WIC Breastfeeding Curriculum

Breastfeeding Training Handbook

Level 4

For WIC Designated Breastfeeding Experts (DBEs)

U.S. DEPARTMENT OF AGRICULTURE

WIC BREASTFEEDING SUPPORT

LEARN TOGETHER. GROW TOGETHER.

Table of Contents

Level 4

What It Covers

The Level 4 content in the *WIC Breastfeeding Curriculum* provides information on supporting WIC Program participants with complex breastfeeding challenges. This includes conducting in-depth breastfeeding assessments, assisting parents experiencing challenging and complex problems, and appropriately using management tools to resolve complex problems. It also includes ways to collaborate with Competent Professional Authorities (CPAs) and other WIC staff on care plans for families with breastfeeding challenges.

Target Audience

Level 4 content is designed for WIC Designated Breastfeeding Experts (DBEs), as well as State staff and DBE supervisors and managers, as desired.

Photos

This section is rich in imagery to help describe many complex breastfeeding conditions. Appropriate attribution is provided. If there is no attribution, the photos were taken as part of the *WIC Breastfeeding Curriculum* project. The images were acquired for the specific purpose of reproducing in the WIC Breastfeeding Curriculum. They are NOT available for use in other educational or promotional materials without express permission of the individuals who own the images. If you wish to contact the owners of photos to secure permission for using the images in other materials, please refer to the *WIC Breastfeeding Curriculum's* Trainer Guide for a complete list.

Staff Roles: DBEs—Role of the DBE

Sneak Preview:
The Level 4 content in the "Staff Roles: DBEs - Role of the DBE" section addresses the basic criteria for the WIC Designated Breastfeeding Expert role. It also addresses roles and responsibilities, and options to integrate DBEs into WIC services.

Level 4 Competencies:

- Perform basic duties outlined in the DBE's job description.
- Participate in developing a plan to integrate DBEs into the WIC clinic flow and services.

What Is a DBE

A WIC Designated Breastfeeding Expert (DBE) is an individual with special training or experience who assists WIC participants who encounter complex breastfeeding challenges that are beyond the scope of practice for peer counselors and other WIC staff.

DBEs may work in a dedicated DBE position, or they might also serve other WIC roles, such as breastfeeding coordinator, Competent Professional Authority (CPA), or other administrative or clinical roles. Some agencies contract with community lactation professionals to serve as DBEs. It is best practice to have experts on hand to assist participants with challenges. If an agency does not have individuals on staff to assist with more challenging situations, they should make referrals for health and social services to help parents meet their breastfeeding goals.

Qualifications of the DBE

The WIC *Nutrition Service Standards* (NSS) updated in 2019 outlines the Federal definition, qualifications, and job duties for the DBE. A DBE is defined as:

"An individual who is an expert with special experience or training in helping breastfeeding mothers and who provides breastfeeding expertise and care for more complex breastfeeding problems when WIC staff face situations outside their scope of practice. Individuals with this description can be WIC staff, including breastfeeding coordinators, peer counselors, coordinators, International Board Certified Lactation Consultants (IBCLCs), nutritionists, and nurses or community healthcare providers such as physicians or nurses. The IBCLC is the preferred WIC DBE."

The qualifications state that the DBE:

"...is a physician or nutritionist (Masters or Bachelor's degree in Nutritional Sciences, Community Nutrition, Clinical Nutrition, Dietetics, Public Health Nutrition or Home Economics with emphasis in Nutrition), IBCLC, dietitian, registered nurse, physician's assistant certified by the National Committee on Certification of Physician's Assistants *or* has completed a minimum of 8 college courses in the Health Sciences (suggested coursework includes, but is not limited, to the following areas: Human Anatomy, Human Physiology, Biology, Infant Growth and Development, Nutrition, Counseling Skills, Sociology, Introduction to Clinical Research, etc.)."

DBEs must also complete the FNS *WIC Breastfeeding Curriculum*, Levels 1-4. As part of the requirement for completing the health science courses, aspiring DBEs can look at local community colleges or online options. The Lactation Education Accreditation and Approval Review Committee (LEAARC) provides a list of sources for online coursework that have been accepted by the International Board of Lactation Consultant Examiners to satisfy the health science requirement for sitting the IBCLC exam. Refer to your State policies for the specific DBE qualifications in your State.

Bring It Home!
Check out the "**WIC Nutrition Service Standards**" for more information about best practice standards for the DBE position in WIC, available at https://wicworks.fns.usda.gov/resources/wic-nutrition-services-standards. To learn more about LEAARC approved courses, visit their website at www.leaarc.org.

In addition to program requirements, effective DBEs also have:

- Experience working with breastfeeding families.
- Personal leadership skills.
- Active listening and communication skills.
- Critical thinking and problem-solving skills.
- Ability to collaborate with the WIC team.
- Ability to establish a personal connection with WIC parents.
- Ability to understand barriers and challenges faced by low-income families.
- Sensitivity working with diverse and disadvantaged populations.

General Job Duties

Basic duties of the DBE include:

- Provide follow-up breastfeeding support to WIC participants.
- Act on referrals received in a timely manner.
- Assess and counsel parents and infants with complex breastfeeding situations.
- Refer parents to healthcare professionals and other WIC staff as needed.

To accomplish these tasks, DBEs:

- *Assess participants with complex challenges.* DBEs develop a care plan and communicate it to the rest of the WIC team and others as needed. These services are provided:
  - Prenatally: referrals from WIC staff for conditions that might affect breastfeeding.
  - Early postpartum: assess and assist with problems establishing breastfeeding.
  - Late postpartum: assess and assist with complex problems that arise throughout breastfeeding.
- *Make and receive referrals.* DBEs act on referrals from peer counselors and other staff, and make referrals as needed to healthcare professionals.
- *Collaborate with WIC staff.* DBEs collaborate on care plan development and implementation, referrals, and connecting parents to other WIC support services.
- *Collaborate with community.* DBEs work closely with community resources to complement the care plan. They coordinate hospital lactation staff for post-discharge follow-up, build relationships with healthcare providers to facilitate referrals, and work with community organizations that serve WIC eligible populations.
- *Train WIC staff.* DBEs are a breastfeeding resource for the agency including training peer counselors and other WIC staff, in-service education, and new staff orientation. They may work with the breastfeeding coordinator to engage community partners in WIC training activities to amplify consistent messaging for WIC families.
- *Conduct group education.* DBEs facilitate breastfeeding classes and support group meetings, develop lesson plans, gather resources, and support peer counselors who assist with education.

DBEs are expected to maintain their lactation credentials and certifications as applicable, and to acquire ongoing continuing education. This might include shadowing an IBCLC or others to stay abreast of current lactation profession information and enhance skills.

Bring It Home!
See the handout, "**DBE Job Description**" for more information on the general job duties of the DBE.

DBE Options

Agency Self-Assessment

Local agencies may conduct self-assessments to determine breastfeeding support needs and goals for their participants. This helps identify DBE staffing needs. Factors to consider might include:

- Size of the agency and number of clinics.
- Geographic considerations.
- Caseload of pregnant and breastfeeding participants.

- Availability of peer counselors.
- History of complex challenges prevalent among the participant population.
- Strength of lactation support in the community.

Some agencies may need to employ a full-time DBE, while other agencies might have a DBE in dual roles. Others might divide their DBE time among several service sites. Some states have established regional breastfeeding training and resource centers across the state, with DBEs providing virtual and in-person support. Small agencies might make referrals to State office staff or may share DBE support with other small agencies.

Recruiting DBEs

Training agency staff to become DBEs may be an effective way to provide DBE support. State agencies could also offer training or technical support to become certified as IBCLCs, or to access options for completing required health science courses.

Some agencies establish agreements with lactation professionals in the community to work with WIC staff to manage complex challenges. They may link with private-practice lactation consultants, hospital outpatient clinics, Federally Qualified Health Centers (FQHC) (outpatient clinics that qualify for special reimbursement under Medicare and Medicaid), lactation experts in private prenatal and pediatric clinics, or lactation experts in community organizations serving a similar population. The agreements should address making and receiving referrals, communication strategies, fees, and participating in the *WIC Breastfeeding Curriculum* training program.

Allocating Time

Time management is an ongoing challenge for DBEs, especially when working in dual roles. According to formative research conducted for the curriculum, most DBEs average 20 minutes or more for a prenatal consultation, and 30 minutes or more for a postpartum consultation. Time is spent building a relationship, doing the assessment, exploring options, providing breastfeeding education and assistance, referrals, and documentation. Agencies ensure that DBEs time is protected and prioritized, so that they can provide participants with timely appointments.

Managing Dual Roles

It is common for many a DBE to work in dual roles within an agency such as sharing time between administrative or clinical roles. Options some WIC agencies have used to manage dual roles include:

- Creative scheduling, e.g., scheduling all pregnant or breastfeeding parents during blocks of time.
- Backup coverage on days when more breastfeeding participants are served.
- A peer counselor in the clinic on the same days the DBE provides consultations. The peer counselor does the initial inquiries and assists with basic concerns to free the DBE for complicated cases.
- CPAs counsel on normal breastfeeding as part of nutrition visits and refer to the DBE(s) as needed.

Integrating DBEs

DBEs are integral to the breastfeeding promotion and support that are core components of WIC Nutrition Services. Integrating DBEs into clinic flow and operations helps meet the needs of participants experiencing complex challenges. Ways to integrate DBEs might include:

- Clear scope of practice between peer counselors and DBEs.
- DBEs mentor peer counselors with shadowing, critical thinking, and counseling techniques.
- Dedicated breastfeeding clinic days with peer counselors and DBEs available.
- DBE coverage in multiple WIC sites throughout the month.

Staff Roles: DBEs—Scope of Practice

Sneak Preview:
The Level 4 content in the "Staff Roles: DBEs - Scope of Practice" section addresses the scope of practice for DBEs and ways to strengthen the referral network when assisting participants with complex breastfeeding challenges.

Level 4 Competency:

- Provide support for WIC parents experiencing complex breastfeeding problems within the DBE scope of practice.
- Make timely referrals for problems beyond the DBEs scope of practice.

Scope of Practice

DBEs provide a deeper level of breastfeeding assistance than peer counselors and other WIC staff. The "DBE Scope of Practice" outlines the general range of services for the DBE at various points of the parent's feeding journey, and might include the following:

Pregnancy	Early Postpartum/First Month	Beyond the First Month
		 *©Texas Department of Health Services*
▪ Previous breastfeeding challenges. ▪ Health conditions that might affect breastfeeding (including hormonal concerns). ▪ Prior breast surgery. ▪ Breast or nipple anomalies. ▪ History of preterm birth.	▪ Unresolved latch difficulties. ▪ Delayed or low milk production. ▪ Sore or damaged nipples. ▪ Infant weight gain issues. ▪ Unresolved engorgement, plugged ducts, or mastitis. ▪ Preterm or early term infants. ▪ Maternal or infant health conditions or medication use.	▪ Rebuilding production when formula has already begun. ▪ Low milk production. ▪ Mastitis or abscess. ▪ Provider recommends supplements. ▪ Baby rejects breastfeeding. ▪ Concerns about infant weight. ▪ Maternal or infant health conditions or medication use.

Bring It Home!
See the handout, "DBE Scope of Practice" for more information on the DBE scope of practice in WIC.

Hands-On vs. Hands-Off Care

DBEs work within their credential scope of practice and State protocols. One example is knowing when to provide "hands-on" assistance. Hands-on assistance is rarely needed; however, it can sometimes be necessary. DBEs must follow the scope of practice that aligns with their professional credential, as well as the State's guidelines on hands-on assistance. Follow the 3-step process outlined below.

Step 1: Demonstrate	Step 2: Hand Over Hand	Step 3: Hands-On Help
		
▪ Demonstrate using a doll or breast model. ▪ Allow the participant to observe or follow along.	▪ *With permission*, the DBE places their hands over the parent's hands to gently guide.	▪ *With permission,* use hands-on care if it is within State protocol *AND* within the DBE's professional scope of practice. ▪ Practice good hand washing and wear gloves.

Follow a similar process when handling the infant. Strive for a hands-off approach, when possible. When taking an infant weight, suggest the parents carry their infant to the baby scales and undress their baby. If assistance is needed, ask the parent for permission to handle the baby.

Practice Settings

DBEs work in a variety of locations to serve the needs of WIC families. This includes:

- **WIC Clinic.** Many DBEs provide one-on-one support in one or more WIC clinics, especially if they work in dual roles. Time allocation between clinics is determined by the agency management staff. In-person consultations are helpful for observing a feeding session, breast assessment, weight checks, and infant assessment.
- **Hospital**. DBEs collaborate with hospital staff post-discharge as needed.
- **Telephone/Text**. By phone, DBEs gather assessment information before in-person consultation.
- **Video Conferencing**. A growing number of WIC agencies use virtual technologies for remote support and education. Many DBEs find that video conferencing is a valuable tool for reaching parents quickly. Considerations include:
  - Protect the privacy of participants following your State's protocols.
  - Consider the DBE's and participant's internet connection and technology capabilities.
  - Minimize participant distractions and interruptions (e.g., reschedule, if needed).
  - Invite the parent's partner or other trusted family member or friend to be on hand to move the phone camera as instructed to help the DBE get a better view.

Curriculum Update:
The COVID-19 pandemic changed how WIC staff communicate and provide services to WIC participants. More and more families prefer the convenience and safety of telehealth options. Agencies should follow the virtual visit guidelines established by their State.

Referral Network

Referrals are crucial to WIC's nutrition services. DBEs provide valuable input into establishing and strengthening the referral network for complex breastfeeding challenges.

Internal Referrals

Structures can be implemented to ensure timely follow-up measures between DBEs and peer counselors, CPAs, and other WIC staff. A formal structure will communicate expectations to help ensure that internal referrals are made and received when participants need help most. Agencies use face-to-face or phone referrals or an electronic referral system as part of the documentation process.

External Referrals

The NSS discusses WIC's role in making and receiving referrals, along with strategies to address the varied health and social service needs of participants. WIC agencies work with local healthcare providers, private clinics, hospitals, and other community resources to establish referral networks. These networks build community support, promote WIC services, and provide a continuum of care for families. Explore structuring a referral network with:

- **Healthcare providers**. This referral network might focus on breastfeeding problems or medical conditions beyond the DBE's scope of practice. It may include mastitis, breast abscess, medication use, slow or faltering weight, jaundice, tongue restriction, reflux, and other issues that compromise the baby's health.
- **Hospitals**. A hospital referral network might focus on mutual goals and ways to enhance post-discharge follow-up. The hospital might alert the WIC office when participants deliver or make direct referrals for post-discharge care.
- **Community resources.** Relationships with community organizations that also serve WIC families strengthen the continuity of care. Consider groups such as Healthy Start, Early Head Start, home visiting programs, teen pregnancy centers, and other local support initiatives such as La Leche League or postpartum support groups.

Bring It Home!
Use the handout "Referral Partners" to begin development of a plan for establishing or strengthening the referral network for participants experiencing complex breastfeeding challenges.

Staff Roles: DBEs—Training DBEs

Sneak Preview:
The Level 4 content in the "Staff Roles: DBEs - Training DBEs" section addresses opportunities for DBEs to continue building clinical skills to support participants with complex breastfeeding problems.

Level 4 Competency:

- Engage in ongoing education to sharpen lactation assessment and counseling skills.

Training Needs

Effective training needs for DBEs focus on achieving competencies. the *WIC Breastfeeding Curriculum* highlights the competencies important for DBEs to effectively support and assist participants experiencing complex challenges.

WIC Breastfeeding Curriculum

The tiered approach in the FNS *WIC Breastfeeding Curriculum* demonstrates the power of well-trained staff who support participants within their scope of practice. DBEs are required to complete all four levels of the curriculum. Level 4 content aligns with most of the International Board of Lactation Consultant Examiners competencies for IBCLCs. Any IBCLC competencies outside the scope of WIC or the role of the DBE in WIC are not included in the curriculum. Level 4 focuses on building skills and confidence in assessing complex problems and developing appropriate care plans.

Who Trains DBEs

Trainers of DBEs should ideally be IBCLCs or be experienced in assisting with complex lactation problems. They should have completed all four levels of the *WIC Breastfeeding Curriculum* and have an in-depth knowledge of the WIC program and operations. In many states, State WIC staff (such as the State breastfeeding coordinator) or a contracted IBCLC trainer may provide the training. Some states and agencies collaborate on training or provide train-the-trainer opportunities for local experts to provide training on a continual basis.

