# Statewide Breastfeeding Hotline
# Emily A. Hannon, MD, IBCLC, FAAP

**Organization name and web address:**
American Academy of Pediatrics, Section on Breastfeeding (https://services.aap.org/en/community/aap-sections/breastfeeding/)
Western Wake Pediatrics (https://www.westernwakepediatrics.com/About-Us/Our-Providers/Emily-Hannon,-MD,-IBCLC)

## 1) Issue
We seek the Child Fatality Task Force's support for the creation of a statewide 24-hour breastfeeding hotline to assist families of newborns and infants with breastfeeding.

## 2a) Evidence for prevention of child deaths, and promotion of safety and well-being for children

- **Background**

Breastfeeding is widely accepted as an effective strategy to promote positive health outcomes for both mothers and their infants. Breastmilk is nutritionally superior to other forms of infant feeding and offers substantial immunological and health benefits for both the mother and infant. As Baby Friendly USA states: "Breastfeeding is the single most powerful and well-documented preventative modality available to health care providers to reduce the risk of common causes of infant morbidity."[1] Breastfeeding provides short and long term benefits to the mother and infant, and reduces disease burden and death in both populations. Numerous peer-reviewed research studies confirm that breastfeeding promotes significantly lower rates of leukemia, diabetes, asthma, otitis media, necrotizing enterocolitis, and Sudden Infant Death Syndrome.[2] Breastfeeding reduces the risk of respiratory infections in infants, and recent evidence has shown that mothers who have received the COVID-19 vaccine provide protection to their infant through the transfer of antibodies in breast milk.[3]

The benefits of breastfeeding are not limited to the infant. Women who breastfeed have a significantly lower risk of Type 2 diabetes, breast and ovarian cancers, hypertension, and heart disease.[2] The American Academy of Pediatrics (AAP), the American College of Obstetricians and Gynecologists (ACOG), The Centers for Disease Control and Prevention (CDC), and the World Health Organization (WHO) all recommend exclusive breastfeeding for 6 months and continued breastfeeding while adding complementary foods for one year and beyond. The benefits for mom and baby last long after breastfeeding has stopped.

Despite growing data about these benefits, the rate of any breastfeeding in North Carolina decreases dramatically in the first few months of life, dropping from 85% when infants leave the hospital or birthing center (hereafter referred to as "maternity center") to 56% at 6 months, according to North Carolina data from the CDC's most recent National Immunization Survey/Breastfeeding Report Card. And, rates of exclusive breastfeeding at 3 months old in North Carolina are 38% and only 20% at 6 months old, well below the Healthy People 2030 goal of 42.5% exclusive breastfeeding at 6 months old.[4]

Most North Carolina's mothers are initiating breastfeeding immediately after the infant's birth, but upon discharge from the maternity center families face many barriers in identifying or obtaining the skilled support needed to address their concerns about breastfeeding. Families encounter issues in accessing care due to limited or complete lack of lactation consultants in their county, barriers to insurance reimbursement of lactation professionals, high out of pocket costs for private lactation professionals, and limited lactation knowledge among their health care providers.

- **COVID-19 impact on breastfeeding**

An August 2020 CDC report highlights the impact of the COVID-19 pandemic on breastfeeding support. During the early part of the pandemic, one in five hospitals nationally reported reduced in-person lactation support and

nearly 75% of hospitals discharged new mothers less than 48 hours after delivery to decrease risk of exposure to COVID-19. The CDC report also states the disconnect in messaging around breastfeeding and COVID-19 due to conflicting recommendations among professional organizations leading to guidance that negatively impacted the breastfeeding dyad.[5] In North Carolina, the onset of the pandemic further exacerbated the existing gaps in breastfeeding support. Even prior to March 2020, North Carolina maternity centers were reporting a decrease in staff positions and/or hours for lactation staff and the closure of maternity centers particularly in hospitals serving rural communities.[6,7] The North Carolina Breastfeeding Coalition statewide database for breastfeeding support highlights the limited resources available to breastfeeding women in both rural and urban communities.[8] This inequitable availability of and access to resources and support is a known contributor to racial and ethnic disparities of breatfeeding.[9,10] The statewide breastfeeding hotline will permit North Carolina to provide continuous breastfeeding resources and support with consistent messaging to a large geographic area with the ability to reach our most vulnerable citizens.

