

# Breastfeeding: A Public Health Imperative

---

Reference Materials for Policy, Systems, and Environmental Change (PSE)



## Contents

Public Health Case for Breastfeeding.....	2
<b>National &amp; International Policy Statements Recommending Breastfeeding.....</b>	<b>2</b>
<b>Impact of Breastfeeding and Human Lactation on Health Outcomes .....</b>	<b>2</b>
Maternal Health .....	2
Infant Health .....	2
Donor Human Milk.....	3
Economic Case for Breastfeeding.....	3
<b>National Cost of Not Breastfeeding .....</b>	<b>3</b>
Policy, System, and Environmental Factors Impacting Human Milk Feeding: Barriers, Facilitators and Disparities .....	4
<b>Access to Lactation Support and Supplies .....</b>	<b>4</b>
<b>Maternity Care Practices .....</b>	<b>5</b>
<b>Employment .....</b>	<b>5</b>
<b>Students.....</b>	<b>6</b>
<b>Formula Marketing.....</b>	<b>7</b>
<b>Infant and Young Child Feeding in Emergencies.....</b>	<b>7</b>
<b>Racial/Ethnic Disparities .....</b>	<b>8</b>
Breastfeeding Data & Public Health Surveillance Sources .....	8
Existing Federal & State Legislation .....	9

## Public Health Case for Breastfeeding

### National & International Policy Statements Recommending Breastfeeding

All major medical authorities recommend exclusive breastfeeding for the first 6 months of life, with continued breastfeeding following the introduction of complementary foods.

- **American Academy of Family Physicians:** [Breastfeeding \(Policy Statement\)](#)
- **American Academy of Pediatrics:** [Policy Statement: Breastfeeding and the Use of Human Milk](#)
- **American College of Obstetricians and Gynecologists:** [Practice Advisory to Update the Duration of Breastfeeding](#)
- **U.S. Department of Agriculture:** [2020-2025 Dietary Guidelines for Americans](#)
- **World Health Organization:** [Breastfeeding: Recommendations](#)

### Impact of Breastfeeding and Human Lactation on Health Outcomes

Breastfeeding has a profound impact on population health outcomes. The evidence for the value of human milk on overall health for infants, children, and mothers is scientific, robust, and continually reaffirmed by new research.

#### *Maternal Health*

Breastfeeding reduces the risk of a range of chronic diseases, including type 2 diabetes, cardiovascular disease, and breast and ovarian cancers.

- **Acta Paediatrica:** [Breastfeeding and maternal health outcomes: a systematic review and meta-analysis](#)
- **Agency for Healthcare Research and Quality:** [Benefits Associated with Moms Who Breastfeed](#)
- **American Family Physician:** [The Maternal Health Benefits of Breastfeeding](#)
- **Centers for Disease Control and Prevention:** [Breastfeeding Benefits Both Baby and Mom](#)
- **Office on Women's Health:** [Making the decision to breastfeed](#)

#### *Infant Health*

Breastfed infants are at lower risk of certain infections, sudden unexplained infant death, and a range of chronic diseases, including obesity, type 1 and 2 diabetes, asthma, and childhood leukemia. Ever breastfeeding is associated with a significant reduction in the odds of post-perinatal (between 7-364 days) infant death.

- **Agency for Healthcare Research and Quality:** [Research Protocol: Breastfeeding and Health Outcomes for Infants and Children](#)
- **American Journal of Preventive Medicine:** [Associations Between Breastfeeding and Post-perinatal Infant Deaths in the U.S.](#)
- **International Breastfeeding Journal:** [Breastfeeding is associated with reduced risks of central obesity and hypertension in young school-aged children: a large, population-based study](#)
- **Journal of Internal Medicine:** [Breastfeeding in infancy and mortality in middle and late adulthood: A prospective cohort study and meta-analysis](#)
- **Office on Women's Health:** [Making the decision to breastfeed](#)

- **The Lancet:** [Breastfeeding and post-perinatal infant deaths in the United States, a national prospective cohort analysis](#)
- **U.S. Department of Agriculture:** [Pregnancy and Birth to 24 Months Systematic Review](#)

## *Donor Human Milk*

Pasteurized donor human milk feeding has been shown to reduce infant mortality rates, lower healthcare costs, and shorten hospital stays. Specifically, the use of donor milk is associated with increased survival rates and lowered rates of infections, sepsis, serious lung disease, and gastrointestinal complications. The World Health Organization and the American Academy of Pediatrics recommend the use of donor milk for low-birthweight infants, as well as for sick infants who cannot be fed their mother's own milk.