Building Skills

After completing Levels 1-4 in the *WIC Breastfeeding Curriculum,* DBEs should continue their learning through ongoing self-study or other continuing education to stay abreast of current and new advances in lactation. Additional learning opportunities can include:

- **Observation**. Shadow an IBCLC at the hospital, another WIC clinic, or organization. It is also helpful for DBEs to shadow other WIC staff to learn more about their role. This includes shadowing peer counselors and joining home visiting staff on appointments with new parents in their home setting.
- **Mentoring**. Spend time with another DBE to become acclimated to the role of providing complex care.

- **Case Examples**. Meet regularly with DBEs in the state to share case studies for ongoing learning.
- **Self-directed Study.** Keep current with new research and best practices in lactation. WIC agencies can provide resources for continuing education and self-study. These might include subscriptions to lactation journals, lactation resources or conference attendance.

Bring It Home!
Meet with your WIC management team to discuss opportunities to continue your lactation education through shadowing experiences and continued mentoring and self-directed study. Use the handout, "DBE Shadowing Tool" when conducting observations to note best practices to consider.

WIC and Breastfeeding—Food Packages

Sneak Preview:
The Level 4 content in the "Food Packages" section addresses the role of the DBE when tailoring and issuing food packages for breastfeeding participants.

Level 4 Competency:

- Collaborate with CPAs on appropriate food package tailoring when parents experience complex breastfeeding challenges.

Tailoring Food Packages – DBE Role

When participants experience complex breastfeeding problems, their food packages often need to include the amount of formula that might be necessary to meet, but not exceed, the infant's nutritional needs while the DBE works with them on the problem. Issues that might require supplementation include:

- Delayed onset of lactogenesis (DOL).
- Low milk production.
- Supplementation that has already begun.
- Ineffective milk transfer.
- Slow or faltered growth in the baby.

The DBE receives referrals from CPAs, peer counselors, and other WIC staff. The DBE assesses the situation and recommends solutions to address identified issues. For example, the DBE may reassure parents that formula might be a temporary tool until the breastfeeding problem is resolved. In cases of complex challenges that can have a more lasting impact, supplementation might be needed throughout lactation. The DBE also makes referrals to the CPA to tailor the food package to the parent's goals and to meet the baby's nutritional needs. In some cases, the DBE will assist parents in weaning their baby from formula while helping to rebuild their milk production to return to full breastfeeding.

Care Plan

The DBE and CPA develop a care plan together to address problems and help parents reach their breastfeeding goals. This includes a thorough assessment and tips and solutions to address the problem. The CPA will tailor the food package in collaboration with the DBE. They will maintain open communication and create a feeding plan that optimizes feedings at the breast, including milk

expression as appropriate and timing and amounts of formula that might be needed. The DBE develops a plan to rebuild milk production and discontinue formula supplementation, consistent with the parent's goals. The DBE also develops a follow-up plan and makes appropriate referrals.

Bring It Home!
How do CPAs and DBEs work together in your clinic? Consider ways to strengthen the referral network and collaboration between staff to better meet the needs of families.

WIC and Breastfeeding—Health Communication

Sneak Preview:
The Level 4 content in the "Health Communication" section addresses best practices for providing breastfeeding training for WIC staff.

Level 4 Competency:

- Provide breastfeeding training and education for WIC staff under the direction of the agency breastfeeding coordinator.

Staff Training

A potential role for DBEs is to conduct breastfeeding training at the direction of the local agency breastfeeding coordinator. Using the *WIC Breastfeeding Curriculum* the DBE might:

- Provide Level 1 training as part of orientation for new WIC staff.
- Provide Level 2 training to new peer counselors
- Provide Level 3 training for CPAs to strengthen the referral network and collaboration between staff when tailoring food packages.
- Provide continuing education updates at peer counselor monthly staff meetings and ongoing training sessions.
- Provide one-on-one education with all levels of staff when breastfeeding questions arise.

The flexible nature of the *WIC Breastfeeding Curriculum* makes it an ideal resource for tailoring training opportunities based on the needs of the agency. Options include:

- In-service training for staff using the "Supplementation" topics in the "Problem Solving" section to address common challenges with breastfeeding participants who request formula.
- Lunch-and-learn event using the "Parent/Baby Separation" topic in the "Normal Breastfeeding" section to discuss ways to support participants who return to work or school.

Enhancing Learning

Whether providing training in person or as virtual events, DBEs can make learning memorable and enjoyable by using a variety of techniques. These include:

- Storytelling.
- Invite a WIC participant to share their experiences to make the topic relevant and meaningful.
- Conduct role-playing activities.
- Use facilitated discussion to allow learners to share what they know and to contribute to ideas.
- Use dolls, breast models, and other visual aids for skills-based learning.
- For video trainings, invite participants to freely share through the software "Chat" feature, and utilize other interactive learning techniques such as polls and whiteboards.

Bring It Home!
Use the handout, "**WIC Staff Training Plan**" to identify potential training needs of staff in your agency, along with options to consider for staff training.

Counseling—Difficult Counseling Situations

Sneak Preview:
The Level 4 content in the "Difficult Counseling Situations" section addresses ways to apply counseling skills when new parents face complex breastfeeding challenges.

Level 4 Competencies:

- Support parents facing difficult breastfeeding situations.

Difficult Situations – Complex Breastfeeding Problems

Active listening skills are especially important when families face complex challenges. Transition to parenthood is a potentially vulnerable time mentally. Between 9 to21 percent of birth parents experience depression and/or anxiety, stress, low self-esteem, and lack of confidence early postpartum. When breastfeeding problems occur at this fragile time, they may be overwhelmed and feel stress, frustration, anxiety, and fatigue. If parents feel they have failed, it can add to diminished self-esteem, making it difficult to focus on solutions or visualize the impact of current decision on long-term outcomes.

Active-Listening Skills

Open-ended questions can help the DBE build trust and better understand the factors that may have brought about the complex problem. Affirmation can help restore and rebuild the parent's self-esteem. Some affirmations to consider might be:

- It is obvious how much you love your baby.
- Your baby is lucky to have a parent who is working so hard to resolve these problems.
- You seem overwhelmed with everything you are experiencing right now.
- Most parents imagined that breastfeeding would go a little easier.

Offering Solutions

Effective assessment skills will help the DBE explore the factors that contributed to the problem. (*See the "Breastfeeding Assessment" section.*) The DBE can reassure parents that most problems DO have solutions, and that they are not alone in experiencing these challenges. When offering solutions for challenges (*covered in the section on Problem Solving*) remember to:

- Keep them simple and easy to achieve (the complete resolution might be a lengthy process).
- Use visuals, when possible, so parents can envision success and gain confidence.
- Share several options, when possible, so parents can select solutions they feel will work best, thus gaining a sense of autonomy and control.
- Demonstrate solutions, when possible, to help parents remember them.
- Involve parents in selecting solutions and doing demonstrations, when possible.

Assisting Parents with Past Abuse

Some parents referred to the DBE may have a previous history of sexual abuse or domestic violence. Sensitive counseling is critical in building trust and helping parents identify goals and solutions.

Past Sexual Abuse

Women with past sexual abuse may be in a fragile emotional state during the prenatal and postpartum periods. Breastfeeding discussions can trigger painful memories and affect a parent's feeding decisions. Studies show that prior sexual abuse increases the likelihood of complex breastfeeding challenges such as mastitis and breast pain. If a parent is uncomfortable putting the baby directly to the breast, the DBE can assist with exclusive pumping, if desired by the parent. The DBE can also provide additional support and share options to help parents build a strong support network to reach their feeding goals.

Domestic Violence

According to the CDC, domestic violence (also referred to as intimate partner abuse), is common in the U.S., with 1 in 4 women having experienced abuse. Intimate partner abuse leads to mental health problems such as depression and a higher risk for smoking and alcohol use. The DBE can support parents who currently or previously experienced domestic violence. This might include:

- Helping with use of a breast pump, if preferred, instead of putting the baby to the breast.
- Aiding parents to build a strong network of support.
- Praising accomplishments that help parents move closer to their goals.
- Making appropriate referrals following State or agency guidelines.

Bring It Home!
Learn more about postpartum depression and other mental health concerns during the early postpartum period at the Office on Women's Health at https://www.womenshealth.gov/mental-health/mental-health-conditions/postpartum-depression.

Preparing for Breastfeeding—Barriers

Sneak Preview:
The Level 4 content in the "Barriers" section addresses the DBE's role when parents face potential contraindications to breastfeeding, and ways to assist with ceasing or suspending breastfeeding.

Level 4 Competency:

- Counsel parents when contraindications to breastfeeding exist.

Contraindications – DBE Role

Condition	Okay to Breastfeed?	DBE Role
Parent or Infant illness	▪ In most cases, breastfeeding can continue. ▪ When parents are ill, babies are often already exposed and benefit from receiving antibodies. ▪ Human milk is well absorbed and helps ill infants with hydration.	▪ Reassure parents that continued breastfeeding is important to provide antibodies. ▪ Refer to the healthcare provider to discuss impact of medications on lactation.
HIV Positive Status	▪ Breastfeeding is contraindicated when the parent has HIV.	▪ Assist with suppressing lactation, if desired. ▪ Make appropriate referrals as needed.
Medications	▪ Most medications are safe while breastfeeding, and often substitutes can be found if needed. ▪ Some medications may impact the baby or affect milk production (e.g., contraceptives containing estrogen or certain decongestants).	▪ Encourage parents to discuss medication usage and options with their healthcare provider. ▪ Assist with temporary or permanent cessation of breastfeeding as required. ▪ Provide parents and providers with information about the medication and reputable resources.
Radiocontrast Agents	▪ Agents used in CAT scans are usually safe. They are poorly absorbed and clear quickly from the blood. ▪ Radioactive iodine (used for radiation therapy) may require temporary suspension of breastfeeding.	▪ Refer to the healthcare provider for decisions about continuing to breastfeed. ▪ Assist with milk expression if the infant is unable to go to the breast and/or if milk must be discarded. Assist parent with returning to the infant to the breast when it is safe to do so. ▪ Assist with weaning if indicated. ▪ Work with the CPA on a feeding plan.
Marijuana	▪ AAP, ACOG, and CDC advise not to use marijuana while breastfeeding.	▪ Advise parents of medical recommendations. ▪ Follow State policies/referral guidelines. ▪ Assist in suppressing lactation if parent chooses to continue marijuana.
Opioids/ Illegal Drugs	▪ Contraindicated in breastfeeding.	▪ Discuss risks of preterm birth, fetal growth problems, still birth, Neonatal Abstinence Syndrome [NAS]). (*See the "Complex Infant Issues" section in Problem Solving.*) ▪ Follow State policies/referral guidelines. ▪ Assist with suppressing lactation.
Methadone Treatment	▪ Generally safe; infants receive small doses through the milk. ▪ Parent should be in a substance abuse treatment program monitored by the healthcare provider. ▪ Other contraindications (e.g., HIV status) should not be present.	▪ Assist with breastfeeding if the infant has symptoms of NAS. ▪ Offer position and latch tips (e.g., Dancer hand hold) to help maintain a good seal at the breast. ▪ Offer comfort suggestions (e.g., skin-to-skin contact and frequent feedings). ▪ Work with CPA to monitor baby and ensure milk production remains adequate.

Assisting Parents

When addressing contraindications to breastfeeding, be sensitive to the parent's concerns and feelings about the safety of breastfeeding or grief in having to discontinue breastfeeding, if indicated. Parents might experience disappointment, confusion, relief, sadness, or worry. Active listening skills affirm the parents' desire to do what is best for their baby and help them explore alternative options, if needed.

Temporary Suspension of Breastfeeding

When temporary suspension is recommended, instruct on the use of an electric breast pump and the importance of frequent milk removal to maintain production. Also assist with transitioning the baby back to the breast. (*See the "Weaning" section in Ongoing Breastfeeding.*)

Bring It Home!
Consult the CDC website at https://www.cdc.gov/breastfeeding/breastfeeding-special-circumstances/maternal-or-infant-illnesses/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fbreastfeeding%2Fdisease%2Findex.htm for more information about breastfeeding safety during contraindications.

Normal Breastfeeding—Hospital Support

Sneak Preview:
The Level 4 content in the "Hospital Support" section examines the DBE's role in supporting new parents at hospital discharge.

Level 4 Competency:

- Support WIC parents with complex breastfeeding challenges by building working relationships with hospital lactation staff.

Follow-Up Support

Although WIC peer counselors might visit participants in the hospital setting, a DBE generally would not, as this could interfere with the role and responsibility of the hospital lactation staff. However, the DBE can collaborate with hospital staff to establish or strengthen referral networks after parents are discharged. A continuity of care plan helps participants receive timely follow-up for complex breastfeeding challenges and might include:

- Hospital alerts WIC when participants deliver so peer counselors can support them while they are in the hospital.
- Hospital refers to WIC clinic for a post-discharge follow-up appointment.
- WIC staff refer to hospital outpatient clinic or other hospital support services.
- Connect participants to community support (e.g., postpartum parent groups, WIC, hotlines).
- Remind parents to keep their post-discharge provider and WIC certification visits.

Building Relationships

DBEs and breastfeeding coordinators establish relationships with local hospitals. They provide information and resources to the hospital about WIC services and making and receiving referrals. Some WIC agencies invite hospital staff to training events or continuing education opportunities and may participate on the hospital's breastfeeding task force.

Bring It Home!
Consider a plan for establishing or strengthening a connection with your local hospital(s). What WIC resources and services are available to help hospital staff better support participants? What educational resources and trainings could include hospital staff? If a post-discharge referral network is not in place, what options could be considered? Plan a meeting with hospital leadership (e.g., maternity unit nurse manager or director of nursing) to discuss WIC services and options for collaboration.

Normal Breastfeeding—Baby Behavior

Sneak Preview:
The Level 4 content in the "Baby Behavior" section addresses ways to assist parents when infants persistently cry.

Level 4 Competency:

- Make appropriate referrals for infants with persistent crying.

Fussing and Crying

In addition to the common reasons babies cry discussed in Level 2 (e.g., hunger, overstimulation, dirty diaper, too hot or too cold), other more complex situations can lead to persistent crying, such as:

- Reflux or GERD.
- Inadequate nutrition of the infant.
- Food sensitivity to something in the parent's diet (e.g., foods, medications, supplements).
- Lactose overload.
- Neonatal abstinence syndrome (NAS).
- Substance abuse by the parent.
- Neurological disorders.
- Pain.
- Illness.
- Child abuse.

Colic

Perceptions about infant crying are highly subjective and based on preconceptions about cultural and social norms around normal infant behaviors. Many infants have fussy periods that are unrelated to GI problems or feedings. Sometimes persistent crying is referred to as "colic." Most studies define "colic" as inconsolable crying in otherwise healthy infants lasting longer than *3 hours per day* for more than *3 days a week* for longer than *3 weeks,* usually subsiding around *3 months of age*.

DBE Role

When infants cry persistently, DBEs can assess for ineffective milk transfer, food sensitivity, lactose overload, forceful milk ejection reflex (MER), parental or infant anomalies leading to low milk production, or practices such as infrequent feedings. Refer the infant to the healthcare provider for further assessment and any treatment options, or to appropriate support services if the parent feels incapable of handling the baby's crying. If there are concerns about a parent harming the infant or negligence, make a referral to the appropriate social service agency to investigate. Remind parents that breastfeeding and close contact can provide comfort to the infant. The active listening principles below can help when counseling parents with infants who are persistently crying.

Open-Ended Questions	Affirmation
▪ What does your baby's behavior seem to be saying to you?	▪ I can tell wanting your baby to be happy is very important to you.
▪ How do you feel when your baby gets fussy?	▪ Your concern shows how much you love your baby.
▪ What do others tell you and how do you feel about what they are saying?	▪ Many parents are anxious about what their newborn wants.
▪ How does your baby's behaviors differ from previous children?	▪ At first, it is definitely hard to tell what the baby wants. It takes time to learn your baby!
▪ Who can support you during this challenge?	▪ Your baby is lucky to have so many people that love him/her.

Bring It Home!
Visit the AAP's Healthy Children website on "Crying & Colic" for parent's tips in dealing with infant crying. https://www.healthychildren.org/English/ages-stages/baby/crying-colic/Pages/default.aspx

Normal Breastfeeding—Ongoing Breastfeeding

Sneak Preview:
The Level 4 content in the "Ongoing Breastfeeding" section addresses the DBE's role when referrals are made for common concerns that are not resolved with basic recommendations.