**2b) Scope of positive impact**

- **Support for North Carolina families**

One way North Carolina has worked to improve breastfeeding success is to improve the in-hospital care given to newborn families. The WHO's Baby-Friendly Hospital Initiative is an evidence-based strategy shown to increase breastfeeding initiation and duration through the implementation of Ten Steps to Successful Breastfeeding. The North Carolina Division of Public Health has supported maternity centers to provide top level breastfeeding support through the development of an incremental approach modeled on the Baby-Friendly Hospital Initiative called the North Carolina Maternity Center Breastfeeding Friendly Designation (NC MCBFD). Maternity centers are awarded one star for every two Baby-Friendly steps implemented, and the designation encourages hospitals to seek full designation through Baby-Friendly, USA.

The implementation of the WHO's Ten Steps to Successful Breastfeeding has been so effective that policy makers and insurance providers in some states have mandated achievement of the Baby Friendly Hospital designation as a strategy to decrease infant morbidity and mortality. In North Carolina, the University of North Carolina at Chapel Hill's Carolina Global Breastfeeding Institute currently is operating an Enriching Maternity Care Communities in the Carolinas project (ENRICH Carolinas) where hospital and birthing centers throughout the state can receive direct technical assistance and coaching towards improving maternity care through the implementation of the WHO's Ten Steps to Successful Breastfeeding. With help from programs like ENRICH Carolinas, breastfeeding initiation within maternity centers has increased 10% over the prior 10 years to a level of 85%.[11]

However, once the mother-baby dyad leaves the maternity center, they are often left without support or help for their breastfeeding needs. Families' needs for breastfeeding support do not end after the newborn period, and families routinely need assistance and advice at predictable milestones like returning to work or school, or increased feeding demands of older infants. North Carolina's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC Program) has been working to improve breastfeeding infrastructure through statewide implementation of the Breastfeeding Peer Counseling Program which offers peer-to-peer breastfeeding support, anticipatory and postpartum breastfeeding education, increased foods for breastfeeding families, and breastfeeding supplies. Fifty percent of North Carolina's infants are eligible for WIC Program services, yet participation in the WIC Program does not negate the barriers to accessing timely competent lactation professionals when breastfeeding concerns arise. Breastfeeding support is a collective responsibility of health care, government, employers, and the community, and all of these players contribute to the success of an individual's breastfeeding experience.

A centralized, statewide, 24-hour hotline can provide accessible, consistent breastfeeding support and messaging, and facilitate referrals to local resources including, but not limited to, the North Carolina WIC Program and the Breastfeeding Peer Counselor Program. Such a hotline can be integrated into existing family support structures in North Carolina and be part of the system of change. Specifically, the implementation of a statewide breastfeeding

hotline would support maternity centers and continue the efforts to reduce infant and maternal mortality and morbidity through breastfeeding support after the mother and infant leave the maternity center.

- **Other states as examples of positive impact**

Tennessee, Ohio, Oklahoma, New Mexico, and Arizona have existing, successful, statewide breastfeeding hotlines. The Tennessee Breastfeeding Hotline (TBH) and The Oklahoma Breastfeeding Hotline have shared their Annual Reports and budgets with us.

For population comparison, in North Carolina in 2019 there were 118,725 live births. In Tennessee in 2016 there were 80,807 live births. Each state has a similar birth rate: TN 62 per 1000 women of childbearing age; NC 60.3 per 1000 women of childbearing age.[12,13]

In year 5 of the TBH (June 2017-July 2018), the hotline received 6,337 unique callers, 73.9% were first time callers. The TBH recorded, among other data points, reasons for calls. The top 5 reasons for calls were: 1) Medications and breastfeeding; 2) Breast and nipple pain; 3) Not making enough milk; 4) Breast engorgement; and 5) Baby feeding too little/too much.

99.1% of callers reported increased comfort and confidence with breastfeeding by the end of their initial call interaction with TBH and at 4-week follow up. At the 8- and 12-week follow up, 100% of callers reported increased confidence and comfort with breastfeeding.

