

**Oklahoma Breastfeeding Resource Center (OBRC)**  
**Lactation Information Sheet for Resident Lactation Rotation**

**Goals & Objectives for the OBRC lactation rotation and links for more information.**

**GOAL**

Understand the role of the pediatrician in preventing breastfeeding problems and premature weaning, and in counseling and screening mother/baby dyads at risk for these problems.

Learning Objective	Objective Resource
Understand the roles of providers and support persons in breastfeeding care	<ul style="list-style-type: none"> <li>• <a href="#">The Physician's Role in Human Milk Feeding by the American College of Obstetricians and Gynecologists</a> (ACOG)</li> <li>• TEDx "<a href="#">How Breastfeeding Education is Failing Us</a>" by: Karen Federici, MD</li> </ul>
Health impact for mother and baby of exclusive breastfeeding for 6 months and continued breastfeeding for 12 months or longer.	<ul style="list-style-type: none"> <li>• <a href="#">AAP - Technical Report: Breastfeeding and the Use of Human Milk</a> (2022)</li> <li>• <a href="#">AAP Policy Statement on Breastfeeding and the Use of Human Milk</a> (2022)</li> <li>• <a href="#">Risks of Not Breastfeeding</a> by ILCA</li> <li>• <a href="#">Infant and young child feeding</a> by WHO</li> </ul>
Maternal and infant risk factors for breastfeeding difficulties.	<ul style="list-style-type: none"> <li>• <a href="#">Breastfeeding Challenges</a> by ACOG</li> <li>• <a href="#">ABM Clinical Protocol #35: Supporting Breastfeeding During Maternal or Child Hospitalization</a></li> </ul>
Myths related to breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">Busted: 14 myths about breastfeeding by UNICEF</a></li> <li>• <a href="#">Breastfeeding Myths</a> by The Office of Women's Health</li> </ul>
Identify potential barriers to breastfeeding (e.g. lack of family support, maternal employment)	<ul style="list-style-type: none"> <li>• <a href="#">Barriers to Breastfeeding: Supporting Initiation and Continuation of Breastfeeding</a></li> <li>• <a href="#">ACOG – Committee Report on Breastfeeding Challenges</a> (2021)</li> </ul>
Contraindications to Breastfeeding or Feeding Expressed Milk	<ul style="list-style-type: none"> <li>• <a href="#">Contraindications to Breastfeeding or Feeding Expressed Breast Milk to Infants</a> by the CDC</li> <li>• AAP - <a href="#">The Transfer of Drugs and Therapeutics Into Human Breast Milk: An Update on Selected Topics</a></li> </ul>

**GOAL**

Develop a working knowledge of normal lactogenesis and breastfeeding, and recognize pathophysiologic and other clinical findings that indicate deviations from the norm.

Learning Objective	Objective Resource
Describe the normal development of lactogenesis (milk production) including mammogenesis and lactogenesis I, II, III	<ul style="list-style-type: none"> <li>• AAP - <a href="#">Anatomy and Physiology of Lactation</a></li> <li>• <a href="#">Stages of Lactogenesis</a></li> </ul>
Describe the normal initiation and establishment of exclusive breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">Guideline: Protecting, Promoting and Supporting Breastfeeding in Facilities Providing Maternity and Newborn Services.</a></li> </ul>
Assess infant positioning and latch-on at various time periods (1st hour of life, 1st 48 hours, post-discharge)	<ul style="list-style-type: none"> <li>• <a href="#">Positioning by La Leche League International</a> (LLI)</li> <li>• <a href="#">Getting a good latch by Office on Women's Health</a></li> <li>• <a href="#">Breastfeeding from the first hour of birth: What works and what hurts by UNICEF</a></li> </ul>
Assess maternal milk production at various time periods (1st hour of life, 48-72 hours postpartum, 1-2 weeks postpartum)	<ul style="list-style-type: none"> <li>• <a href="#">Assessment of breastmilk expression by UNICEF and Baby-Friendly USA</a></li> <li>• <a href="#">The Phases of Breast Milk</a> BY USDA</li> <li>• <a href="#">Breastfeeding from the first hour of birth: What works and what hurts by UNICEF</a></li> <li>• <a href="#">Evidence-based Care During the "Golden Hour"</a></li> <li>• <a href="#">Factors in the Hospital Experience Associated with Postpartum Breastfeeding Success</a></li> </ul>
Assess infant milk transfer during breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">Is my baby getting enough milk?</a> By LLI</li> </ul>
Assess maternal comfort and/or pain during breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">Breastfeeding FAQs: Pain and Discomfort</a></li> </ul>
Describe signs of adequate infant intake	<ul style="list-style-type: none"> <li>• <a href="#">How to Tell if Your Breastfed Baby is Getting Enough Milk</a></li> </ul>
Develop a strategy for workup of perceived or true insufficient milk supply, based on presenting signs and symptoms	<ul style="list-style-type: none"> <li>• <a href="#">Perceived Insufficient Milk</a></li> </ul>