Level 4 Competencies:

- Assist parents experiencing severe fatigue during breastfeeding.
- Assist parents whose infants experience a prolonged growth spurt.
- Assist parents with suppressing lactation during abrupt weaning.

Early Weeks – Severe Fatigue

It is common for most new parents to feel fatigue and loss of energy. Sleep deprivation can continue and even increase after returning to work or school and resuming normal daily activity levels. For most parents, fatigue levels tend to decline after the first few weeks. However, for some parents, severe fatigue can continue, and prolonged sleep deprivation can lead to serious physical and mental health issues, as well as early discontinuation of breastfeeding.

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A parent with severe fatigue might feel depressed, stressed, or unable to cope with the normal demands of breastfeeding and caring for a newborn. Parents who are sleep deprived may find it challenging to follow simple instructions or to visualize solutions for complex breastfeeding challenges. A DBE can ask questions such as these to learn more:

- What is your greatest concern about getting rest?
- Tell me about a typical day.
- What have you already tried to help you get more rest?
- How does fatigue affect breastfeeding for you and your ability to cope with being a new parent.
- What has your healthcare provider told you about ways to manage your fatigue?

Be sensitive to what might affect a parent's ability to hear and assimilate new information about breastfeeding. Keep information simple and focused on what is most important. Severe fatigue can be caused by a variety of chronic health and mental health concerns. It can also lead to health and mental health concerns. Refer parents to their healthcare providers for assessment and possible treatment.

As Baby Grows – Prolonged Growth Spurts

All babies go through periods of rapid growth and development, resulting in temporary periods of increased feeding frequency. These high-feeding periods can occur during times of physical growth, as well as when infants move into new developmental stages (such as rolling over, crawling, and walking). Growth spurts typically last around 2-3 days but can sometimes continue for a week or more (especially in older infants). These spurts can continue into childhood.

When a growth spurt lasts for longer than a few days, DBEs can assess for low milk production or inadequate milk transfer, as well as any other causes, such as:

- Subsequent pregnancy.
- Use of medications or herbal supplements that lower milk production.
- Baby is ill.
- Decline in frequency or length of feedings.
- Changes in routine causes the baby to seek comfort through extra nursing.

Open-Ended Questions	DBE Role
▪ Tell me more about when your baby started wanting to feed more often.	▪ Identify possible causes for the prolonged feeding increase.

Open-Ended Questions	DBE Role
▪ What concerns do you have about being pregnant again?	▪ Provide options for continuing to breastfeed, if desired and approved by the provider.
▪ Tell me more about your baby's behaviors.	▪ Assess milk production capacity and assist with increasing production if needed.
▪ What does your baby's healthcare provider say about any signs of illness in your baby?	▪ Refer to the baby's healthcare provider for assessment and treatment.
▪ Tell me about any medications or herbal supplements you might have begun.	▪ Refer questions about medications to the parent's healthcare provider.
▪ What changes have occurred in your life and home recently?	▪ Encourage self-care and rest. Keep baby's bed close to parent's bed to help baby feel secure.

Abrupt Weaning

A challenging situation might require abrupt or temporary weaning. In addition to the contraindications discussed in the "Barriers" section, parents may present with mental illness, long-term medication use that is incompatible with breastfeeding, serious maternal illness (such as cancer), or even infant demise. Temporary weaning might be needed (e.g., short-term medication use or radiocontrast agents that are incompatible with breastfeeding). In some cases, a parent may not wish to breastfeed and needs help suppressing lactation once lactogenesis II occurs.

Temporary Suspension of Lactation

When a parent must temporarily suspend feeding at the breast and/or providing their milk, the DBE can provide strategies for effective milk expression to maintain milk production, including guidelines on using the pump, maximizing milk expression, and storing the milk. Share information on alternative feeding methods, if desirable, as well as strategies to help the baby wean from the bottle when breastfeeding is resumed.

Suppressing Lactation

Abrupt weaning can lead to painful engorgement, plugged milk ducts, mastitis, and breast abscesses. Breast binding to suppress lactation is not recommended as it increases the risk of these conditions. Instead, offer comfort suggestions, such as:

- Warm shower or bath to relax breast tissue.
- Remove just enough milk to minimize discomfort and prevent engorgement.
- Ice packs between feedings and after milk expression to help reduce swelling and pain.
- Bra to provide sufficient support and comfort for heavy breasts.

©Texas Department of Health Services.

Suggest that parents watch for signs of plugged ducts or mastitis, and to seek help quickly. Also refer parents to their healthcare provider if signs of mastitis or abscess arise, or if they wish to take anti-inflammatory medications or medications to suppress lactation.

Assisting Infants

Infants who are not used to artificial nipples may resist replacing breastfeeding with bottle-feeding. The younger the infant the more likely it is that a breastfed baby will accept milk from a bottle. A family member can feed the bottle until the baby becomes familiar with it. Using a cup or other feeding method may help.

With patience, most babies will eventually accept the bottle. Other ways parents can feel close to the baby during the transition and beyond include:

- Cuddle the baby in other ways.
- Feed the baby close to the chest, similar to breastfeeding.
- Spend time with the baby with other activities such as reading, singing, and talking.

Source: United States Breastfeeding Committee.

Infant Demise

When infant death occurs, some parents wish to quickly cease milk production to avoid the pain of producing milk that their baby will never receive. Sensitivity is critical in supporting them through abrupt weaning. Others wish to continue to express and donate their milk to babies in need. Assist these parents with milk expression and information on local resources for donating their milk.

Bring It Home!
Collaborate with the breastfeeding coordinator and other WIC staff in compiling a list of resources such as options for donating milk; support groups for parents of babies who are stillborn, preterm, passed away due to SIDS or SUID, and other grief support groups; and mental health resources for dealing with chronic fatigue.

Normal Breastfeeding—Milk Expression

Sneak Preview:
The Level 4 content in the "Milk Expression" section addresses the DBE role in assisting parents who face challenges using a breast pump.

Level 4 Competency:

- Assist parents in overcoming complex problems with using a breast pump.

Pumping – Troubleshooting Concerns

Level 3 reviewed the appropriate ways to use a breast pump. However, parents may not follow the instructions, or they might use the incorrect flange size. Pumping might be painful, or they only express a low volume of milk. When referrals are made to the DBE, there are several issues to explore to assist parents with more effective pumping.

Potential Problem	Signs/Causes	Ways to Troubleshoot
Defective pump 	▪ No feeling of suction. ▪ Breasts still feel full after pumping. ▪ MER no longer occurs. ▪ Low milk production occurs, even though feeding/milk expression patterns are unchanged.	▪ Educate on appropriate techniques. ▪ Correct pump setup. ▪ Replace flanges, if needed. ▪ Replace valve membrane or other pump parts that do not work properly. ▪ Check for cracks, signs of broken parts, or parts that are loose. ▪ Check that milk is not backing into or clogging the tubing. ▪ Replace the pump if troubleshooting measures do not resolve the issues.
Painful nipples/breasts  *Courtesy of Tricia Cassi, IBCLC.*	▪ Flanges may be too large, pulling excess areola into the flange tunnel and causing pain and low milk yield. ▪ Pump controls might be set too high. ▪ Pumping may occur for too long, causing nipple irritation.	▪ Observe a pumping session for flange size and pumping technique. ▪ Offer information on proper technique. ▪ Replace pump flange, if needed (*Note:* each breast might need a different size, and needs may change throughout the course of lactation). ▪ Provide solutions for damaged nipples. ▪ Hand express until nipples heal. ▪ Refer to healthcare provider if nipples are infected.
Minimal milk yield 	▪ Flange incorrect size. ▪ Pump defective (*see above*). ▪ Vacuum setting too low. ▪ Missed pumping sessions lead to lower production. ▪ Stress inhibits MER. ▪ Unrealistic expectations about milk amount. ▪ Stress or baby's condition.	▪ Observe a pumping session to determine potential issues with technique. ▪ Replace pump flange, if needed. ▪ Improve pumping technique, if needed. ▪ Increase the length of pumping sessions. ▪ Improve relaxation (e.g., massage, warm compresses before pumping). ▪ Use "hands-on" pumping techniques to help increase milk yield.

Supporting Exclusively Pumping Parents

Parents exclusively pump for many reasons including parental preference to exclusively pump rather than directly breastfeed. Exclusively pumping parents may experience a wide range of emotions and experiences related to the decision, including:

- Guilt, grief, or feelings of failure for not feeding the baby at the breast.
- Fatigue and stress over the time and effort required to exclusively pump and care for the baby.
- Lack of time to fit in the number of pumping sessions needed to maintain milk production.

- Declining milk production.
- Lack of support from family and friends.
- Sore nipples and breasts due to incorrect pumping techniques.

Peer counselors and other WIC staff provide encouragement and basic suggestions to these parents. When problems develop, they refer to the DBE for assessment and follow-up. This might include:

- **Assessment** to identify goals, causes of low milk production, and realistic expectations. (*Visit the "Low Milk Production" and "Complex Maternal Challenges" sections for more information on assessing and assisting with low milk production and sore nipples/breasts.*)
- **Tips and Solutions:** Improve milk expression techniques
  - Hold baby skin to skin to enjoy bonding and improve milk yield.
  - Set up pump in an area conducive to frequent pumping.
  - Warm compresses and gentle massage before pumping to encourage a MER.
  - Express milk at least 8 times per 24 hours. More or less pumping sessions may be needed based on the parent's individual needs.
  - Pump at least once during sleep periods to take advantage of higher prolactin levels.
  - Use "hands-on" pumping (e.g., massage, breast compressions, and hand expression) to increase milk yield.
  - Think about the baby while pumping.
  - Cover the collection container to avoid stressing over milk yield.
  - Join a support group for pumping parents.

Courtesy of Lisa Marasco, IBCLC.

- **Referrals** to the healthcare provider if damaged nipples are infected or the parent needs pain medications.

Bring It Home!
Be sure your clinic has adequate resources for helping parents access appropriate breast pumps, as well as replacement parts, alternative flange sizes, and other equipment that might be needed.

Breastfeeding Assessment—Prenatal Assessment

Sneak Preview:
The Level 4 content in the "Breastfeeding Assessment" section addresses health factors that the DBE can include as part of a prenatal assessment.

Level 4 Competency:

- Assess health conditions in pregnancy that can impact breastfeeding success.

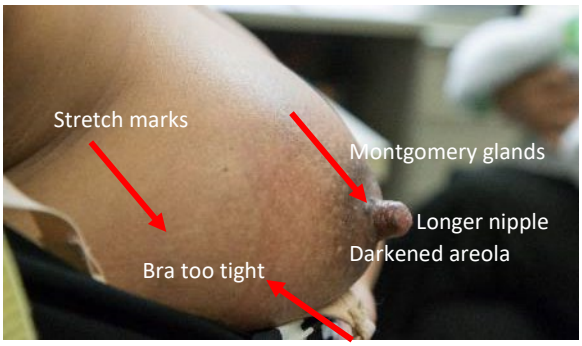
Healthcare Factors

Although DBEs normally do minimal breastfeeding assessments during pregnancy, occasionally WIC staff may refer to the DBE for health issues that might affect a participant's ability to breastfeed.

Lack of Breast Changes

Types and timing of visible breast changes during pregnancy might include:

- Greater breast sensitivity or tenderness.
- Breast enlargement (may be gradual).
- Greater prominence of veins under the skin.
- Stretch marks from growing breast skin.
- Darkening of the areola.
- Eruption of prominent Montgomery glands.
- Longer and more elastic nipples.
- Colostrum leaks.



Although lack of breast changes during pregnancy can be a marker for low milk production, it does not always predict an inability to produce sufficient milk. In many cases, breast changes may be noticeable once the baby is born, and milk begins flowing.

Areas of Assessment	Questions to Ask	How the DBE Helps
▪ Anatomical issue that might contribute to insufficient glandular tissue (IGT) (e.g., wide space between the breasts [hypoplasia], asymmetry, or tubular shaped breasts). ▪ Breast or nipple anomaly (e.g., inverted nipple). ▪ Prior trauma to the breast. ▪ Endocrine concerns (e.g., polycystic ovary syndrome [PCOS] or untreated thyroid disease).	▪ Tell me how your breasts *feel.* ▪ What concerns do you have about your breasts? ▪ How does your bra fit now that you are pregnant? ▪ Tell me more about how breastfeeding went with your last baby (if applicable). ▪ What medical concerns do you have? ▪ Tell me about any prior breast surgeries or traumas. ▪ What do you know about how your breast makes milk?	▪ Give anticipatory guidance about breast changes. ▪ Flag for close monitoring. ▪ Build the parent's confidence. ▪ Encourage frequent breastfeeding. ▪ Give anticipatory guidance about signs of adequate milk intake and when to call for help: ▪ No breast fullness by day 2-3. ▪ Baby not stooling 3-4x/day by days 3-4 or still passing meconium stools. ▪ Baby not feeding 8 or more times in 24 hours. ▪ Baby's skin or eyes have a yellow appearance, or they have been diagnosed by a healthcare provider with jaundice. ▪ Baby is difficult to wake for feedings. ▪ Baby not back to birth weight by 2 weeks postpartum.

Hormonal Conditions

Common endocrine disorders affecting breastfeeding include PCOS and hypothyroidism (insufficient production of thyroid hormones). These conditions can cause hypoplastic breasts (wide space between the breasts) and affect the ability to make sufficient milk. (*Visit the "Complex Maternal Problems" section for more detailed information about hormonal conditions and how they can be addressed.*)

Courtesy of Lisa Marasco, IBCLC.

What to Assess	Questions to Ask	How the DBE Helps
▪ Previous experiences breastfeeding. ▪ Hormonal conditions for which the parent is being treated. ▪ Breast irregularities such as hypoplasia, asymmetry, underdeveloped breast tissue, or tubular shape. ▪ Other breast conditions that might affect breastfeeding (such as anatomical concerns).	▪ What medications are you taking for health issues? ▪ What concerns you about your condition? ▪ What has your healthcare provider told you about breastfeeding with your condition? ▪ What are you doing to address these concerns? ▪ What do you know about how your breast makes milk?	▪ Closely monitor baby. ▪ Refer to the parent's healthcare provider for treatment for PCOS or thyroid disease. ▪ Encourage frequent breastfeeding. ▪ Educate on possible impact of the hormonal condition on milk production. ▪ Give anticipatory guidance about signs of adequate milk intake and when to call for help: · No fullness by day 2-3. · Baby not stooling 3-4x/day by days 3-4 or still passing meconium stools. · Baby not feeding 8 or more times in 24 hours. · Baby's skin or eyes have a yellow appearance, or they have been diagnosed by a healthcare provider with jaundice. · Baby is difficult to wake for feedings. · Baby not back to birth weight by 2 weeks postpartum.

Breast Surgeries

DBEs might receive prenatal referrals regarding breast augmentation or reduction surgeries, biopsies, or other procedures on the breast(s). Surgical procedures that sever important nerves may affect milk production. Augmentation surgeries may affect milk production depending on the reason for the surgery. If surgery corrected an underlying breast anomaly (such as hypoplasia, underdeveloped breast tissue, or breast asymmetry), the underlying condition may result in low milk production. (*See the "Complex Maternal Problems" section for more information on supporting breastfeeding when parents had prior surgery on their breasts.*)

What to Assess	Questions to Ask	How the DBE Helps
▪ Reasons for breast surgery. ▪ Location of surgical scars. ▪ Other breast or nipple anomalies. ▪ Prior experience breastfeeding other children and milk production concerns.	▪ Tell me how your breasts *feel.* What kind of nerve sensation do you have in your breasts? ▪ What concerns do you have about your breasts? ▪ What did the surgeon tell you about your ability to make milk? ▪ Tell me about any breast changes you noticed during pregnancy. ▪ What are your breastfeeding goals? ▪ What do you know about how to tell your baby is getting enough milk? ▪ What do you know about ways to supplement if it becomes necessary?	▪ Flag for close monitoring. ▪ Build the parent's confidence. ▪ Encourage frequent breastfeeding. ▪ Give anticipatory guidance about breast changes. ▪ Give anticipatory guidance about signs of adequate milk intake and when to call for help: · No fullness by days 2-3. · Baby not stooling 3-4x/day by days 3-4 or still passing meconium stools. · Baby not feeding 8 or more times in 24 hours. · Baby's skin or eyes have a yellow appearance, or they have been diagnosed by a healthcare provider with jaundice. · Baby is difficult to wake for feedings. · Baby not back to birth weight by 2 weeks postpartum.

