



**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 South Carolina 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 South Carolina.

**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.

South Carolina's mPINC Score:

78

In South Carolina, 83% of 46 eligible facilities participated in CDC's 2013 mPINC Survey.

South Carolina Highlights: Strengths

	<p><b>Documentation of Mothers' Feeding Decisions</b> Staff at all (100%) facilities in South Carolina consistently ask about and record mothers' infant feeding decisions.</p>	<p>Standard documentation of infant feeding decisions is important to adequately support maternal choice.</p>
	<p><b>Availability of Prenatal Breastfeeding Instruction</b> Most facilities (97%) facilities in South Carolina include breastfeeding education as a routine element of their prenatal classes.</p>	<p>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.</p>

South Carolina Highlights: Opportunities for Improvement

	<p><b>Appropriate Use of Breastfeeding Supplements</b> Only 27% of facilities in South Carolina adhere to standard clinical practice guidelines against routine supplementation with formula, glucose water, or water.</p>	<p>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.</p>
	<p><b>Inclusion of Model Breastfeeding Policy Elements</b> Only 36% of facilities in South Carolina have comprehensive breastfeeding policies including all model breastfeeding policy components recommended by the Academy of Breastfeeding Medicine (ABM).</p>	<p>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.</p>
	<p><b>Protection of Patients from Formula Marketing</b> Only 74% of facilities in South Carolina adhere to clinical and public health recommendations against distributing formula company discharge packs.</p>	<p>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.</p>
	<p><b>Initiation of Mother and Infant Skin-to-Skin Care</b> Only 73% of facilities in South Carolina initiate skin-to-skin care for at least 30 minutes upon delivery of the newborn.</p>	<p>Upon delivery, the newborn should be placed skin-to-skin with the mother and allowed uninterrupted time to initiate and establish breastfeeding in order to improve infant health outcomes and reduce the risk of impairment of the neonatal immune system from unnecessary non-breast milk feeds.</p>



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 South Carolina. Opportunities such as those listed below can help bring ideal maternity care practices to all South Carolina hospitals.

### Change opportunities:

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

## South Carolina's 2013 Survey Results

78

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

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

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mPINC Care Dimension	Care Dimension Subscore*	Ideal Response to mPINC Survey Question	Percent of SC Facilities with Ideal Response	Item Rank <sup>†</sup>
Labor and Delivery Care	78	Initial skin-to-skin contact is at least 30 min w/in 1 hour (vaginal births)	73	27
		Initial skin-to-skin contact is at least 30 min w/in 2 hours (cesarean births)	60	27
		Initial breastfeeding opportunity is w/in 1 hour (vaginal births)	63	31
		Initial breastfeeding opportunity is w/in 2 hours (cesarean births)	49	44
		Routine procedures are performed skin-to-skin	42	24
Feeding of Breastfed Infants	85	Initial feeding is breast milk (vaginal births)	84	17
		Initial feeding is breast milk (cesarean births)	74	22
		Supplemental feedings to breastfeeding infants are rare	27	19
Breast-feeding Assistance	88	Water and glucose water are not used	91	---
		Infant feeding decision is documented in the patient chart	100	---
		Staff provide breastfeeding advice & instructions to patients	92	---
		Staff teach breastfeeding cues to patients	87	31
		Staff teach patients not to limit suckling time	51	34
		Staff directly observe & assess breastfeeding	90	---
Contact Between Mother and Infant	78	Staff use a standard feeding assessment tool	82	8
		Staff rarely provide pacifiers to breastfeeding infants	50	22
		Mother-infant pairs are not separated for postpartum transition	68	34
		Mother-infant pairs room-in at night	84	35
		Mother-infant pairs are not separated during the hospital stay	54	16
Facility Discharge Care	72	Infant procedures, assessment, and care are in the patient room	22	6
		Non-rooming-in infants are brought to mothers at night for feeding	94	---
Staff Training	68	Staff provide appropriate discharge planning (referrals & other multi-modal support)	47	13
		Discharge packs containing infant formula samples and marketing products are not given to breastfeeding patients	74	28
		New staff receive appropriate breastfeeding education	36	7
		Current staff receive appropriate breastfeeding education	42	5
Structural & Organizational Aspects of Care Delivery	79	Staff received breastfeeding education in the past year	65	16
		Assessment of staff competency in breastfeeding management & support is at least annual	70	13
		Breastfeeding policy includes all 10 model policy elements	36	12
		Breastfeeding policy is effectively communicated	71	41
		Facility documents infant feeding rates in patient population	84	15
		Facility provides breastfeeding support to employees	77	19
		Facility does not receive infant formula free of charge	37	14
Breastfeeding is included in prenatal patient education	97	---		
Facility has a designated staff member responsible for coordination of lactation care	74	24		

### 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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### 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.