- **Expected North Carolina outcome measures/return on investment**

Using data from Tennessee, with their impressive 11.2% increase in exclusive breastfeeding rates at 3 months, and 11.1% increase in exclusive breastfeeding rates at 6 months, we can extrapolate expected North Carolina exclusive breastfeeding gains.

Using the "Cost of Suboptimal Breastfeeding Calculator" available through the US Breastfeeding Committee,[14] we can estimate the number of maternal and infant lives saved, and cost savings by increasing our exclusive breastfeeding rates by the percentages that Tennessee's rates increased. The attached Fact Sheet shows a graphic displaying cost savings (medical costs, non-medical costs, and death costs) and deaths prevented by increasing breastfeeding rates by Tennessee's percentages. This calculator is based on published data from Alison Stuebe, MD at UNC-CH.[15] If North Carolina increased exclusive breastfeeding rates by the percentages Tennessee did after implementation of their statewide breastfeeding hotline, we could prevent 6 maternal deaths, 4 infant deaths, save more than $72 million combined in related medical, non-medical, and death related costs each year.

**3) State-level collaboration and funding**

In order to create a successful statewide breastfeeding hotline that is available 24 hour per day to all residents of North Carolina, we need agency collaboration and funding. We are already working in close collaboration with WIC to draw upon the existing peer-counselor lactation support framework. Most other states with successful and sustainable hotlines acquire funding from HRSA Title V. In North Carolina, our HRSA Title V funding is committed, and funding a statewide breastfeeding hotline with Title V funds would require defunding an existing service. For this reason, we have been seeking other sources of funding. In our most rural areas where resources are lacking, especially in Eastern North Carolina, we see our lowest breastfeeding initiation and continuation rates.

**4) Proposed action and budget**

A proposed budget for both start-up costs and annual expenses is attached on the Fact Sheet. In collaboration with the Division of Public Health, we applied for a CDC Equity Grant but were not selected. We are currently working with Children's Health Insurance Program (CHIP)/Medicaid to pursue funding. An agency would be tasked with the Request for Application process to identify and award a subcontractor. The agency would monitor performance and quality assurance and facilitate reimbursement.

**5) The importance of state funding**
Following successful models from other states including Tennessee, Oklahoma, and Ohio, a statewide breastfeeding hotline is best managed within the Division of Public Health or the Division of Family and Child Wellbeing.

**6) No law changes**
We are not seeking any law changes, but we are asking for the Task Force's assistance in supporting and securing funding for the North Carolina Breastfeeding Hotline.

**7) Infrastructure of agencies to support proposal**
The existing infrastructure is sufficient to execute this proposal. The recommendation to subcontract the hotline through a non-profit organization would not place day to day operations outside of the State agency/organization. The State agency would need to identify a contract administrator to provide oversight for contract deliverables and reimbursement.

**8) Supporting organizations**
North Carolina Department of Health and Human Services, Division of Public Health
North Carolina Pediatric Society
North Carolina Obstetrical & Gynecological Society
Carolina Global Breastfeeding Institute
NC Child
MomsRising
North Carolina Institute of Medicine
North Carolina Breastfeeding Coalition
American Academy of Pediatrics – Section on Breastfeeding
Breastfeeding Family Friendly Communities
La Leche League
Tennessee Breastfeeding Hotline
Community Care of North Carolina (CCNC)
UNC Lactation Warmline
Jacaranda Health (COVID Mom's Helpline)

**9) Leadership and advancement of issue**
There has been interest from all of the organizations and agencies listed above in helping to advance this issue, and create a statewide breastfeeding hotline.

