	30
		Staff received breastfeeding education in the past year	61	24
		Assessment of staff competency in breastfeeding management & support is at least annual	72	11
Structural & Organizational Aspects of Care Delivery	69	Breastfeeding policy includes all 10 model policy elements	16	41
		Breastfeeding policy is effectively communicated	79	27
		Facility documents infant feeding rates in patient population	74	33
		Facility provides breastfeeding support to employees	63	39
		Facility does not receive infant formula free of charge	7	47
		Breastfeeding is included in prenatal patient education	90	---
		Facility has a designated staff member responsible for coordination of lactation care	62	40

\* 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 "Total Score" is made up of subscores for practices in each of 7 dimensions of care.

† Ranks range from 1 to 53, 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

- <sup>1</sup> 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.
- <sup>2</sup> 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>
- <sup>3</sup> DiGirolamo AM, Grummer-Strawn LM, Fein S. Effect of maternity care practices on breastfeeding. *Pediatrics* 2008;122, Supp 2:S43-9.
- <sup>4</sup> 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.