Other Medical Concerns

Other medical concerns that affect the ability to breastfeed or make milk may become obvious during pregnancy. Conditions might include physical disability, metabolic disorder (e.g., diabetes or obesity), or autoimmune disease. While breastfeeding is usually possible, the parent and the infant might require close monitoring, especially in the early days postpartum. For example:

- Obese or diabetic parents with delayed lactogenesis (DOL) may need to supplement.
- Physical disability may require creative strategies to position and latch the infant.
- In some cases (e.g., HIV status or certain medications) the DBE may need to advise parents not to breastfeed and support them with temporary or permanent milk suppression.

What to Assess	Questions to Ask	How the DBE Helps
▪ Advice about breastfeeding from healthcare provider. ▪ Prior experience breastfeeding, and any concerns about milk production. ▪ Medications the parent is taking for the condition. ▪ Breastfeeding goals. ▪ Openness to using alternative feeding methods if necessary (e.g., nursing supplementer).	▪ What concerns you about breastfeeding with your condition? ▪ What has your healthcare provider told you about breastfeeding? ▪ How do you know your baby gets enough milk? ▪ What are your thoughts about feeding your baby supplements if necessary?	▪ Flag for close monitoring. ▪ Build the parent's confidence. ▪ Encourage frequent feedings and avoiding formula unless medically necessary. ▪ Share how to breastfeed with the condition. ▪ Refer to the healthcare provider for follow-up assessment and medical treatment as necessary. ▪ Give anticipatory guidance about signs of adequate milk intake and when to call for help: · No fullness by days 2-3. · Baby not stooling 3-4x/day by days 3-4 or is still passing meconium stools. · Baby not feeding 8 or more times in 24 hours. · Baby's skin or eyes appear yellow or jaundice was diagnosed by a healthcare provider. · Baby is difficult to wake for feedings. · Baby not back to birth weight by 2 weeks.

Bring It Home!
The handout, "**Health Assessment**" is a handy resource during the prenatal period, with sample open-ended questions and educational opportunities for health issues that might affect breastfeeding.

Breastfeeding Assessment—Breastfeeding Dyad

Sneak Preview:
The Level 4 content in the "Breastfeeding Dyad" section addresses assessment tools and strategies to include as part of a postpartum assessment of the parent/baby dyad.

Level 4 Competencies:

- Conduct a parent and baby assessment to identify potential complex breastfeeding problems to include physical characteristics and breastfeeding technique.
- Take an appropriate breastfeeding history to explore potential concerns affecting breastfeeding management.
- Conduct a feeding assessment for signs of milk transfer and appropriate position and latch.
- Identify causes of concern for breast and infant assessment.

Although CPAs may do a preliminary assessment when participants experience complex challenges, the DBE uses critical thinking and problem-solving to follow up with a more in-depth breastfeeding assessment. This helps identify the root causes of the problem, as well as the impact on milk production and well-being of the parent and infant. The DBE also develops an appropriate care plan.

Breastfeeding History

A detailed breastfeeding history helps the DBE identify more details about previous and current breastfeeding experiences and potential factors that affect the current issue. This might include:

Current Experience with Breastfeeding

- Lack of breast changes prenatally.
- Breast surgeries or trauma.
- Medical conditions, including physical anomalies and hormonal conditions.
- Birth history.
- Infant feeding and growth patterns.
- Early hospital practices.
- Any breastfeeding challenges.
- Current breastfeeding goals and available support.

Previous Breastfeeding Experiences

- How many children previously breastfed and when and why breastfeeding was discontinued.
- Previous challenges (e.g., tongue restriction, low milk production, inverted nipples) and how they were resolved.
- Previous breastfeeding goals and available support.

Bring It Home!
Use the handout, "**Breastfeeding History Assessment Worksheet**" to identify a participant's current and previous health and breastfeeding experiences.

Breast Assessment

A breast assessment helps the DBE identify any signs or visible concerns about the parent's breast. It helps contribute toward the development of a care plan to address the problem.

Indications for Conducting a Breast Assessment

- Evidence of surgery and type of incision performed.
- Bruising, scarring, and other potential implications of trauma.
- Signs of insufficient glandular tissue.
- Nipple anomalies (e.g., flat or inverted nipples, bifurcated nipple).
- Extent of any nipple damage.
- Edema or engorgement.
- Signs of mastitis or other infections.
- Lack of normal breast changes.

General Protocols

- Use screening questions to gather more information before assessing the breasts.
- Ask permission first. Explain the purpose of the assessment and what you hope to learn.
- Offer privacy, such as closing the door or offering a baby blanket to place over the shoulders.
- Follow the "hands on/hands off" protocol outlined below. (*See the "Staff Roles: DBEs" section.*)

Hands-On/Hands-Off Protocol		
 *©Texas Department of Health Services.*		
Step 1: Hands-Off Observe vs. touch. Use a breast model or baby doll to demonstrate techniques (e.g., how to test for an inverted nipple).	Step 2: Hand Over Hand Ask permission to place a hand over the parent's hand to guide a technique.	Step 3: Direct Touch With permission, touch the breast only when needed, *if* allowed by professional scope of practice and State policies. ▪ Wash hands or use hand sanitizer. ▪ Wear gloves. ▪ Use gentle movements. ▪ Observe whether parent feels safe and comfortable.

What to Assess

With each condition described below, refer to the "Complex Maternal Problems" section for more details on ways to assist parents with breastfeeding and making appropriate referrals.

Assessment Components	
 *Courtesy of Lisa Marasco, IBCLC.*	Insufficient Glandular Tissue ▪ Lack of development in one or both breasts. ▪ Marked asymmetry between the breasts. ▪ Wide spacing between the breasts. ▪ Long tubular breasts (often with a large areola). ▪ Asymmetry.
 *Courtesy of Lisa Marasco, IBCLC.*	Nipple or Breast Anomaly ▪ Very large nipple or areola. ▪ Bifurcated nipple. ▪ Flat or inverted nipple(s). ▪ Breast ptosis (sagging because of quick weight loss). ▪ Supernumerary nipple (extra nipple along the midline). ▪ Excessively large breasts.
 *Courtesy of Lisa Marasco, IBCLC.*	Unusual Presentation ▪ Unusual dimpling in the breasts (*Note: pitted tissue like the skin of an orange [peau d'orange] may indicate a severe breast infection or other serious concerns*). ▪ Lump unresolved with usual plugged duct management. ▪ Rash or and other skin condition.
	Breast Surgery Scars ▪ Scars around the areola may indicate reduction surgery. Nerves crucial for initiating milk synthesis and the ducts responsible for delivery of milk from the breast to the baby may have been severed. ▪ Scars in the crease below the breast or outer breast may indicate augmentation. A breast implant can cause recurrent plugged ducts. ▪ Scars in other areas might indicate a biopsy or procedure that may have interfered with important nerves/ducts.
 *Courtesy of Lisa Marasco, IBCLC.*	Fullness/Engorgement ▪ Swollen or hard breasts. ▪ Shiny appearance. ▪ Visible veining under the skin. ▪ Reddened areas or streaks. ▪ Flattened nipple, making it hard for baby to latch.

	Assessment Components
 *Courtesy of Lisa Marasco, IBCLC.*	Nipple Trauma ▪ Redness, bruising, or swelling which may affect latch. ▪ Crack, scab, open wound, or oozing which may indicate infection. ▪ Biofilm over the wound or nipple which may indicate an infection or may cause delayed or slow healing.
 *Courtesy of Lisa Marasco, IBCLC.*	Breast Trauma ▪ Can damage breast tissue and impair release of lactation hormones. ▪ Bruising might indicate domestic violence or impact trauma such a car accident. ▪ Note any abnormal discoloration, burn scar (pictured here), or scar that may or may not affect milk production.

Bring It Home!
Use the handout, "**Breast Assessment Worksheet**" as a tool when identifying potential breast and nipple problems as part of a breast assessment.

Infant Assessment

The baby's healthcare provider does a head-to-toe infant assessment in the hospital and during postpartum visits. The DBE will assess for abnormal infant anatomy and signs of inadequate growth and development. Observe for any conditions that might affect breastfeeding and make appropriate referrals to the healthcare provider. An infant assessment helps contribute toward the development of a care plan for addressing the complex breastfeeding problem.

Indications for Conducting an Infant Assessment

- Medical condition that might compromise breastfeeding.
- Slow or faltered weight gain.
- Poor feeding practices or ineffective milk transfer.
- Low milk production.
- Pain with breastfeeding.

General Protocols

- Prior to observing the infant, begin by asking screening questions to gather more information.
- Ask permission first. Respect the parent's position as the caregiver and cultural factors that may affect a willingness to allow others to handle their baby. Explain the purpose of the assessment.
- Use a "hands off" approach when possible. (*Learn more in the "Staff Roles: DBEs" section.*)

Hands-On/Hands-Off Protocol	
	Step 1: Demo with a Baby Doll Use a baby doll to demonstrate techniques, when possible. First observe the baby during a feeding session to identify areas to assess further.
	Step 2: Ask Permission Ask permission before handling the baby. Wash hands or use hand sanitizer, and wear gloves.
	Step 3: Parent Handles Baby Allow the parent to undress and carry the baby to the scale for weight checks. If possible, ask the parent to pull down the baby's chin to observe for white patches and other simple assessments.

- If a suck assessment is indicated:
  - Ensure it is within your professional scope of practice *and* is allowed under State policy.
  - Ask permission from the parent.
  - Wash hands or use hand sanitizer, and wear gloves.
  - Do not conduct a suck assessment unless trained in the proper technique.

Assessing Growth Trends

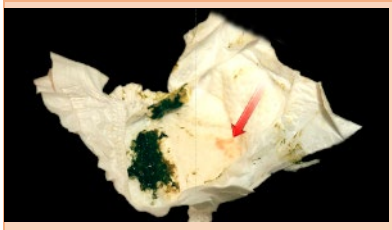
- Healthy newborns typically gain around 28-34 g (1 ounce) per day, or approximately 7 ounces per week during the first 3 months, and 13-20 g (½ ounce) per day at 3-6 months of age.
- Consult with the CPA to assess a baby's growth trends. Examine trends and collect data on:
  - Today's weight and length (using the same scale each time, if possible).
  - Birth weight and length.
  - Lowest weight and date of the lowest weight.
  - Weight gain since birth (should be around 1 ounce per day).
- Plot data on the same growth charts used by the CPA, using state-approved technique, growth-monitoring criteria, and scales.
- Pre- and post-test weights of a single feeding may be too imprecise for the overall evaluation of milk transfer. Babies take in different amounts of milk at different feeds, and the amounts and composition of milk vary over a 24-hour period. Pre- and post-test weights can make parents

anxious and delay or inhibit MER. It may be more helpful to review weight trends and request more frequent weights at the WIC clinic to observe overall growth trends.

What to Assess

Refer to the "Complex Infant Problems" section for more details on assisting parents and appropriate referrals for infant problems such as those described here.

	Assessment Components
	Skin Color ▪ Yellowish color might be a sign of jaundice, which can make babies sleepy, lethargic, or difficult to wake for feedings. ▪ A blueish color on the hands and feet can be normal in the early day or two; beyond that, it can signify a cardiovascular abnormality. ▪ Mottling of the skin (bluish, blotchy areas) is a sign of cold stress or overstimulation. ▪ Newborn rashes are common and do not usually affect breastfeeding. The baby's healthcare provider will diagnose and advise on treatment.
 *Photo by Janelle Abby, MD, Stanford University.*	Head and Jaw ▪ Head *molding* is common during birth; does not affect breastfeeding. ▪ Swelling on the scalp (*cephalohematoma*) is a collection of blood between the baby's skin and skull. Parents might need positioning help to avoid putting pressure against that part of the baby's head. ▪ Birth trauma can affect cranial nerves needed for suckling or cause soreness and discomfort, leading to sucking difficulties. ▪ *Torticollis* (neck asymmetry pictured here) causes the head to lean to one side. Eyes and ears may appear misaligned. This can affect latch and ability to maintain a seal. It can lead to weight loss. ▪ A slightly recessed chin, common in the early days postpartum, can make latch challenging. Baby slides into a shallow latch, with sore nipples and compromises milk transfer. ▪ *Pierre Robin Syndrome* is an abnormally recessed chin which prevents effective latch.
 *Courtesy of Tricia Cassi, IBCLC.*	Mouth ▪ Buccal cheek pads help create negative pressure. May not be fully developed in preterm, SGA, or malnourished babies. ▪ Full-term infants have full, "pillowy" lips that aid with seal. Preterm and SGA babies often have thin lips, which can compromise milk transfer. ▪ Friction from sucking can cause tiny, whitish-colored sucking blisters which are common and usually go away on their own. Multiple blisters can occur with a tongue or lip tie or incorrect latch.

Assessment Components	
 *Photo by Janelle Abby, MD, Stanford University.*	Tongue ▪ *Ankyloglossia* (restricted frenulum which connects the underside of the baby's tongue to the floor of the mouth) can limit tongue movement, causing sore nipples, and affect milk transfer to the baby. ▪ *Lip tie* (prominent tissue bridge between upper lip and gums) can affect latch. ▪ *Macroglossia* (unusually large tongue) can make it difficult for the tongue to cup the breast and form a good seal. ▪ *Pierre Robin Syndrome* can accompany an underdeveloped tongue and make latch difficult.
	Milk Intake ▪ Signs of adequate intake: • Stools transition from meconium to yellowish, runny stools by day 5. (*Assess for other signs of intake if meconium continues past day 5.*) • After days 3-4 postpartum, the baby should have 6-8 wet diapers and 2-3 dirty diapers every 24 hours in the first 4-6 weeks. • Baby regains birth weight by 2 weeks. • Baby continues gaining weight at a rate of an ounce per day. • Baby wakes to feed at least 8or more times every 24 hours. • Swallowing is heard. • Baby's hands and feet relax at the end of the feeding and baby detaches from the breast spontaneously. ▪ Pink patches in the diaper (*brick dust urine*) are common in the first 3 days and indicate uric acid crystals in the urine. If it persists past the first 3 days, it can be a sign of poor milk transfer and dehydration. ▪ Blood in the stools can result from small anal fissures, a urinary tract infection, the parent's bleeding nipples, sensitivity to foods in the parent's diet, or an intraductal papilloma (a benign tumor that grows in a milk duct and can cause a clear or blood-stained discharge).

Bring It Home!
Use the handout, "**Infant Assessment Worksheet**" to identify an infant's potential issues contributing to a complex breastfeeding problem as part of an infant assessment.

Feeding Assessment

A feeding assessment helps the DBE better understand the nature of a problem, and to identify potential causes such as ineffective latch, inadequate milk transfer, and poor feeding patterns. The assessment contributes toward the development of a care plan for addressing the problem.

Indications for Conducting a Feeding Assessment

- Low milk production is suspected.
- Pain with breastfeeding.

- Slow or faltered infant weight gain.
- Poor feeding practices or ineffective milk transfer.
- Parent's or infant's medical condition affecting breastfeeding.
- Infant reluctant to breastfeed or fussy behaviors at the breast.

General Protocols

- Ask screening questions to gather more information before observing a feeding.
- Suggest that parents hold off nursing right before meeting with the DBE, if possible.
- If baby is too sleepy to feed, ask pertinent questions to learn more until baby is ready to feed.
- Offer privacy, such as closing the door or offering a baby blanket.
- Ask permission first and explain the purpose of the assessment.
- Use a doll and breast model if guidance is needed during the feeding assessment.
- Use the feeding assessment to also conduct a breast and/or infant assessment, as needed.

What to Assess

Observing a feeding can provide insights into potential causes of problems. Assessment might include:

- Baby's position and latch at the breast.
- Presence of normal feeding cues (e.g., rooting, opening wide).
- How the latch feels (e.g., comfortable, weak suck, any pain).
- Frequency and duration of feedings at the breast.
- How the feedings end.
- How the breasts feel before and after the feeding.
- Other supplemental foods the baby receives.

Refer to the "Complex Maternal Problems" and "Complex Infant Problems" sections for more details on ways to assist parents with breastfeeding challenges identified during the feeding assessment.

Assessment Components	
	Position and Latch ▪ Identify signs of appropriate position and latch. ▪ Note potential signs of compromised milk transfer, such as: • Baby has slow or faltered weight and growth trends. • Baby is unhappy at the breast (e.g., arches, pulls away, cries). • Baby is unable to maintain a vacuum or seal. • Baby slides down into a shallow latch. • Parent has sore nipples, or grimaces in pain when latching.
	Signs of Appropriate Sucking Patterns ▪ Rapid at the beginning of the feeding until milk begins flowing. ▪ Slower, deeper sucks after milk ejection. ▪ Smooth rhythm of suck/swallow/breathe. ▪ Short pauses after long bursts of suckling, swallowing, and breathing. ▪ Suckling resumes after pauses without prodding. ▪ Baby remains awake through most of the feeding. ▪ Baby spontaneously releases the breast when completed.