**10) Other potential stakeholders/collaborators (no concerns or opposition)**
Family Connects International
AAP Federal Affairs Office
Equity Before Birth
Perinatal Quality Collaborative of North Carolina (PQCNC)
North Carolina Hospital Association

**References:**
1) https://www.babyfriendlyusa.org/wp-content/uploads/2019/12/US-Interim-GEC_191107_CLEAN.pdf
2) Stuebe A. The risks of not breastfeeding for mothers and infants. *Rev Obstet Gynecol*. 2009;2(4):222-231
3) Vassilopoulou E, Feketea G, Koumbi L, Mesiari C, Berghea EC, Konstantinou GN. Breastfeeding and COVID-19: From Nutrition to Immunity. *Front Immunol*. 2021;12:661806
4) http://www.cdc.gov/breastfeeding/data/nis_data
5) https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6947a3-H.pdf

6)https://www.wnct.com/local-news/the-need-for-lactation-servies-and-support-in-the-enc/
7) https://www.northcarolinahealthnews.org/2020/02/24/when-rural-maternity-units-close-alternatives-are-hard-to-come-by/
8) https://www.ncbfc.org/perinatal-region-map
9) https://www.acog.org/clinical-information/policy-and-position-statements/position-statements/2020/addressing-health-equity-during-the-covid-19-pandemic
10) https://schs.dph.ncdhhs.gov/schs/pdf/SB_36_FIN_Oct_2010.pdf
11) https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-breastfed-exclusively-through-age-6-months-mich-15/data
12) https://schs.dph.ncdhhs.gov/schs/births/babybook/2019/northcarolina.pdf
13)https://www.marchofdimes.org/peristats/ViewSubtopic.aspx?reg=47&top=2&stop=1&lev=1&slev=4&obj=1
14) www.usbreastfeeding.org/saving-calc, accessed 4/8/2021
15) Stuebe AM, Jegier BJ, Schwarz EB, Green BD, Reinhold AG, Colaizy TT, Bogen DL, Schaefer AJ, Jegier JT, Green NS, Bartick MC. An Online Calculator to Estimate the Impact of Changes in Breastfeeding Rates on Population Health and Costs. Breastfeed Med. 2017 Dec;12(10):645–658.

**Statewide Breastfeeding Hotline Fact Sheet**

Extrapolated North Carolina cost savings (medical costs, non-medical costs, and death costs) and deaths prevented by increasing North Carolina's breastfeeding rates by 11.2% for exclusive breastfeeding at infant's age 3 months old, and 11.1% for exclusive breastfeeding at infant's age 6 months old (the same percent increase Tennessee achieved in these measures in the first 5 years of the Tennessee Breastfeeding Hotline). "Cost of Suboptimal Breastfeeding Calculator" available through the US Breastfeeding Committee[14]

## Health impact of breastfeeding for North Carolina

| | Initiation | Exclusive in hospital | 3 mo exclusive | 6 mo exclusive | 6 mo any | 12 mo any |
|---|---|---|---|---|---|---|
| Changing from rates of... | 83.5 | 73.6 | 50.8 | 26.1 | 57.2 | 32 |
| ... to rates of | 88.2 | 78.3 | 61.8 | 37.2 | 63.4 | 32 |

## would prevent...

**Medical Costs**
**$9,579,982**
($-14,862,683 to $37,651,660)

**Non Medical Costs**
**$6,390,564**
($854,147 to $12,826,235)

**Death Costs**
**$56,801,662**
($-216,802,198 to $362,346,243)

**Maternal deaths**
**6**
(-71, 94)

**Child deaths**
**4**
(-13, 23)

# Statewide Breastfeeding Hotline Fact Sheet

## Proposed Budget

| | | |
|---|---|---|
| **Initial costs:** | | |
| Development | | $200,000 |
| Quality Improvement Plan | | $15,000 |
| Turnover Plan | | $5,000 |
| Texting Integration | | $40,000 |
| **Total Initial Costs** | | **$260,000** |
| | | |
| **Ongoing Costs:** | | |
| Operational Director (~30 hrs/week; $70/hr) | $8,400 x 12 months | $100,800 |
| Medical Director (~6 hrs/wk; $150/hr) | $3600 x 12 months | $43,200 |
| IBCLC personnel (paid per minute call; $70/hr; ave 400 10-minute calls per month) | $4800 x 12 months | $48,000 |
| Texting integration Maintenance | $2000 x 12 mo | $24,000 |
| CQI and Client Surveys | $350 x 12 months | $4,200 |
| Quarterly Operational Reports | $2000 x 4 quarters | $8,000 |
| On-Demand Phone Interpretation | | $3,500 |
| **Total Ongoing Costs (annual)** | | **$231,700** |