Interpret current information (such as pharmacokinetics) on maternal medications to identify safety when used during lactation	<ul style="list-style-type: none"> <li>• <a href="#">Medications and Breastfeeding Mothers by Infant Risk Center</a></li> <li>• <a href="#">LactMed Drugs &amp; Lactation Database</a> by NIH</li> </ul>
Describe medical indications for supplementation of breastfeeding newborns	<ul style="list-style-type: none"> <li>• <a href="#">ABM Clinical Protocol #3: Supplementary Feedings in the Healthy Term Breastfed Neonate (Revised 2017)</a></li> </ul>

### **Defining Acuity of Breastfeeding Situations**

- [Defining Lactation Acuity](#)
- [Lactation Acuity Levels](#)
- [Latch Scoring Table](#)

### **Breastfeeding Situations Generally Referred.**

- Difficulty latching
- Documented insufficient milk supply
- Documented maternal nipple trauma
- Transition from gavage or bottle-feeding to direct breastfeeding
- Infant diagnosed with slow weight gain or failure to thrive
- Prematurity
- Infant congenital anomalies
- Induced lactation/re-lactation

### **Common Breastfeeding Situations Not Referred.**

Learning Objective	Objective Resource
Maternal knowledge deficit	<ul style="list-style-type: none"> <li>• <a href="#">Lactation Education Resources' Parent Handouts Page</a></li> <li>• Free online prenatal education course for patients/families. This was created by OBRC staff to assist with Step 3 of the Baby-Friendly Hospital Initiative. This is an interactive session with all the info patients need to know about breastfeeding! Use any smart device. No teacher, no grades, just learning! Also available in Spanish. Link: <a href="https://obrc.ouhsc.edu/Families/Free_Parent_Education">https://obrc.ouhsc.edu/Families/Free_Parent_Education</a></li> <li>• <a href="#">Importance of Prenatal Education – OBRC Webinar</a></li> </ul>

Delayed or interrupted breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">A Mother's Touch, Breastfeeding in the First Hour</a> by Jane Morton</li> </ul>
Supplementation of breastfeeding secondary to perceived insufficient milk supply	<ul style="list-style-type: none"> <li>• <a href="#">Medically Indicated Supplementation – OBRC Webinar</a></li> <li>• <a href="#">Alternative Feeding Methods</a> by Lactation Education Resources</li> </ul>
Infant hypoglycemia or hyperbilirubinemia	<ul style="list-style-type: none"> <li>• <a href="#">ABM Clinical Protocol #1: Guidelines for Glucose Monitoring and Treatment of Hypoglycemia in Term and Late Preterm Neonates (Revised 2021)</a></li> </ul>
Maternal mastitis	<ul style="list-style-type: none"> <li>• <a href="#">Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum (Revised 2022)</a></li> </ul>
Infant/maternal candidiasis	<ul style="list-style-type: none"> <li>• <a href="#">Neonatal Candidiasis: Epidemiology, Risk Factors, and Clinical Judgment</a> – by the AAP</li> </ul>
Maternal pain/discomfort during breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">Persistent Pain When Breastfeeding</a> by La Leche League International</li> </ul>
Weaning	<ul style="list-style-type: none"> <li>• <a href="#">Weaning How To</a> by LLLI</li> <li>• <a href="#">Unexpected Weaning</a> by LLLI</li> </ul>