- **Breastfeeding Medicine:**
  - [Beyond necrotizing enterocolitis prevention: improving outcomes with an exclusive human milk based diet.](#)
  - [Cost and Cost-Effectiveness of Donor Human Milk to Prevent Necrotizing Enterocolitis: Systematic Review](#)
- **Health Equity:** [Racial Disparities in Human Donor Milk Feedings: A Study Using Electronic Medical Records](#)
- **Nutrients:** [Donor human milk protects against bronchopulmonary dysplasia: a systematic review and meta-analysis](#)
- **Pediatrics:**
  - [Beneficial Effects of Breast Milk in the Neonatal Intensive Care Unit on the Developmental Outcome of Extremely Low Birth Weight Infants at 18 Months of Age](#)
  - [Policy Statement: Breastfeeding and the Use of Human Milk](#)
- **The Journal of Pediatrics:** [Impact of suboptimal breastfeeding on the healthcare and mortality costs of necrotizing enterocolitis in extremely low birthweight infants](#)
- **World Health Organization:**
  - [Standards for improving the quality of care for small and sick newborns in health facilities](#)
  - [Guidelines on optimal feeding of low birth-weight infants in low- and middle-income countries](#)

## Economic Case for Breastfeeding

Low breastfeeding rates in the United States cost our nation millions of dollars through higher health systems costs, lost productivity, and higher household expenditures. At the national level, improving breastfeeding practices through programs and policies has been shown to be one of the best investments a country can make, as every dollar invested is estimated to result in a U.S. \$35 economic return. Increased breastfeeding rates are also associated with reduced environmental impact and associated expenses.

## National Cost of Not Breastfeeding

- **Alive & Thrive:**

- [The human costs of not breastfeeding in USA](#)
- [The First-Food System: The Importance of Breastfeeding in Global Food Systems Discussions](#)
- **Frontiers Public Health:** [The volume and monetary value of human milk produced by the world's breastfeeding mothers: Results from a new tool](#)
- **Maternal & Child Nutrition:** [Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs](#)
- **U.S. Department of Agriculture:** [Economic Implications of Increased Breastfeeding Rates in WIC](#)
- **World Bank Group:** [An Investment Framework for Meeting the Global Nutrition Target for Breastfeeding](#)

## Policy, System, and Environmental Factors Impacting Human Milk Feeding: Barriers, Facilitators and Disparities

Increasing breastfeeding rates and creating lactation-friendly environments have been identified as critical public health priorities both nationally and globally. Yet policy, system, and environmental barriers to establishing and maintaining the human milk feeding relationship are persistent and pervasive in the United States.

### Access to Lactation Support and Supplies

Every infant feeding journey is different. For some, breast pumps, lactation supplies, and/or knowledgeable support from lactation support providers are helpful or necessary. Most health plans are required under the Patient Protection and Affordable Care Act to cover the costs of lactation support services and breastfeeding equipment and supplies.

- **American Academy of Pediatrics:** [Federal Support for Breastfeeding](#)
- **American Journal of Public Health:**
  - [Breastfeeding by Disability Status in the United States: Pregnancy Risk Assessment Monitoring System, 2018–2020](#)
  - [Effect of the Affordable Care Act on Breastfeeding Outcomes](#)
- **Kaiser Family Foundation:** [Medicaid Coverage of Pregnancy-Related Services: Findings from a 2021 State Survey](#)
- **National Association of County and City Health Officials & USBC-affiliated Continuity of Care Constellation:** [Continuity of Care in Breastfeeding Support Blueprint for Communities](#)
- **National Women's Law Center:** [State of Breastfeeding Coverage: Health Plan Violations of the Affordable Care Act](#)
- **USBC-affiliated Lactation Support Provider Constellation:** [Lactation Support Provider Descriptor Chart](#)
- **Women's Preventive Services Initiative:** [Breastfeeding Services and Supplies](#)

## Maternity Care Practices

Supportive, culturally aligned maternity care practices play an essential role in setting families up for breastfeeding success. Research clearly demonstrates that maternity care practices have a significant and lasting impact on infant feeding outcomes. Birth facility policies and practices that create a supportive environment for breastfeeding begin prenatally and continue through discharge. In the United States, Baby-Friendly USA accredits hospitals and birth centers that follow the standards set forth through the international Baby-Friendly Hospital Initiative to protect, promote, and support breastfeeding.