Assessment Components	
 *©Texas Department of Health Services*	Signs of Potential Problems - Parent ▪ Sore and damaged nipples. ▪ Engorgement. ▪ Plugged ducts. ▪ Mastitis or breast abscess. ▪ Low milk production. ▪ Parent reports "dreading" feedings. ▪ Parent ends the feeding before baby is through and does not offer the second breast.
 *Courtesy of Tricia Cassi, IBCLC.*	Signs of Potential Problems - Infant ▪ Poor weight gain. ▪ Arches and pulls away when attempting to latch. ▪ Fusses and cries when trying to latch or shows aversion to the breast. ▪ Clicking sounds, which can indicate poor seal due to restricted tongue or inability to maintain vacuum. ▪ Falls asleep quickly and must be prodded to actively suck. ▪ Little audible swallowing is heard. ▪ Fists clenched, feet tensed and do not relax during the feeding. ▪ Acts hungry after the feeding.

Bring It Home!
Use the handout, "**Feeding Assessment Worksheet**" to identify issues that contribute to a problem.

Problem Solving—Low Milk Production

Sneak Preview:
The Level 4 content in the "Low Milk Production" section addresses causes for delayed and true low milk production, along with ways to assist new parents in recovering and rebuilding production.

Level 4 Competency:

- Assist parents with reestablishing and increasing their milk production.

Assessing Delayed Milk Production

Level 2 and Level 3 content for "Low Milk Production" addressed common causes and strategies for assisting parents with DOL. Level 4 content builds on this foundation, examining less common causes. It includes assessment components when assisting with delayed production, tips and strategies that are within the scope of practice for DBEs, and appropriate referrals.

Less Common Causes of DOL

- **Impaired milk ejection reflex (MER).** MER is triggered by oxytocin released from the pituitary gland. It can be stifled by stress, pain, thyroid problems, use of alcohol, or breast surgery (with a peri-areolar or "around the areola" incision that severed important milk ducts and nerve endings). A spinal cord injury can also impair innervation to the breast, negatively affecting the MER.

- **Sheehan's Syndrome.** This results in significant blood loss that affects blood flow to the pituitary gland and leads to necrosis in the pituitary gland. This prevents the release of prolactin and usually results in lactation failure. Heavy bleeding that is not Sheehan's Syndrome may delay lactation due to inhibiting the milk synthesis process.
- **Preterm delivery**. Inadequate or infrequent milk removal can result from an unexpected premature delivery.
- **Gestational ovarian theta-lutein cyst.** This develops during pregnancy, causes high testosterone levels, and leads to DOL. Testosterone levels usually subside by several weeks post-delivery.
- **Certain medications** such as selective serotonin reuptake inhibitor (SSRI) anti-depressants taken during pregnancy can result in DOL.

Areas of Assessment

Assessment Components - Pregnancy	Questions to Ask
Medical Concerns ▪ PCOS. ▪ Hypothyroidism. ▪ Medication use.	▪ What medications are you taking? ▪ Tell me about any medical conditions you might have. ▪ What hormonal concerns has your provider talked with you about?
Breast Assessment ▪ Breast changes during pregnancy. ▪ Potential signs of IGT.	▪ What breast changes have you noticed during pregnancy? ▪ Tell me about any concerns you have about your breasts. ▪ What do you know about how your body makes milk?
Prior Breast Surgery ▪ Reason for surgery. ▪ Type of surgery conducted. ▪ Type of incision made. ▪ Whether re-innervation occurred.	▪ Tell me more about your prior breast surgery. ▪ How was the surgery done? ▪ What did your surgeon say about your ability to make milk?
Breastfeeding History ▪ Birth experience. ▪ Early breastfeeding practices including separation from baby or supplements. ▪ Significant blood loss during labor or after discharge. ▪ Medications taken during labor/delivery and post birth. ▪ Medical conditions (e.g., PCOS, hypothyroidism, and obesity).	▪ Describe your birth experience (type of delivery, length of labor, and medications taken). ▪ How soon after the birth were you able to breastfeed? ▪ Describe feedings during your hospital stay. ▪ Describe any major bleeding after hospital discharge. ▪ What medications do you currently take? What has your healthcare provider told you about these medications and their impact on breastfeeding? ▪ Tell me about any medical conditions you have. ▪ How is your healthcare provider monitoring your condition?
Breast Assessment ▪ Prior surgery. ▪ Signs of IGT. ▪ Breast or nipple pain. ▪ Appropriateness of a breastfeeding aid (e.g., breast pump or alternative feeding device) if milk is insufficient.	▪ *See above in Prior Breast Surgery Questions to Ask.* ▪ What has your healthcare provider said about possible delays with your milk production? ▪ What breast changes have you noticed? ▪ What concerns do you have about your breasts? ▪ Tell me how your breasts feel now. ▪ What do you know about using a breastfeeding device?

Tips and Solutions: Educate in Pregnancy

When there are known risk factors for DOL, prepare a pregnant participant with strategies to potentially shorten the delay, such as:

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- Hold baby skin to skin after birth, and throughout the hospital stay and beyond as much as possible.
- Breastfeed at least 8 or more times/24 hours.
- Hand express colostrum after each nursing session to feed to the baby.
- Ensure baby is latched well to transfer milk.
- Use hands-on breastfeeding and milk expression techniques.

Tips and Solutions: Feed the Baby

If milk production is delayed beyond day 3 postpartum, there may be signs of inadequate intake, such as weight loss, sleepiness, lethargy, jaundice, or hypoglycemia. Supplements may be needed for a day or longer.

- A nursing supplementer provides can provide the extra nutrition directly at the breast.
- The amount of supplement varies based on the baby's age and the amount of milk produced.
- The Academy of Breastfeeding Medicine clinical protocol #3, *Supplementary Feedings in the Healthy Term Breastfed Neonate,* outlines the average colostrum intake among healthy term infants in the early days. This serves as a guide when determining the amount of supplement that might be needed if the parent experiences DOL.

Baby's Age	Amount Baby Takes
First 24 Hours	2-10 mL/feed (.07-.34 oz)
24-48 hours	5-15 mL/feed (.17-.5 oz)
48-72 hours	15-30 mL/feed (.5-1 oz)
72-96 hours	30-60 mL/feed (1-2 oz)

Tips and Solutions: Build Production

When a parent experiences DOL, frequent milk removal and effective breast drainage are important. Options to consider include:

Courtesy of Tricia Cassi, IBCLC.

- Enhance the MER to encourage milk to flow easily. For example:
  - Warm compresses and breast massage before feed to relax parent.
  - Assist with a good latch to stimulate oxytocin flow.
- Hold baby skin to skin often for easy access to the breast and oxytocin release to encourage milk flow.
- Increase the number and length of feedings.
- Express milk after feedings if the baby has a weak suck and cannot easily remove milk. Hand expression is an effective way to remove milk and increase milk yield. Small amounts of expressed milk can be fed to the baby using an

alternative device such as a spoon or cup. (*See the "Milk Expression" section in Level 2 for basic hand expression techniques.*)

- Talk with the healthcare provider regarding medications that may affect milk production.

When to Refer

Prompt referrals are indicated when a participant faces DOL.

Before Hospital Discharge	Baby's Healthcare Provider
Hospital Staff ▪ Questions and concerns about supplementation and building milk production. WIC Peer Counselor ▪ Ongoing support.	▪ Questions regarding baby's weight. ▪ Questions about supplementing the newborn.

Post-Discharge	Baby's Healthcare Provider	Parent's Healthcare Provider
WIC CPA ▪ Monitor infant weight and growth. ▪ Care plan to tailor the food package for the participant and baby. ▪ Work with the DBE to develop the feeding plan. WIC Peer Counselor ▪ Ongoing support.	▪ Inadequate infant weight gain. ▪ Potential infant anomalies affecting milk transfer.	▪ Continued heavy bleeding. ▪ Medication usage. ▪ Treatment of hormonal or medical conditions (e.g., PCOS, diabetes, or hypothyroidism).

Assessing Low Milk Production

Less Common Causes of Low Milk Production

In addition to the common causes of low milk production discussed in Levels 2 and 3, the DBE should be aware that both *primary* and *secondary* causes of low milk production need to be considered when conducting an assessment.

Primary causes are those that relate to physical conditions, such as:

- History of infertility.
- Spinal cord injury affecting nerves to the breast (especially the thoracic spine nerves T1 to T5).
- Breast reduction or augmentation, or biopsy that severed or damaged nerves that innervate the breast (especially the 4th intercostal nerve) or ducts that deliver milk from the breast to the baby.
- Burn wound or blunt trauma to the chest area.
- Preterm delivery (especially before 34 weeks) before completion of breast tissue development.

Secondary causes are those that relate to feeding or lifestyle practices, such as:

- Infant's ineffective milk removal (e.g., a restricted lip or tongue, preterm birth, torticollis, cleft palate/lip, high or "bubble" palate, cardiac issues, or other issue).
- Parent's ineffective milk removal (e.g., infrequent feedings, ending feedings too quickly, feeding baby on a schedule, or ineffective pumping).

- Pumping practices such as using a defective pump, incorrectly sized flange, or improper use.
- Parent's gastric bypass surgery if nutrient deficiencies (B_{12}, calcium, and iron) are not corrected.
- Parent's eating disorder such as bulimia, which can lower prolactin levels.
- Medication use (e.g., birth control with estrogen, chemotherapy drug, or SSRI anti-depressant).

Areas of Assessment

Assessment Components	Questions to Ask
Breastfeeding history ▪ Feeding practices. ▪ Medication use. ▪ Medical conditions. ▪ Birth experience. ▪ Surgeries. ▪ Prior milk production issues.	▪ Tell me more about when your milk began to increase. ▪ Describe your birth experience. ▪ Tell me about any situations during your hospital stay that caused you to be separated from your baby. ▪ What medications are you taking?
Breast assessment ▪ Unusual scars. ▪ Breast anomalies. ▪ Edema/engorgement. ▪ Prior and current nipple pain. ▪ Signs of IGT.	▪ Tell me about any concerns you have about your breasts. ▪ What do you know about how your body makes milk? ▪ Tell me how your breasts feel.
Feeding Assessment ▪ Positioning or latch concerns. ▪ Infant sucking patterns. ▪ Signs of milk transfer. ▪ Feeding practices. ▪ Pumping practices.	▪ Why do you think you are not making enough milk? ▪ Tell me about a typical day of feeding your baby. ▪ How do you know when it's time to feed your baby? ▪ How do feedings feel to you? ▪ How do you know when your baby has had enough? ▪ Tell me more about your experiences expressing milk.
Infant Assessment ▪ Restricted tongue or lip. ▪ Ability to latch. ▪ Suck ability. ▪ Anomaly that affects milk removal.	▪ How does your baby act before, during, and after feedings? ▪ Describe any pain you have experienced with breastfeeding. ▪ What concerns do you have about your baby?

Tips and Solutions: Feed the Baby

When low milk production is a concern, work with the CPA to monitor the baby's milk intake. Supplements might be needed while rebuilding milk production. Options to consider:

- Express milk after feedings and feed the creamier high fat milk to the baby. With increased calories, the baby's energy and appetite begin to increase.
- If a baby is too sleepy or lethargic to feed well, a small supplement before feedings for a day or two may provide the energy needed to suck more effectively at the breast.
- A dropper or spoon may be sufficient for short-term supplementation. For long-term supplementation, a nursing supplementer nourishes the baby while stimulating milk production.
- Some parents prefer to offer the supplement after breastfeeding sessions through a bottle.
- Formula supplements can be a temporary solution while rebuilding milk production.

(*Note: See the "Slow Weight Gain" content in the "Complex Infant Problems" section for more details about supporting parents of slow gaining infants. The "Management Tools" section has more details on using a nursing supplementer and alternative feeding devices.*)

Tips and Solutions: Rebuild Production

The key to rebuilding milk production begins with effective milk removal either by the baby or a breast pump. Consider:

- Increase feedings or milk expression to 10-12 times per day for a few days. Frequent milk removal builds prolactin receptors, which can help long-term breastfeeding.
- Offer both breasts at feedings, or feed baby on one breast and express milk on the other.
- Use "hands-on" pumping (*See Level 2*).
- Fully drain breasts to increase the speed of milk synthesis:
  - Feed baby on both breasts.
  - Return baby to both breasts a second time.
  - Express any remaining milk.
- Hold the baby skin to skin between and during milk expression sessions.
- Talk with the healthcare provider if taking medications that may affect milk production (e.g., estrogen-containing birth control).
- Explore creative solutions for gaining sufficient rest.

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When to Refer

Prompt referrals are indicated when a participant faces low milk production. Referrals might include:

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor Infant weight and growth. ▪ Care plan to tailor food package for the participant and baby. ▪ Work with the DBE to develop the feeding plan. Peer Counselor ▪ Ongoing support.	▪ Baby not gaining adequate weight. ▪ Restricted tongue/lip or oral anomaly that makes transferring milk difficult. ▪ Cardiac or other medical concern that impact feedings.	▪ Medication concern, including birth control options. ▪ Hormonal or medical condition (e.g., PCOS or hypothyroidism).

Bring It Home!
Use the handout, "**Low Milk Production Summary - Level 4**" for a synopsis of the key teaching points in this section that can serve as a handy resource.

Problem Solving—Supplementation

Sneak Preview:
The Level 4 content in the "Supplementation" section addresses strategies the DBE can use when assisting parents who wish to combine breastfeeding with supplementation, as well as those who wish to return to full breastfeeding after beginning formula supplements.

Level 4 Competencies:

- Assist parents in safely transitioning to full breastfeeding after supplementation has begun.
- Assist parents who wish to do combination feeding.

Combination Feeding

When Supplements Are Needed

Supplements are not always necessary to address a complex breastfeeding challenge. Sometimes parents use supplements because they do not understand that babies often "cluster feed" or bundle many feedings together in one time period. The parents may be exhausted and feel that supplements will help them get more rest or they may be anxious about making sufficient milk. In situations where supplements are not necessary, work with the parents and the WIC team to assess the situation and assist on a feeding plan that best meets the parents' goals.

There are some situations where supplements might be warranted, such as poor infant weight gain or low maternal milk production. The Academy of Breastfeeding Medicine outlines indications for supplementation in the early days after the birth for a healthy term infant:

- Hypoglycemia that is unresponsive to appropriate frequent breastfeeding.
- Signs of inadequate intake, including:
  - Weight loss of >8-10% by day 5.
  - Fewer than 4 stools on day 4 of life, or continued meconium stools on day 5.
  - Clinical or laboratory evidence of dehydration (e.g., high sodium, poor feeding, or lethargy) that does not improve with proper management of breastfeeding.
  - Hyperbilirubinemia despite appropriate intervention.
  - Infant inborn errors of metabolism.
  - Low milk production or DOL.
  - Pituitary glandular insufficiency (e.g., abnormal breast shape, minimal breast growth during pregnancy, or breast surgery).
  - Intolerable pain during feedings that is unrelieved by appropriate interventions.
  - Temporary cessation of breastfeeding due to certain medical conditions or medications.
- Separation of the parent and baby without availability of human milk.

Areas of Assessment

The DBE conducts an assessment to identify recommendations to assist the parents in reaching their goals. (*The Low Milk Production section provides more details about assessing low milk production*.)

Assessment Components	Questions to Ask
Breastfeeding history ▪ Feeding practices. ▪ Medication use. ▪ Medical condition (e.g., PCOS or hypothyroidism) that can affect milk production. ▪ Birth experience. ▪ Surgeries. ▪ Prior milk production issues.	▪ What did your healthcare provider say about the need for supplements? ▪ How much supplement did your healthcare provider advise and for how long? How do you feel about that advice? ▪ Tell me more about when your milk began to increase. ▪ Describe your birth experience. ▪ What medications are you taking? ▪ What medical conditions do you have?
Breast assessment ▪ Structural problems that might contribute to low production. ▪ Edema/engorgement. ▪ Nipple abrasions that might signify poor milk transfer.	▪ Tell me about any concerns you have about your breasts. ▪ Tell me how your breasts feel. ▪ How do you feel about the amount of milk you are currently producing for your baby?
Feeding Assessment ▪ Positioning or latch concerns. ▪ Maternal comfort during feedings. ▪ Infant sucking patterns. ▪ Signs of milk transfer. ▪ Pumping practices. ▪ Appropriate use of breastfeeding aids.	▪ Tell me about a typical day of feeding your baby. ▪ How often does your baby go to the breast? How long do feedings last? ▪ If you are supplementing, what are you giving as the supplement? ▪ How do you feel about using your milk as the supplement? ▪ If you are giving formula, when do you give it and how much? ▪ What changes have occurred with feedings at the breast? ▪ How do you know when your baby has had enough? ▪ What do you know about using breastfeeding aids (such as a breast pump or nipple shield).
Infant Assessment ▪ Tongue or lip restrictions. ▪ Ability to latch and suckle. ▪ Baby's behaviors at the breast.	▪ Describe your baby's behaviors before, during, and after feedings. ▪ Describe any pain you have experienced with breastfeeding. ▪ What concerns do you have about your baby?