### Hospital Practices That Impact Breastfeeding

Learning Objective	Objective Resource
Describe the Baby-Friendly Hospital Initiative and the Ten Steps to Successful Breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">Baby-Friendly USA Designation</a></li> <li>• <a href="#">The 10 Steps to Successful Breastfeeding</a></li> <li>• <a href="#">The International Code of Marketing of Breast Milk Substitutes</a></li> <li>• <a href="#">How the marketing of formula milk influences our decisions on infant feeding</a> by The WHO</li> </ul>
Describe the AAP Policy Statement on Breastfeeding and Human Lactation	<ul style="list-style-type: none"> <li>• <a href="#">AAP - Technical Report: Breastfeeding and the Use of Human Milk</a> (2022)</li> <li>• <a href="#">AAP Policy Statement on Breastfeeding and the Use of Human Milk</a> (2022)</li> </ul>
Investing in breastfeeding care	<ul style="list-style-type: none"> <li>• <a href="#">Why invest, and what it will take to improve breastfeeding practices?</a> By The Lancet</li> </ul>

--	--

### Human Milk Composition

Learning Objective	Objective Resource
Human Milk Composition	<ul style="list-style-type: none"> <li>• <a href="#">Human Milk Composition</a></li> <li>• <a href="#">Physiology of Lactation</a></li> <li>• <a href="#">Transitional Milk and Mature Milk</a> by Healthy Children.Org</li> <li>• <a href="#">Composition comparison: Formula vs. Breast milk</a></li> </ul>
Recent epidemiological and biological findings from during the past decade expand on the known benefits of breastfeeding for women and children, whether they are rich or poor.	<ul style="list-style-type: none"> <li>• <a href="#">Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect</a> by The Lancet</li> </ul>

### Newborn Hyperbilirubinemia and Breastfeeding

Learning Objective	Objective Resource
Discuss the AAP Policy on Management of Hyperbilirubinemia and how it relates to breastfeeding	<ul style="list-style-type: none"> <li>• <a href="#">AAP Hyperbilirubinemia Overview &amp; Recommendations</a></li> <li>• <a href="#">Clinical Practice Guideline Revision: Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation</a></li> </ul>
Educate the mother and family about jaundice and breastfeeding, including a plan for prevention and management at home	<ul style="list-style-type: none"> <li>• <a href="#">ABM Clinical Protocol #22: Guidelines for Management of Jaundice in the Breastfeeding Infant 35 Weeks or More of Gestation (Revised 2017)</a></li> </ul>

### Newborn Hypoglycemia and Breastfeeding

Learning Objective	Objective Resource
Monitoring and Treatment of Hypoglycemia in Term and Late-Preterm Neonates	<ul style="list-style-type: none"> <li>• <a href="#">ABM Clinical Protocol #1: Guidelines for Blood Glucose Monitoring and Treatment of Hypoglycemia in Term and Late-Preterm Neonates (Revised 2014)</a></li> </ul>
Supplementation for Neonates at Risk for Hypoglycemia	<ul style="list-style-type: none"> <li>• <a href="#">Effect of Donor Breastmilk vs Formula Supplementation on Blood Glucose Levels in Neonates at Risk for Hypoglycemia</a></li> </ul>