- **Agency for Healthcare Research and Quality:** [Report Identifies Strategies that Increase Breastfeeding Rates](#)
- **Baby-Friendly USA:** [Upholding the Highest Standards of Infant Feeding Care](#)
- **BMC Pregnancy and Childbirth:** [Changes in maternity care policies and practices that support breastfeeding as measured by the Ten Steps to Successful Breastfeeding — United States, 2018–2022](#)
- **Centers for Disease Control and Prevention:** [Supporting Evidence: Maternity Care Practices](#)
- **Journal of Human Lactation:** [The Influence of the Baby-Friendly Hospital Initiative and Maternity Care Practices on Breastfeeding Outcomes](#)
- **KnE Life Sciences:** [Impact of Baby-Friendly Hospital Initiative for Improving Exclusive Breastfeeding: A Systemic Review of Ten Steps to Successful Breastfeeding](#)
- **Maternal and Child Health Journal:** [Unpacking Breastfeeding Disparities: Baby-Friendly Hospital Designation Associated with Reduced In-Hospital Exclusive Breastfeeding Disparity Attributed to Neighborhood Poverty](#)
- **Maternal & Child Nutrition:** [The effect of Baby-friendly status on exclusive breastfeeding in U.S. hospitals](#)
- **Pediatrics:** [Maternity Care Practices and Breastfeeding Intentions at One Month Among Low-Income Women](#)
- **UNICEF:** [Baby-Friendly Hospital Initiative: Ten steps to successful breastfeeding, from UNICEF and the World Health Organization](#)
- **World Health Organization:** [Ten steps to successful breastfeeding: BFHI Tools](#)

## Employment

Access to paid family leave programs can lay the groundwork for breastfeeding success. Paid family leave programs make it possible for employees to take time for childbirth recovery, bonding with their baby, establishing feeding routines, and adjusting to life with a new child without threatening their family's economic well-being. This precious time provides the foundation for success, contributing to improved breastfeeding initiation and duration rates. When returning to work, lactation accommodations in both the workplace and in childcare settings are critical to maintaining breastfeeding. Under federal law, employers are required to provide their employees with the time and space to pump breast milk.

- **American Academy of Pediatrics:**
  - [Creating A Culture Plan to Support Breastfeeding Physicians and Medical Trainees](#)
  - [Paid Family and Medical Leave: Policy Statement](#)
- **American Journal of Obstetrics & Gynecology:** [State paid family and medical leave and postpartum outcomes](#)
- **Breastfeeding Medicine:**

- [ABM Position Statement: Paid Maternity Leave—Importance to Society, Breastfeeding, and Sustainable Development](#)
- [New York State Paid Family Leave Law Associated with Increased Breastfeeding Among Black Women](#)
- **Carolina Global Breastfeeding Institute:** [Ten Steps to Breastfeeding Friendly Child Care](#)
- **Center for WorkLife Law:** [EXPOSED: Discrimination Against Breastfeeding Workers](#)
- **Centers for Disease Control and Prevention:** [Breastfeeding and Early Care and Education \(ECE\): Help ECE centers and homes make an impact by supporting breastfeeding moms](#)
- **In These Times:** [The Real War on Families: Why the U.S. Needs Paid Leave Now.](#)
- **Journal of Obstetric, Gynecologic & Neonatal Nursing:** [Integrative Review of Breastfeeding Support and Related Practices in Child Care Centers](#)
- **Office on Women’s Health:**
  - [Business Case for Breastfeeding](#)
  - [Supporting Nursing Moms at Work](#)
- **Public Health Reports:** [National Policies on Parental Leave and Breastfeeding Breaks: Racial, Ethnic, Gender, and Age Disparities in Access and Implications for Infant and Child Health](#)
- **U.S. Breastfeeding Committee:** [Understanding Protections For Pregnant And Lactating Workers](#)
- **U.S. Department of Health and Human Services:** [The Surgeon General's Call to Action to Support Breastfeeding](#)
- **U.S. Department of Labor Wage and Hour Division:**
  - [Fact Sheet #73: FLSA Protections for Employees to Pump Breast Milk at Work](#)
  - [FLSA Protections to Pump at Work](#)
  - [What to Expect from Your Employer When You're Expecting](#)
- **U.S. Department of Labor Women’s Bureau:** [Employment Issues Related to Pregnancy, Birth and Nursing](#)
- **U.S. Equal Employment Opportunity Commission:** [What You Should Know About the Pregnant Workers Fairness Act](#)
- **Women’s Health Issues:** [Access to workplace accommodations to support breastfeeding after passage of the Affordable Care Act](#)