Tips and Solutions: Supplementation Options

The DBE's role when parents wish to combination feed is to assist them with maintaining their milk production, help them rebuild production if needed, and support them in meeting their goals. This includes developing an individualized feeding plan and connecting parents to support. The feeding plan might include:

- Increase the number of direct breastfeeding sessions (e.g., during the night) and minimize supplementation when possible.
- Use an alternative feeding device to deliver the milk to the baby.
- Use a nursing supplementer nursing supplementer at the breast if acceptable to the parent to stimulate production.

Tips and Solutions: Rebuilding Milk Production

If milk production has waned, suggest options to increase production (*also see the "Low Milk Production" section*). Suggestions may include:

- Maximize feedings at the breast, when possible. For example, exclusively breastfeed when with the baby and reserve supplements for times when parent and baby are apart.
- Use an electric breast pump to remove milk.
- Express milk when separated from the baby, if possible and acceptable to the parent.
- Express milk frequently over several hours to stimulate production ("power pumping").
- Position and latch the baby effectively.
- Use breast compressions while breastfeeding to deliver higher-fat milk to the baby and encourage continued nursing.
- Use "hands-on" milk expression techniques to help increase milk yield.
- Breastfeed at least once at night to take advantage of higher prolactin levels.
- Get help from WIC staff rather than turning to formula if production begins to wane.

Follow-Up

The DBE works with the CPA to coordinate follow-up to ensure the baby is receiving sufficient nutrition.

- Track wet and dirty diapers.
- Perform weight checks as needed.
- Observe the baby's tone and demeanor (e.g., identify any evidence of lethargy).
- Track improvements in milk production.
- Reassess any breastfeeding aids issued to the parent.

Bring It Home!
Use the handout, "**Feeding Plan Components**" to see a sample feeding plan for a WIC participant who wishes to supplement after returning to work. After reviewing, identify another common scenario when a participant might be supplementing, and the key components to a feeding plan for that situation.

When to Refer

The DBE works with the WIC and healthcare team to support and follow up with families who are combination feeding.

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor infant weight and growth. ▪ Tailor the food package. ▪ Work with the DBE to develop the feeding plan. Peer Counselor ▪ Ongoing support.	▪ Baby not gaining adequate weight. ▪ Concerns about baby's health. ▪ Negative reactions to formula. ▪ Milk production not increasing sufficiently for baby's needs.	▪ Health concerns or medication use by the parent.

Returning to Breastfeeding

The CPA can work with parents who wish to return to breastfeeding after having started formula. (*See the Level 3 content on "Supplementation."*) The DBEs role is to enhance the process by helping the parent increase milk production and ensuring good latch during the transition process.

Areas of Assessment

Assessment Components	Questions to Ask
Breastfeeding history ▪ Early feeding practices. ▪ Problems with milk production or DOL. ▪ Medications taken by the parent. ▪ Medical condition that might compromise safe transition to the breast (e.g., IGT, diabetes, hormonal conditions, surgery). ▪ Efforts the parent has already tried. ▪ Parent's infant feeding goals. ▪ Perceived support from family and friends.	▪ Tell me about the early days of breastfeeding and factors that led you to begin supplements. ▪ What are your greatest concerns as you think about weaning your baby from supplements? ▪ What medications are you taking? ▪ What medical conditions does your healthcare provider tell you might affect your ability to rebuild your milk production? ▪ What have you already tried to begin transitioning your baby back to your breast?
Feeding Assessment ▪ Timing and amount of formula the baby receives. ▪ Length of time supplements have been given. ▪ How feedings at the breast have changed since supplements began. ▪ Parent's thoughts about using breastfeeding aids and/or alternative feeding devices, if needed.	▪ Describe a typical day of feeding your baby. ▪ How often do you breastfeed and what concerns do you have about your baby feeding directly at your breast? ▪ How does your baby behave when feeding at the breast? ▪ How much supplement do you currently give your baby? ▪ How often do you feed the supplements to your baby? ▪ What changed with breastfeeding after you began feeding formula? ▪ How do you feel about using breastfeeding aids such as a breast pump or nipple shield? ▪ What are your thoughts about using another means to feed the baby such as a spoon, cup, or tube?
Infant Assessment ▪ Baby's age. ▪ Weight trends. ▪ Ability to latch and suckle. ▪ Infant condition that might compromise a transition fully to the breast. ▪ Advice from baby's healthcare provider.	▪ What does the baby's healthcare provider say about your plan to wean from supplements? ▪ Tell me about your baby's birth weight and weight checks. ▪ Describe your baby's behaviors before, during, and after feedings at the breast. ▪ Describe any pain you experienced with breastfeeding. ▪ What concerns do you have about your baby?

Tips and Solutions: Rebuilding Production

When a parent transitions from formula supplements, the CPA will assist with minimizing formula and tracking the baby's weight throughout the transition. The DBE will assist with rebuilding milk production. This will be a greater issue if the baby was receiving large amounts of formula or was supplemented for an extended time. (*See the "Low Milk Production" section and the "Combination Feeding" content in this section for more strategies to rebuild milk production.)* Additional ideas to consider include:

- Address early causes of low milk production, such as factors that may have led to DOL.
- Refer parents to their healthcare provider for any medical condition such as hormonal problems that might interfere with milk production.

- Remind parents with IGT or prior breast surgery that formula might need to continue.
- Share ways to know that milk production is increasing. For example:
  - Changes in quantity and consistency of baby's stools.
  - Breasts feel fuller before feedings and softer afterwards.
  - Baby gains weight.
  - Able to express more milk.
  - Baby seems content after feedings.

Tips and Solutions: Coaxing Baby to the Breast

If the baby has grown accustomed to artificial nipples, the DBE can assist with strategies to coax the baby back to the breast again. Some options to suggest might include:

- Hold baby skin to skin so baby is close to the breast and views it as a place of comfort.
- Offer the breast when baby is sleepy.
- Stimulate a MER before offering the breast so milk is available when the baby latches.
- Try breastfeeding in a different position.
- Dribble expressed milk or formula over the breast for an instant reward when latching.
- Use the Dancer hand hold to help keep baby on the breast after latching.
- Use a nipple shield temporarily as a transition if other suggestions were not effective.

Follow-Up

Work with the CPA to track the parent's and baby's progress throughout the transition, including:

- Baby's growth trends.
- Baby's increasing satisfaction with feedings at the breast.
- Amount of supplements given, with food package tailored as appropriate.
- Infant developmental milestones.
- Changes in the breasts, such as increasing feelings of fullness or leaking.
- Changes in the baby's behavior before, during, and after feeding.
- Potential fatigue or frustration that might affect the transition.
- Available support throughout the process.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor infant weight trends. ▪ Tailor food package. ▪ Develop feeding plan with DBE. Peer Counselor ▪ Ongoing support.	▪ Baby not gaining weight sufficiently. ▪ Infant medical concerns.	▪ Medications and birth control options that affect milk production. ▪ Parent's questions about herbal remedies to try to increase production. ▪ Medical concerns affecting the ability to make milk.

Bring It Home!
Use the handout, "Supplementation Summary - Level 4" for a synopsis of the key teaching points in this section that can serve as a handy resource.

Problem Solving—Complex Parental Problems

Sneak Preview:
The Level 4 content in the "Complex Parental Problems" section addresses complicated breastfeeding challenges that can arise, the DBEs role in assisting lactating parents, and when to make referrals.

Level 4 Competencies:

- Assess the signs and causes of parental conditions that affect lactation success.
- Evaluate potential tips and solutions to resolve breastfeeding problems.
- Counsel and assist parents with positioning and latch for complex breastfeeding challenges.
- Counsel and assist parents with appropriate breastfeeding aids and referrals related to complex parental breastfeeding challenges.

Nipple Conditions – Flat or Inverted Nipples

	Signs	Potential Causes
 	**Flat nipples may appear flat with a short shank that does not evert well. Inverted nipple dimple or sink inward.** ▪ Nipple might *look* flat or inverted but everts when baby's gums compress the areolar ridge. ▪ Nipple might *look* normal but inverts when compressed. ▪ Place fingers around the areola and compress to determine if the nipple inverts or everts. ▪ Inverted nipple can be enveloped by the areola and create the appearance of a dimple; this can increase the risk of skin breakdown.	▪ Collagen fibers form adhesions that keep the nipple taut. ▪ Parent might report: • Nipple pain/damage. • Baby refuses to latch. • Poor milk transfer. • Low infant weight gain. • Engorgement.

Areas of Assessment

- **Breastfeeding history** - including compounding issues such as ineffective latch, pain or nipple breakdown from the latch, poor milk transfer, and issues with infant weight gain.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Nipple protrusion at rest and when compressed or stimulated (compression test).
  - Cracks or abrasions in the nipple.
  - Early latch issues.
  - Low milk transfer.
  - Any device or equipment already in use (e.g., a nipple shield) to coax the baby to latch.

Tips and Solutions

- Baby may form a larger teat with the nipple and surrounding areolar tissue.
- To help form a teat, the parent can:
  - Massage and stimulate the nipple.
  - Place thumb behind nipple and fingers underneath and push back into the chest.
  - Before latch, draw out nipple with pump.
- Temporary nipple shield to form teat.
- May feed on unaffected breast.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth. ▪ Infant medical concerns.	▪ Breast infection or other medical complication arising from the ineffective latch.

Nipple Conditions – Nipple Variations

	Signs	Potential Causes


 
Photos courtesy of Lisa Marasco, IBCLC.
	▪ Challenging nipple variations:
	  ▪ Large or long nipples.
	  ▪ Bulbous nipple (round and swollen in appearance).
	  ▪ Supernumerary nipple (pic #1) (accessory tissue along the "milk line" from the axilla to the groin); can become engorged and leak milk.
	  ▪ Bifurcated nipple (appears to separate into two parts). (pic #2)
		▪ Accessory breast and nipple tissue might be genetic in origin.
		▪ Variations can occur in one or both breasts.
		▪ Nipple types can affect latch and milk transfer.
		▪ Leaking accessory breast tissue might affect the parent's overall feeding experience.

Areas of Assessment

- **Breastfeeding history** - including compounding issues such as ineffective latch, pain or nipple breakdown from the latch, poor milk transfer, and issues with infant weight gain.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Appearance of the nipple before and after the feeding to determine shape changes.
  - Nipple fissure, crack, bleeding, or signs of infection.
  - Parental discomfort during feedings.
  - Edema or engorgement.

  - Accessory breast tissue.
- **Feeding assessment** - to determine whether the baby can latch and remain attached. Try different positions and holds to improve latch, if not effective. Ask if the parent is open to using a breastfeeding aid if the baby is unable to latch effectively.

Tips and Solutions

- Use a position that helps baby take in a large amount of breast tissue. This could include:
  - Sandwich hold, to compress the areolar tissue to better fit in the baby's mouth.
  - Dancer hand hold (*pictured*) to maintain latch.
  - Laid-back position so gravity helps baby get a large mouthful of breast tissue.
  - Football hold for more support.

- Pump affected breast and feed on other breast.
- Express milk until the baby's oral anatomy grows to accommodate the nipple variation.
- Consider a nipple shield to provide a firmer teat for the baby to grasp.
- Apply cold compresses for engorgement due to accessory breast tissue.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth because of the variation.	▪ Signs of infection because of poor latch due to the variation. ▪ Signs of mastitis (e.g., swelling, fever). ▪ Advice on medications or herbals.

Nipple Conditions – Persistent Nipple Pain

	Signs	Potential Causes


 
Photos courtesy of Lisa Marasco, IBCLC.
	▪ Improving positioning and latch does not always prevent or resolve nipple pain.
	▪ Persistent pain can be felt:
	  ▪ Deep within the breasts.
	  ▪ Right after baby latches.
	  ▪ Throughout the feeding.
	  ▪ Right after baby detaches.
	▪ There might also be:
	  ▪ Open sores in the skin (pic #1).
	  ▪ Bleeding.
	  ▪ Signs of infection (e.g., pus, crusty area, fever, discoloration, or biofilm) (pic #2).
	  ▪ Rash.
		▪ Other causes of persistent pain include:
		  ▪ Infection.
		  ▪ *Candida albicans.*
		  ▪ Pump trauma.
		  ▪ Sucking disorder. *(See "Complex Latch Issues" in the Complex Infant Challenges section.)*
		  ▪ Vasospasm (*see "Vasospasm" in the Nipple Conditions section*).
		  ▪ Nipple bleb.
		  ▪ Infant tongue restriction.
		  ▪ High or bubble palate.
		  ▪ Skin condition (e.g., psoriasis, eczema).
		  ▪ Herpes Simplex virus.
		  ▪ Incorrect use or size of a nipple shield/breast pump flange.

Areas of Assessment

- **Breastfeeding history**
  - Early challenges with pain and how/if it was resolved.
  - Attempts to resolve current pain.
  - Description of the pain, severity, and where and when it occurs. Pain at the beginning of the feed might be from the latch. Pain after the feeding ends might be from a vasospasm. A sharp or burning sensation can sometimes accompany thrush or a breast infection.
- **Breast assessment** following State approved protocols for a breast observation, note:
  - Breaks in the skin.
  - Signs of infection or sore area that is not healing.
  - Discoloration (redness or darker areas of skin in people of color).
  - Rashes.
  - Appearance of the nipple before and after the feed.
- **Infant assessment** to identify any anomalies such as restricted tongue or lip, high palate, or asymmetry of the baby's jaw (*torticollis*) that can cause an improper latch.
- **Feeding assessment** to determine latch and milk transfer. Observe baby's behaviors during the feeding (e.g., sleepiness, impatience, arching the back).

Tips and Solutions

- If the baby has an anatomical issue, share information about the condition and offer positioning and latch adjustments such as:
  - Sandwich hold (*pictured here*), to compress the areolar tissue to better fit in the baby's mouth.
  - Dancer hand hold, to help the baby stay latched if baby slips into a shallow latch.
  - Laid-back breastfeeding for gravity to help baby get a larger amount of breast tissue into the mouth. This is helpful for a baby with a bubble or high palate.
- If only one breast is affected pump the milk and feed on the other breast.
- Warm water compresses can help relieve pain.
- Oral antibiotics and/or pain meds might be needed as prescribed by the healthcare provider.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Develop feeding plan with DBE. Peer Counselor ▪ Ongoing support.	▪ Oral anomalies such as restricted tongue or lip (*See the Complex Infant Problems* section.)	▪ Signs of infection. ▪ Skin conditions or rashes. ▪ Signs of mastitis. ▪ Recommendations for appropriate pain medications.

Nipple Conditions – Cracked/Bleeding Nipples

	Signs	Potential Causes
 *Courtesy of Lisa Marasco, IBCLC.*  *Courtesy of Tricia Cassi, IBCLC.*	**Nipple trauma causes cracks or fissures that allow pathogens to enter and become infected.** ▪ Signs of nipple damage: • Open fissures in the skin. (pic #1) • Presence of blood/scabs. • Oozing/pus or biofilm. (pic #2) • Redness or discoloration (depending on pigment). • Fever. ▪ Baby's oral issue: • Tongue or lip restriction. • Long tongue. • Receding jaw. • Asymmetrical jaw.	▪ Nipple trauma · Poor positioning/latch. · Receding chin, small mouth, asymmetry, tongue/lip tie. · Sucking patterns in utero. · Disorganized suck. · Artificial nipple use. · Engorgement compromises latch. · DOL causes vigorous sucking. · Overactive MER, baby pulls off or slides into shallow latch. · Incorrect flange size/pump use. ▪ Bacteria · *Staphylococcus aureus* because of skin breakdown. · Biofilm, a gel-like film that covers the wound and encases pathogens. · Inhibited MER due to pain.