**Prematurity and Breastfeeding**

Learning Objective	Objective Resource
Human milk for very low birth weight infants	<ul style="list-style-type: none"> <li>• AAP - <a href="#">Promoting Human Milk &amp; Breastfeeding for the VLBW Infant</a> (2021)</li> <li>• <a href="#">Association of Timing of Initiation of Breastmilk Expression on Milk Volume and Timing of Lactogenesis Stage II Among Mothers of Very Low-Birth-Weight Infants</a></li> <li>• <a href="#">ABM Clinical Protocol #12: Transitioning the Breastfeeding Preterm Infant from the Neonatal Intensive Care Unit to Home</a> (Revised 2018)</li> </ul>
NICU Guidance from Baby-Friendly USA (BFUSA)	<ul style="list-style-type: none"> <li>• <a href="#">Neonatal Intensive Care (NICU) Resources: A Guide to Recommended Practices</a> (2021)</li> </ul>

**Human Milk Expression, Collection and Storage**

Learning Objective	Objective Resource
Milk Expression	<ul style="list-style-type: none"> <li>• <a href="#">Hand Expression</a> by CDC</li> <li>• <a href="#">Teaching Hand Expression</a> by Maya Bolman</li> <li>• <a href="#">Tips for Professionals Teaching Hand Expression</a> by Jane Morton</li> <li>• <a href="#">Hands on Pumping</a> by First Droplets</li> </ul>
Collection and Storage	<ul style="list-style-type: none"> <li>• <a href="#">Safe Storage of Expressed Breast Milk</a> by CDC</li> </ul>

**Breastfeeding Devices and Equipment**

Learning Objective	Objective Resource
Breastfeeding Supplies	<ul style="list-style-type: none"> <li>• <a href="#">WIC Breastfeeding Support: Some things can make breastfeeding easier</a> by USDA</li> </ul>
Breast Pumps Information	<ul style="list-style-type: none"> <li>• <a href="#">Using a breast pump</a> by March of Dimes</li> <li>• <a href="#">How to Keep Your Breast Pump Clean</a> by CDC</li> </ul>

**COMMUNICATION AND INTERPERSONAL SKILLS GOALS**

Learning Objective	Objective Resource
	<ul style="list-style-type: none"> <li>• <a href="#">Communication &amp; Counseling</a></li> <li>• <a href="#">Supporting Maternal Mental Wellness</a></li> </ul>

Videos showing why Steps 1, 2, 3, & 10 are important:	<ul style="list-style-type: none"> <li>• <a href="#">WHO video – Women’s Voices</a></li> <li>• <a href="#">WHO video – You See, They See</a></li> </ul>
---	---

### SYSTEMS-BASED PRACTICE GOALS

Learning Objective	Objective Resource
Identify community resources for low/no-cost breastfeeding support such as WIC and La Leche League	<ul style="list-style-type: none"> <li>• <a href="#">Oklahoma Women, Infants &amp; Children</a> (WIC)</li> <li>• <a href="#">Oklahoma State Department of Health</a> (OSDH)</li> <li>• <a href="#">Coalition of Oklahoma Breastfeeding Advocates</a> (COBA)</li> <li>• <a href="#">Le Leche League of Oklahoma</a> (LLL-OK)</li> </ul>
Identify community resources such as IBCLCs for referral of complicated breastfeeding situations	<ul style="list-style-type: none"> <li>• <a href="#">Oklahoma Breastfeeding Hotline</a>: OK’s free 24/7 breastfeeding help from an on-call IBCLC. Call: 1-877-271-MILK (6455) – OR – Text: ok2bf to 61222</li> <li>• <a href="#">Find lactation support in OK with the OK Lactation Resource Guide</a> by WIC</li> </ul>
Recognize the limits of one's knowledge and expertise and take steps to avoid medical errors.	<p>Below are a variety of ways to gain additional education/training</p> <p><b>Available for free:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">OBRC Free Breastfeeding Knowledge Quiz</a> (36 questions to test your knowledge)</li> <li>• <a href="#">The ABCs of Breastfeeding Education for Professionals</a> Parts 1 &amp; 2 by Dr. Jane Morton</li> </ul> <p><b>To purchase:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">OBRC Provider Training</a> (\$30 per person)</li> <li>• <a href="#">AAP Physician Education and Training on Breastfeeding</a></li> <li>• <a href="#">AAP Breastfeeding Residency Curriculum</a></li> </ul> <p><b>Videos supporting provider education:</b></p> <ul style="list-style-type: none"> <li>• </li> </ul>

### GOAL

Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.