## Students

Lactating students share many of the same needs as lactating employees, including time away from their studies without penalty, access to time and space to pump during the school day, and safe storage of expressed breast milk. Under federal law, academic institutions are required to provide pregnant and postpartum students with medically-necessary leave, lactation space, and reasonable breaks to pump or breastfeed.

- **American Academy of Pediatrics:** [Creating a Culture to Support Breastfeeding Physicians and Medical Trainees](#)
- **American Journal of Pharmaceutical Education:** [A Call to Action for Lactation Support at Colleges of Pharmacy](#)
- **Department of Education:** [Final Title IX Regulations](#)

- **PLoS One:** [University campus breastfeeding, knowledge, and perceptions of support: An exploratory study](#)
- **Society for College and University Planning:** [Research Study: An Exploration of Lactation Policy and Lactation Facilities Across US Higher Education Campuses](#)
- **The Pregnant Scholar:**
  - [Model Campus Lactation Policy for Students](#)
  - [Title IX Regulations Toolkit](#)
- **University of Northern Colorado:** [Toolkit for Establishing Lactation Support on University and College Campuses: Using University of Northern Colorado as an Institutional Model, 2nd Edition](#)

## Formula Marketing

To protect, promote, and support breastfeeding, the World Health Assembly adopted *The International Code of Marketing of Breast-Milk Substitutes* in 1981 and has since passed many associated resolutions (known as "the Code"). Infant formula manufacturers utilize marketing strategies for families, healthcare providers, and policymakers to portray their products as solutions to common infant health issues in ways that systematically undermine breastfeeding and that are not in accordance with the Code. The United States has not adopted the Code or placed marketing restrictions on baby food manufacturers.

- **Breastfeeding Medicine:**
  - [Pediatricians' Reports of Interaction with Infant Formula Companies](#)
  - [The Impact of Formula Marketing on Breastfeeding Support: "There Are No Free Lunches"](#)
- **JAMA:** [Majority of Infant Formula Health Claims Are Poorly Supported](#)
- **Nutrition Reviews:** [Toddler milk: a scoping review of research on consumption, perceptions, and marketing practices](#)
- **Pediatrics:** [Older Infant-Young Child "Formulas"](#)
- **The Lancet:** [The 2023 Lancet Series on Breastfeeding](#)
- **World Health Organization:** [Code and subsequent resolutions: International Code of Marketing of Breast-Milk Substitutes](#)

## Infant and Young Child Feeding in Emergencies

Infants and children are among the most vulnerable in an emergency. It is critical to ensure that infants are safely fed and supported in times of crisis. Breastfeeding saves lives! Human milk is always clean, requires no fuel, water, or electricity, and is available, even in the most dire circumstances.

- **American Academy of Pediatrics:** [Infant Feeding in Disasters and Other Emergencies: Breastfeeding and Other Options](#)
- **American Journal of Public Health:** [The Pent-Up Demand for Breastfeeding Among US Women: Trends After COVID-19 Shelter-in-Place](#)
- **Breastfeeding Medicine:** [Changes in Breastfeeding and Related Maternity Care Practices After Hurricanes Irma and Maria in Puerto Rico](#)
- **Carolina Global Breastfeeding Institute:** [Lactation & Infant Feeding in Emergencies \(L.I.F.E.\) Support - Basic Kit v1.2](#)