Areas of Assessment

- **Breastfeeding history**
  - Issues that might complicate latch.
  - How long the problem has persisted.
  - What the parent has already tried to deal with the problem.
  - Medical conditions of the parent or infant (e.g., allergies, skin conditions, herpes simplex virus [HSV]).
  - Medications the parent might already be taking.
  - Use of any breastfeeding aids or devices.
- **Breast assessment** following State approved protocols for a breast observation, note:
  - Size and location of the abrasion.
  - Signs of infection (swelling, fever, warm to the touch, pus or oozing, redness/discoloration).
  - Nipple anomalies (e.g., large, long nipple, or flat/inverted nipple).
  - Engorgement or edema.
  - Appearance of the nipple before and after the feeding.
  - Parental discomfort during feedings.
- **Infant Assessment**
  - Oral anatomy for restricted tongue/lip, high/bubble palate, lack of fat pads in cheeks (if suck assessment is warranted ensure it is within your professional scope of practice *and* is allowed under State policy).
  - Infant anatomy to identify any anomalies.
  - Evidence of oral thrush.
  - Baby's weight and growth trends.
- **Feeding assessment**
  - Appropriate positioning and latch.
  - Baby's behaviors at the breast.
  - How parent knows it's time to feed the baby.
  - Any discomfort.
  - How the feeding ends.

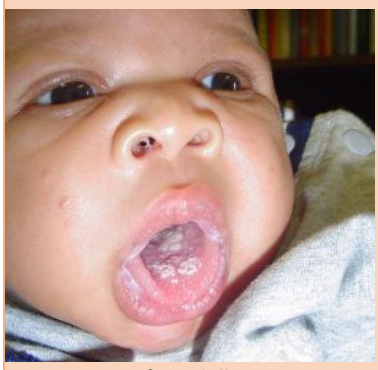
Tips and Solutions

- Parents need immediate pain relief.
- May need to express milk by hand or with a breast pump until nipples heal enough to resume breastfeeding.
- Ensure good positioning and latch.
- If using a breast pump, use a lower vacuum setting and increase to comfort to ensure damaged tissue does not worsen.
- A nipple shield might help if latch causes pain.
- Breast shells (larger hole) might prevent friction from clothing and nursing pads.
- Warm water compresses can help with pain relief.
- Healthcare provider might prescribe oral antibiotics and/or pain medication.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Work with the DBE to develop the feeding plan. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth because of inadequate milk transfer.	▪ Signs of infection. ▪ Treatment for nipples. ▪ Advice on medications (including pain meds).

Nipple Conditions – Fungal Infections

	Signs	Potential Causes
 *Courtesy of Lisa Marasco, IBCLC.*  *Courtesy of Kendall Cox, IBCLC.*	**A fungal infection is typically an overgrowth of Candida albicans.** ▪ Painful, burning, stinging, or shooting pain radiates into the breast. ▪ Itching. ▪ Red or darker areas, shiny appearance, tiny lesions on the breast surface (pic 1). ▪ Thrush in baby's mouth: white or yellowish patches or sores that coat the tongue, cheeks, lips, or roof of the mouth (pic 2) ▪ Vaginal yeast infection in the parent. ▪ Diaper rash with reddened or darker colored "scaly" areas.	▪ Overgrowth of *Candida albicans*. ▪ Antibiotics which kill normal competing bacteria and allow yeast to overgrow. ▪ Moist, dark, warm environment such as mucous membranes of the vagina, skin folds, and nipple area. ▪ Infant oral thrush. ▪ Parents with diabetes are at higher risk of candida infections.

Areas of Assessment

- **Breastfeeding history**
  - Antibiotic use.
  - Vaginal yeast infections.
  - Signs in the infant.
  - When the discomfort began.
  - Other medical conditions such as diabetes.
  - Cracked/bleeding nipples.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Appearance of darker colored areas, bumps, or a shiny appearance to the breast.
  - Description of the pain.
  - Cracked/bleeding nipples, which can serve as an entry portal for bacteria.

- **Infant assessment** - to determine if the baby has evidence of oral thrush or yeasty diaper area.

Tips and Solutions

- Refer to the healthcare provider for anti-fungal treatment.
- If the medication needs to be wiped off before feeding the baby, suggest blotting off excess and gentle wiping to avoid further nipple damage.
- Breast shells using the larger hole can provide relief by removing the constant pressure of nursing pads and clothing against the painful breasts.
- Encourage good hygiene, since yeast is difficult to kill. Wash hands before and after handling the breasts and after changing the baby's diaper.
- Wash bottles, pump supplies, breast shells, and other items that contact the breast and infant's mouth in hot soapy water or a dishwasher. Wash bras and clothing items that come in contact with the affected areas.

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When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has signs of oral thrush or a diaper rash that does not heal with usual cleaning practices.	▪ Medication and treatment for the fungal infection.

Nipple Conditions – Vasospasm

Vasospasm	Signs	Potential Causes
 *Courtesy of Lisa Marasco, IBCLC* 	**Vasospasm is a constriction of blood vessels, which can cause the nipple or portions of it to appear blanched or paler than usual color.** ▪ The nipple might take on colors such as blue (cyanosis), purple, or red. This discoloration might not be as visible on darker pigmented skin. ▪ There may be a temporary, but painful burning or stinging sensation or extreme throbbing pain after the baby detaches from the breast or after pumping.	▪ People with a history of Raynaud phenomenon or autoimmune conditions (e.g., lupus) are at higher risk of developing vasospasm. ▪ Extremities (fingers, toes, and nipples) are sensitive to cold, which can trigger a vasospasm that results in blanching, cyanosis, and pain. ▪ Blanching is due to lack of oxygen, and darker colors occur when blood flow returns to the nipple.

Areas of Assessment

- **Breastfeeding history**
  - Medical treatment or medications for auto-immune disease or Raynaud phenomenon.
  - Description of the pain and nipple discoloration noticed.
  - When the pain first began, and when the pain typically occurs.
- **Feeding Assessment** - to rule out other causes of pain, and to observe the nipples before and after the feeding for color changes.

Tips and Solutions

- Keep breasts warm before and during feedings.
- Apply warm compress immediately after feeding or pumping to minimize cold.
- Keep temperatures at room temperature.
- Avoid vasoconstrictive agents such as caffeine and nicotine to minimize symptoms.
- Consider certain medications as a cause.

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When to Refer

WIC Staff Collaboration	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Further assessment and possible treatment.

Nipple Conditions – Nipple Bleb

	Signs	Potential Causes
  *Courtesy of Lisa Marasco, IBCLC.*	**Clear, white, or yellowish blister or crusted area on nipple pore or tip of nipple.** ▪ Appearance can vary depending on skin pigment. ▪ May resemble a blister or have a thick "cheesy" consistency. ▪ Parent may report pain to the touch or during the feeding.	▪ Cause is not always known. ▪ A small cyst may form when milk leaks into nipple tissue. ▪ Can be caused by obstruction within the milk duct, such as a plugged duct. ▪ Causes severe pain and increases the risk of mastitis. ▪ Can occur at any point throughout breastfeeding. ▪ Can be associated with plugged milk ducts, mastitis, or candida.

Areas of Assessment

- **Breastfeeding history**
  - Recent history of plugged ducts, candida, or mastitis.
  - Pain (e.g., burning or stinging when the baby latches or throughout the feeding).
  - Any efforts already tried to alleviate the pain.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Discoloration at the end of the nipple.
  - Whitish or yellowish colored blister or crusted area.
  - Areas of the breast described as painful.
  - Signs of infection if bleb has opened (e.g., pus, fever, discoloration of nipple or breast area).

Tips and Solutions

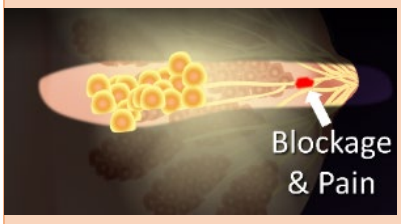
- Apply moist, warm compress before feeding to soften the bleb.
- Light massage or therapeutic massage can help milk flow.
- Ensure the baby is positioned and latched properly to drain the breast well.
- Provide strategies to address plugged ducts, if relevant.
- Do not open the bleb because of possible risk of infection and further trauma to the nipple.
- Keep the nipple area clean if the bleb opens on its own.
- Apply ice packs between feedings to relieve discomfort.

When to Refer

WIC Staff Collaboration	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ If the bleb does not open on its own, the provider can open the bleb and prescribe any needed medications or treatment options. ▪ If the parent develops signs of infection.

Breast Conditions – Unresolved Engorgement

	Signs	Potential Causes


Courtesy of Lisa Marasco, IBCLC.
 	
 
	Breast engorgement is excess edema and fluids.
	
	▪ Swollen, hard, or tight.
	▪ Shiny (pic 1).
	▪ Warm.
	▪ Cannot latch.
	▪ Cannot express milk.
	▪ Intolerable pain.
		▪ *(Also see Level 2 "Common Maternal Problems.")*
		▪ Hyperlactation or overproduction of milk.
		▪ Impaired MER.
		▪ Pain inhibits milk release.
		▪ Incorrect milk expression techniques, defective pump, or incorrectly sized flange.
		▪ Rarely, lesion/breast mass blocks milk.
		▪ Unresolved engorgement can lead to:
		  ▪ Poor latch.
		  ▪ Milk volume exceeds storage capacity.
		  ▪ Plugged ducts and mastitis. *(See the Plugged Ducts and Mastitis sections.)*
		  ▪ Distortion of milk-making cells and hormone receptors prevents the hormone's ability to interact with the cells and receptors.
		  ▪ Inhibited MER due to distorted receptors.
		  ▪ Feedback Inhibitor of Lactation (FIL) accumulates, slows milk synthesis.

Areas of Assessment

- **Breastfeeding history**
  - Birth experience and fluids given during labor and delivery.
  - Early breastfeeding (such as delayed feedings) and milk expression practices.
  - Prior breast surgeries.
  - What has already been tried to alleviate the engorgement.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Areas of the breast that have redness or discoloration, lumpy or hardened areas.
  - Signs of mastitis (e.g., fever, flu-like symptoms, reddened or dark pigmented areas of skin).
- **Feeding assessment** - if response to early questions indicate possible positioning and latch issues affecting milk removal or baby's ability to transfer milk.

Tips and Solutions

- In most cases, standard recommendations for engorgement will resolve uncomfortable breast fullness. (*See "Common Maternal Problems" in Level 2.*)
- Help the parent relax to encourage a MER and milk flow, including:
  - Warm compresses over the breasts before the feeding.
  - Deep relaxation breathing to help lower stress levels and encourage MER.
  - Therapeutic breast massage to drain excess fluid (*See "Management Tools" section*).
- Suggest reverse pressure softening to soften the areola enough to enable the baby to latch.
- If baby is unable to remove milk to comfort, suggest hand expression or pumping after the feeding until the breasts are more comfortable.
- Cool packs after feedings to help reduce inflammation.
- If a breast mass needs diagnostic ultrasound, alert the healthcare provider or imaging technician they are breastfeeding in case the breasts need to be drained before the procedure.

Curriculum Update:
According to the Academy of Breastfeeding Medicine Clinical Protocol #36, "The Mastitis Spectrum, Revised 2022," early postpartum engorgement is a distinct clinical issue that is associated with edema and hyperemia, excessive blood that normally occurs when milk production begins to increase. C-section birth can be associated with delayed engorgement. If engorgement is not managed properly, it can progress to other conditions on the mastitis spectrum. (*See the "Mastitis" section for more details and info from the new ABM protocol.*)

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ If engorgement is caused by poor milk transfer and baby now has slow or faltered growth.	▪ Advice on over the counter or prescription medications needed. ▪ Signs of mastitis or abscess.

Breast Conditions – Unresolved Plugged Duct

	Signs	Potential Causes
 *Courtesy of Tricia Cassi, IBCLC.*	**A plugged duct is a hardened or lumpy area that does not resolve with usual strategies (e.g., warmth and massage).** ▪ Can include a nipple bleb or blister on the end of the nipple. ▪ Milk may appear thick/stringy. ▪ Parent may report breast pain. ▪ Reddened area or discoloration might occur (see pic). ▪ Baby may be unable to latch or relieve discomfort through sucking.	▪ *(Also see Level 2 "Common Maternal Problems.")* ▪ Tongue tie or other anomaly that compromises milk transfer. ▪ Baby is sleepy or gaining weight poorly, limiting time at the breast and inefficiently removing milk. ▪ Inappropriate use of a breastfeeding device (e.g., nipple shield, breast pump). ▪ Unresolved engorgement. ▪ Hyperlactation or overproduction of milk.

	Signs	Potential Causes
	▪ May occur more than once in the same or other areas of the breast.	

Areas of Assessment

- **Breastfeeding history**
  - Breastfeeding and milk expression practices
  - Plugged ducts, engorgement, and mastitis.
  - Practices that might put continued pressure on the breast (e.g., seat belt, purse, tight bra).
  - What the parent has already tried.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Areas of the breast that have redness or discoloration, lumpy or hardened areas.
  - Signs of mastitis (e.g., fever, reddened or darker pigmented areas, or flu-like symptoms).
  - Scars from prior breast surgeries.
- **Feeding assessment** - to determine adequate positioning, latch, and milk removal, and to assist the parent with alternative feeding positions to better drain the plug.

Tips and Solutions

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- Standard plugged duct tips usually resolve them. (*See "Common Maternal Problems" in Level 2*).
- Therapeutic breast massage followed by gentle massage toward the nipple or hand expression.
- Frequent feedings to keep the breast drained.
- Reverse pressure softening to help baby latch.
- Address the milk bleb, if present.
- Cool packs between feedings for inflammation.
- Suggest rest, hydration, and nutritious foods to strengthen the immune system.
- Give anticipatory guidance regarding signs of mastitis and breast abscess.

Curriculum Update:
According to the Academy of Breastfeeding Medicine Clinical Protocol #36, "The Mastitis Spectrum, Revised 2022," plugged ducts are related to inflammation and ductal narrowing causing lymphatic congestion, alveolar edema, and pain. Milk removal decreases edema but expressing to "drain" the breast can exacerbate the problem. Aggressive massage is ineffective and can lead to tissue trauma.

When to Refer

WIC Staff Collaboration	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Signs of a breast infection or abscess. ▪ The lumpy area does not respond to the previous suggestions. ▪ The breast has a *peau d'orange* appearance (thick, pitted). ▪ Advice on pain medications or supplements to help emulsify the milk.

Breast Conditions – Recurrent Mastitis

	Signs	Potential Causes
 *Courtesy of Tricia Cassi, IBCLC.*	Mastitis is an inflammation of the breast. ▪ Can occur at any time during lactation and is common during the first 6 weeks. ▪ Can occur in one or both breasts and can reoccur. ▪ Can cause high sodium levels in milk and the baby may lose interest in feeding. ▪ Common signs/symptoms: • Fever (greater than 100.4° F) • Chills (or flu-like symptoms) • Aching or pain • Fatigue or lethargy • Reddened or darkened areas on the breast (see pic). • Breast swelling.	▪ *(Also see Level 2 "Common Maternal Problems".)* ▪ History of plugged ducts or bacterial mastitis. ▪ Inadequate treatment of prior case of mastitis. ▪ Edema and inflammation from overproduction of milk (or pumping to empty the breast). ▪ Using incorrect sized flanges that lead to nipple trauma. ▪ Bacteria, especially *Staphylococcus aureus,* enters damaged nipple. ▪ Antibiotic resistant organism enters damaged nipple.

Areas of Assessment

- **Breastfeeding history**
  - Previous mastitis, plugged ducts, or engorgement.
  - Practices that led to missed feedings and subsequent inflammation.
  - Medical condition.
  - Feeding and milk expression practices.
  - Current or unresolved nipple trauma.
  - Stress and fatigue.
  - What the healthcare provider advised, or parent has tried.
  - Mastitis symptoms may be sufficient to refer to the healthcare provider without a breast or feeding assessment, though these help if there are other issues identified.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Visible signs of mastitis as noted under "Signs."
  - Parental reported discomfort and pain.
  - Edema or engorgement.
  - Scarring from prior surgery (augmentation can put undue pressure on breast tissue).
  - Signs of a potential abscess (see the "Abscess" section on the following page).
- **Feeding assessment** - to determine effective milk transfer and to note baby's behaviors when feeding on the affected breast.

Tips and Solutions

- Prompt medical attention for assessment, diagnosis, and appropriate treatment.
- Early prevention and management to improve latch and prevent plugged ducts.
- Warm compresses before feedings to help relax breast tissue and encourage milk flow.