Learning Objective	Objective Resource
Test weight for measurement of milk intake at breast	<ul style="list-style-type: none"> <li><a href="#">Typical Volumes of Human Milk Intake Among Infants and Young Children</a> by IABLE</li> </ul>
Various feeding methods for supplementation of breastfeeding, including bottle, cup, dropper.	<ul style="list-style-type: none"> <li><a href="#">Alternative Feeding Methods</a> by Lactation Education Resources</li> </ul>

### **PASTEURIZED DONOR HUMAN MILK (PDHM)**

Learning Objective	Objective Resource
PowerPoint Presentation on PDHM by OBRC	<ul style="list-style-type: none"> <li><a href="#">Human Milk Banking presentation 2023</a> (90-minute PowerPoint Voiceover) <i>NOTE: If you participated in a Zoom meeting with one of our directors, then you have already reviewed this content.</i></li> </ul>
Local organization dealing with Human Milk	<ul style="list-style-type: none"> <li><a href="#">Oklahoma Mothers' Milk Bank</a> (OMMB)</li> <li>OMMB's <a href="#">Bereavement program</a></li> </ul>
International Organization	<ul style="list-style-type: none"> <li><a href="#">Human Milk Banking Association of North America</a> (HMBANA)</li> </ul>

### **PROFESSIONAL PROTOCOLS, TOOLS, RESOURCES & HANDOUTS**

- [Academy of Breastfeeding Medicine Protocols](#) (Protocols to Facilitate Best Practices in Breastfeeding Medicine)
- [AAP Breastfeeding Practice Tools for Health Professionals](#) (evidence-based practice tools and resources)
- [Breastfeeding Information A to Z](#) by La Leche League International
- [LactMed Drugs & Lactation Database](#) by NIH
- [Lactation Education Resources' Professional Handouts Page](#)

### **HSC CAMPUS LACTATION INFORMATION & CLINICS THAT COLLABORATE WITH OBRC**

- [OU Human Resource Breastfeeding Support & Lactation Rooms](#)
- [Oklahoma Children's STAR Prenatal Clinic](#)
- [OU Health Physicians, Women's Health Clinic](#)
- [Oklahoma Children's Hospital Sooner Pediatrics](#)

### **NATIONAL ORGANIZATIONS PROMOTING & SUPPORTING BREASTFEEDING**

- [American Academy of Pediatrics](#) (AAP) and the [AAP Section on Breastfeeding](#)



- [American Academy of Family Physicians \(AAFP\)](#)
- [American College of Obstetrics and Gynecology \(ACOG\)](#) and the [ACOG Breastfeeding Program](#)
- [Academy of Nutrition and Dietetics: Promoting and Supporting Breastfeeding](#)

#### **ACRONYMNS**

ABM = Academy of Breastfeeding Medicine ACOG = American Committee of Obstetricians and Gynecologists BFDG = Breastfeeding BFHI = Baby-Friendly Hospital Initiative CDC = Centers for Disease Control & Prevention EBF = Exclusive Breastfeeding EBM = Expressed Breastmilk EFF = Exclusive Formula Feeding HE = Hand Expression ILCA = International Lactation Consultant Association	LGA = Large Gestational Age MER = Milk Ejection Reflex PDHM = Pasteurized Donor Human Milk PUI = Patient Under Investigation RPS = Reverse Pressure Softening SBF = Supplemental Breastfeeding SGA = Small Gestational Age WHO = World Health Organization
--	---