- **Centers for Disease Control and Prevention:**
  - [Infant and Young Child Feeding in Emergencies \(IYCF-E\) Toolkit](#)
  - [IYCF-E Social Media Toolkit](#)
  - [Safety Messages for Pregnant, Postpartum, and Breastfeeding People During Natural Disasters and Severe Weather](#)
- **International Breastfeeding Journal:** [Barriers and challenges of infant feeding in disasters in middle- and high-income countries](#)
- **Journal of Human Lactation:** [Building a Policy: Ten Steps to a Breastfeeding-Friendly Shelter](#)
- **UNICEF:** [Brief: Infant & Young Child Feeding in the Context of COVID-19](#)
- **U.S. Breastfeeding Committee:** [Infant And Young Child Feeding In Emergencies \(IYCF-E\)](#)
- **USBC-affiliated Infant & Young Child Feeding In Emergencies Constellation:**
  - [Joint Statement on Infant and Young Child Feeding in the Context of COVID-19 Pandemic in the United States](#)
  - [Joint Statement on Infant and Young Child Feeding in the Context of the Infant Formula Crisis and Ongoing COVID-19 Pandemic](#)
- **U.S. Department of Health and Human Services:** [HHS Maternal-Child Emergency Planning Toolkit](#)

### Racial/Ethnic Disparities

Policy, system, and environmental barriers to breastfeeding impact all families but have a disproportionate impact on historically underserved and historically marginalized populations. There are significant and persistent disparities in access to lactation support and in lactation outcomes based on race, geography, and socio-economic status. These disparities contribute to health inequities across the lifespan.

- **Centers for Disease Control and Prevention:**
  - [Racial and Ethnic Disparities in Breastfeeding Initiation – United States, 2019](#)
  - [Racial Disparities in Access to Maternity Care Practices That Support Breastfeeding — United States, 2011](#)
- **BMC Public Health:** [Race/ethnicity-specific associations between breastfeeding information source and breastfeeding rates among U.S. women](#)
- **Journal of Racial and Ethnic Health Disparities:** [Race and Intention to Breastfeed are the Strongest Predictors of Exclusive Breastfeeding: a Retrospective Study](#)
- **Preventing Chronic Disease:** [Disaggregation of Breastfeeding Initiation Rates by Race and Ethnicity — United States, 2020–2021](#)

### Breastfeeding Data & Public Health Surveillance Sources

Surveillance of breastfeeding and lactation-supportive practices is crucial for monitoring progress over time and identifying priority areas that need attention.

- [National Immunization Survey - Child \(NIS-Child\)](#)

- Implemented by the CDC, the NIS-Child uses random-digit dialing to survey U.S. households with children aged 19-35 months and includes survey questions on breastfeeding initiation, duration, and exclusivity as well as infant formula supplementation of breastfed infants.
- **[National Vital Statistics System \(NVSS\)](#)**
  - Coordinated through the CDC National Center for Health Statistics, the NVSS provides the most complete data on births and deaths in the United States. The [National Vital Statistics System Breastfeeding Initiation Rates and Maps by County](#) reports on breastfeeding initiation rates using birth certificate data.
- **[Pregnancy Risk Assessment Monitoring System \(PRAMS\)](#)**
  - Implemented by the CDC, PRAMS collects jurisdiction-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. PRAMS data reports on breastfeeding intention and duration and breastfeeding as a birth control method (Lactational Amenorrhea Method).
- **[Data, Trends, and Maps](#)** (Search by Category: Breastfeeding)
  - The CDC Division of Nutrition, Physical Activity, and Obesity hosts this interactive database which provides national and state-level data about the health status and behaviors of Americans as well as environmental or policy supports, including related to breastfeeding.
- **[Breastfeeding Report Card](#)**

The CDC Breastfeeding Report Card is published biannually to bring together key data points on national, state, and territorial breastfeeding practices, as well as the environmental factors that are proven to impact breastfeeding outcomes.
- **[Infant Feeding Practices Study](#)**
  - This periodic, longitudinal study looks at feeding intention, frequency, and duration, as well as comfort nursing in public, confidence level, pumping practices, milk storage, and access to lactation support and supplies.

## Existing Federal & State Legislation

A range of federal and state laws exist that have implications for breastfeeding dyads and families.

- **National Conference of State Legislatures:** [Maternal and Child Health Legislative Database](#)
- **Pregnant@Work:** [Workplace Lactation Laws](#)
- **U.S. Breastfeeding Committee:** [Existing Legislation](#)
- **U.S. Department of Labor Women's Bureau:** [State Paid Family and Medical Leave Laws](#)