- Gentle therapeutic breast massage to encourage lymphatic drainage.
- Cold compresses between feedings to reduce inflammation and alleviate pain.
- A supportive bra that fits properly to avoid putting undue pressure on inflamed ducts.
- Usual hygiene and pump sanitation practices.
- Follow the healthcare provider's treatment plan fully; do not end prematurely if feeling better.
- Anticipatory guidance about signs of a breast abscess.

Curriculum Update:
According to the Academy of Breastfeeding Medicine Clinical Protocol #36, "The Mastitis Spectrum, Revised 2022," mastitis can begin with engorgement or a plugged duct and progress to inflammatory mastitis, bacterial mastitis, or an abscess. Tachycardia (heart rate over 100 beats per minute) is a symptom of mastitis. Inflammatory mastitis may occur without infection and not require antibiotics. Bacterial mastitis presents as cellulitis and may require antibiotics. It can spread to other quadrants of the breast but is not contagious, and the milk is safe. Hyperlactation contributes to inflammatory and bacterial mastitis. Cold packs between feedings reduce swelling. Older advice to "empty the breast" is not recommended as it can exacerbate the cycle of hyperlactation and mastitis reoccurrence. Instead, feed the baby on demand and express only enough to minimize extreme discomfort until production down-regulates. Deep tissue massage, toothbrushes, and other vibrating devices should be avoided.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Work with the DBE to develop the feeding plan. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth from not feeding on the affected breast.	▪ Any signs of mastitis. ▪ *Peau d'orange* appearance. ▪ Advice on medications, supplements (such as soy or sunflower lecithin), and other treatment options.

Breast Conditions – Breast Abscess

	Signs	Potential Causes
 *Courtesy of Lisa Marasco, IBCLC.*	**An abscess is a tender area with infected fluid on or in the breast.** ▪ May or may not be visible. ▪ Common signs include: • Breast pain. • Red or darker discoloration on the breast. • Draining or oozing pus. • Breast infection (*See "Mastitis" section.*) • Fatigue and lethargy.	▪ *(Also see Level 2 "Common Maternal Problems.")* ▪ Bacterial mastitis not fully resolved. ▪ Mastitis and plugged ducts. ▪ Unresolved or persistent inflammation due to overproduction/over-pumping.

Areas of Assessment

- **Breastfeeding history**
  - Signs and symptoms of an abscess.
  - Previous mastitis and the treatment course followed.
  - Previous persistent inflammation due to overproduction.
  - Advice from the healthcare provider and comfort strategies already tried.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Surface evidence of an abscess. Reddened or darker discoloration to the breast.
  - If the abscess is visible, there might be oozing pus or other signs of infection.

Tips and Solutions

- Prompt medical attention for assessment, diagnosis, and appropriate treatment.
- If breastfeeding is allowed on affected breast, assist with creative positioning.
- If baby rejects affected breast, assist with maintaining production without overproduction.
- Assist with down-regulation of milk if hyperlactation or overproduction is a cause.
- Cold compresses between feedings can help alleviate pain and inflammation.
- Work with the CPA to monitor the baby's weight and output until the abscess is healed.

Curriculum Update:
According to the Academy of Breastfeeding Medicine Clinical Protocol #36, "The Mastitis Spectrum, Revised 2022," an abscess represents a progression from bacterial mastitis or fluid collection that requires drainage via needle aspiration and antibiotics. Symptoms can worsen until drainage occurs. Continue breastfeeding from the affected breast after aspiration. Resolution may take several weeks.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth from not feeding on the affected breast.	▪ Signs of an abscess or mastitis. ▪ Treatment of the abscess, including needle aspiration and follow-up. ▪ Advice on pain medications, antibiotics, and other treatment.

Breast Conditions – Skin Conditions

	Signs	Potential Causes


 
 
 
Photos courtesy of Lisa Marasco, IBCLC.
	▪ Can appear as rashes, discoloration, lesions, dry or scaly areas, with itching and/or pain.
	▪ Common conditions include various types of rashes (pic #1), including eczema.
	▪ Less commonly psoriasis, chicken pox, or herpes simplex virus (HSV) (pic #2).
	▪ Red or dark color from a burn (pic #3), or trauma from a blunt object or a car accident.
	▪ *Pau d'orange* appearance (orange peel texture (pic #4) can indicate a severe blockage and inflammation.
		▪ Skin conditions on the breast can be caused by:
		  ▪ Allergies.
		  ▪ Viruses.
		  ▪ Fungal agents.
		  ▪ Bacteria.
		  ▪ Irritants (e.g., detergents, soaps, perfumes).
		  ▪ Incorrect use of a breast pump or flange size.
		  ▪ Trauma from a burn, blunt object, or force.
		  ▪ Poor latch or infant anomaly (e.g., tongue tie).
		  ▪ Unresolved engorgement, mastitis, abscess, or more rarely, a mass in the breast.
		▪ If HSV lesions are on breast avoid breastfeeding on the affected breast and cover the lesion.

Breast Conditions – Insufficient Glandular Tissue (IGT)

	Signs	Potential Causes
  *Photos courtesy of Lisa Marasco, IBCLC.*	**IGT, also called *hypoplasia,* is lack of glandular tissue needed for sufficient milk production. IGT can occur in one or both breasts.** ▪ Small, underdeveloped (pic # 1). ▪ Breast asymmetry (pic #1). ▪ Large space (> than 1.5") between breasts (pic #2). ▪ Long, tubular shape (pic #2). ▪ Lack of veining (pics #1 and #2). ▪ Low milk production ▪ Low weight gain in the baby. ▪ Previous surgery to correct IGT.	▪ *(Also see Level 2 "Common Maternal Problems".)* ▪ Some milk is usually produced (pregnancy and lactation contribute to glandular development). ▪ PCOS or hypothyroidism can contribute to IGT. ▪ Hypoplasia is significantly associated with a high risk for low milk production, ranging from mild to severe and subsequent inadequate growth in baby.

Areas of Assessment

- **Breastfeeding history**
  - Breast changes during pregnancy and beyond.
  - Current and prior milk production problems or DOL.
  - How breasts feel before and after feedings (i.e., perception of fullness before and after).
  - Prior surgery to correct hypoplasia.
  - Issues with infant weight gain.
  - Advice from healthcare provider.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Visual signs of insufficient tissue as described in the "Signs" section above.
  - Presence of scars from prior surgeries.
  - Visible signs of breast changes (*see the "Assessment: Pregnancy" section*).
- **Infant Assessment**
  - Signs of inadequate intake (*see the "Complex Infant Problems" section*).
  - Concerns about growth and development noted by the CPA or provider.

Tips and Solutions

- Develop a breastfeeding plan prenatally if the condition is identified during the pregnancy.
- Close follow-up to monitor the baby's weight and signs of appropriate milk production.
- Frequent feedings beginning in the first hour to protect and build milk production.
- Frequent skin-to-skin care to maximize feedings at the breast.

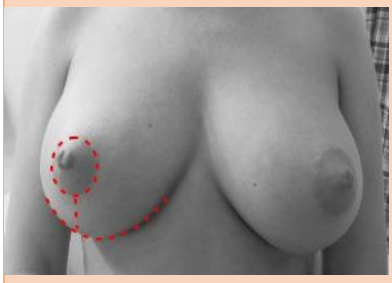
- Offer a breast pump and teach hand expression to increase production
- If supplements are needed, suggest a nursing supplementer so baby stimulates release of lactation hormones while receiving the supplements. The parent and baby also enjoy close physical contact during feedings.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Work with the DBE to develop the feeding plan. Peer Counselor ▪ Ongoing support.	▪ Baby is experiencing slow or faltered growth from IGT.

Breast Conditions – Surgery

Signs		Potential Causes


 
 
	Breast surgeries include augmentation, reduction, biopsies, lumpectomies, or draining a breast abscess.
	▪ Scar around the areola (pic #1), under the breast fold, or on the side.
	▪ Breastfeeding is possible in most cases, and parents may produce at least *some* milk.
	▪ Signs that surgery affects milk production:
	  ▪ Low milk production.
	  ▪ Slow infant gain or inadequate growth.
	▪ Recurrent plugged ducts or inflammation.
		▪ Milk production depends on the reason for the surgery.
		▪ *Biopsy:* usually compatible with breastfeeding.
		▪ *Liposuction* to remove fatty tissue: minimal impact since nerves and blood supply may not be damaged.
		▪ *Lumpectomy:* compromising if nerves and ducts severed.
		▪ *Augmentation:* usually compatible if incision did not sever nerves, ducts, or blood supply (pic #2). The implant might lead to plugged ducts or engorgement. If surgery was to correct IGT, then IGT can compromise production.
		▪ *Reduction:* repositions areola and nipple ("free nipple technique" - pic #3); can compromise production. In some cases, nerves and ducts can regenerate and allow milk synthesis.

Areas of Assessment

- **Breastfeeding history**
  - Reason for and type of surgery.
  - What the surgeon advised about the ability to breastfeed and make milk.
  - When the surgery occurred and whether the breast has re-innervated.
  - Follow-up treatments that were necessary.
  - Underlying issues that compromise milk production (such as IGT or hormonal issues).
  - Issues of infant growth and development.
  - Advice from the parent's or infant's healthcare provider.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Signs of breast changes (*see "Breastfeeding Assessment: Prenatal*).
  - Location of the scar.
- **Infant assessment** - might be needed if milk production is affected. Work with the CPA to monitor weight and growth trends, and any other infant concerns that might compromise milk production (*see "Complex Infant Problems" section*). Ensure baby transfers milk effectively.

Tips and Solutions

- Encourage breastfeeding. Most parents make at least a partial production for the baby.
- Follow up frequently to assure milk production is sufficient.
- Provide anticipatory guidance to prevent and manage engorgement and plugged ducts.
- If supplements are needed, a nursing supplementer stimulates nipples while supplementing. This also helps the parent and baby enjoy the benefits of close physical contact during feedings.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight and growth. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth.	▪ Questions about the type of surgery conducted.

Induced Lactation

Induced Lactation	Signs	Potential Causes


Photo courtesy of Centers for Disease Control and Prevention, Every Mother, Inc., and Regina Maria Roig-Romero.
	Induced lactation describes establishing milk production without having been pregnant.
	
	▪ Milk production can occur with pumping and medications.
	▪ May be challenging and take longer to produce milk.
	▪ Might need to supplement.
	▪ Older baby used to the bottle may have added challenge.
		▪ Reasons to induce lactation:
		  ▪ Adoption.
		  ▪ Fostering a child.
		  ▪ Same sex partners both wish to breastfeed the baby.
		  ▪ Assisting relative unable to care for the baby.
		  ▪ Parenting a baby born to a surrogate mother.
		  ▪ Nutritional and emotional benefits.

Curriculum Update:
With the 2022 national formula shortage triggered by reports of contaminated formula, many WIC parents sought help to induce lactation or relactate (described on the next page). WIC staff can work with parents on realistic plans for how to recover, rebuild, or launch milk production.

Areas of Assessment

- **Breastfeeding history**
  - Reasons for inducing lactation and goals for partial or full human milk feedings.
  - PCOS, hypothyroidism, IGT, breast surgeries that might compromise milk production.
  - Knowledge and interest in using a breast pump or nursing supplementer.
  - Any infant conditions.
  - Advice from the healthcare provider.
- **Breast assessment** - following State approved protocols for a breast observation. A breast assessment may not be necessary based on the general assessment and history. It might help identify IGT or breast surgeries that might compromise milk production.
- **Feeding assessment** - if the baby is with the parent, assess a feeding for latch and milk transfer, or any infant issues that might compromise breastfeeding.

Tips and Solutions

- Might establish full production over time, produce a small amount of milk, or no milk.
- Help parents define success in terms of their relationship with the baby.
- See content in *"Complex Infant Problems"* to help coax a reluctant nurser to the breast.
- A combination of interventions may increase the likelihood of successful lactation, including:
  - Pump with a quality double electric breast pump.
  - Put the baby to breast as soon as possible after the baby arrives.
  - Hold the baby skin to skin.
  - Use a nursing supplementer to stimulate the breasts while supplementing.
  - Wean from bottle nipples if the baby has been receiving them.
  - Use a nipple shield temporarily if the baby has trouble switching from a bottle nipple.
  - Obtain rest, hydration, and healthy nutrition.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Work with the DBE to develop feeding plan if unable to fully breastfeed. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth from transition.	▪ Treatment plan to induce lactation, including medications that may help.

Relactation

	Signs	Potential Causes

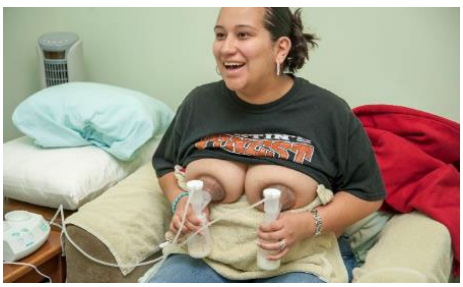
	**Relactation refers to re-establishing lactation after it previously ended.**
	▪ Nipple stimulation can reactivate the neuroendocrine loop to resume lactation.
	▪ Requires motivation and commitment but easier than inducing lactation.
	▪ Issues the parent may face:
	  ▪ Breast tissue has atrophied.
	  ▪ Baby resists latching.
	  ▪ Time and persistence needed.
	  ▪ Family and life demands.
	▪ Challenge depends on how long it has been since lactation ceased.
	▪ Younger babies are more likely to resume than older babies.
		▪ Common reasons to relactate:
		  ▪ Baby developed formula intolerance.
		  ▪ Breastfeeding discontinued due to medical condition now resolved.
		  ▪ Missing the bond of breastfeeding.
		  ▪ No access to formula, safe water, or bottle-feeding supplies in the event of an emergency.

Areas of Assessment

- **Breastfeeding history**
  - Reason for discontinuing breastfeeding, desire to relactate, goals for human milk feedings.
  - Medical conditions (PCOS, hypothyroidism, IGT, breast surgeries) that previously compromised milk production.
  - Knowledge and interest in using a breast pump and nursing supplementer.
  - Any infant conditions that might compromise re-establishing lactation.
  - Demands from family or employment.
  - Knowledge and expectations about the process.
  - Experience using a breast pump or other breastfeeding aids.
  - Any previous efforts to coax baby to the breast.
  - Advice from the healthcare provider.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Asymmetry, hypoplasia, or underdeveloped tissue that might have contributed to the early discontinuation of breastfeeding.
  - Evidence of scars from prior surgery.
- **Feeding assessment** - to determine whether the baby can latch effectively and transfer milk.

Tips and Solutions

- Follow principles of rebuilding milk production (*see "Low Milk Production" section*).
  - Breast pump to stimulate production.
  - Nursing supplementer to stimulate breasts while supplementing.
  - Skin-to-skin, breast massage, warm shower/baths, and emotional support increase oxytocin release.
- Signs that milk production is resuming:



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  - Breasts feel fuller and milk might be leaking.
  - Amount being pumped increases.
  - Baby's stools become softer and looser, and color may change from brown to yellow.
- (*See the "Complex Infant Problems" and "Supplementation" sections for ideas on encouraging a reluctant nurser to latch.*) Other ideas to consider:
  - Hold baby frequently skin to skin for breast access.
  - Offer the breast when baby is drowsy and calm.
  - Use nipple shield temporarily if baby refuses to latch.
  - Encourage parents not to make it a battle. Try again at another feeding.
- Work with the CPA to monitor the baby's weight throughout relactation. Offer weight checks.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Work with DBE to develop feeding plan if unable to fully breastfeed. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth.	▪ Advice on medications or herbal remedies that can help improve milk production.

Other Complex Conditions – Hormone Conditions

	Signs	Potential Causes
 *Courtesy of Lisa Marasco, IBCLC.*	**Hormonal conditions can upset the hormone balance required to make milk.** ▪ Common signs include: • Underdeveloped breast tissue (see pic). • No breast changes during pregnancy. • Delayed onset of lactogenesis (DOL). • Low milk production. • Postpartum heavy bleeding or hemorrhage.	▪ Hormonal conditions that can affect lactation include: - *PCOS:* affects prenatal gland development and results in hypoplasia and IGT. - *Hypothyroidism:* low thyroid that interferes with milk production. - *Diabetes:* associated with DOL and low production; insulin has key role in lactation. - *Placental retention:* preventing progesterone from dropping, which signals Lactogenesis II. - *Pituitary dysfunction:* can inhibit release of prolactin and oxytocin needed to make and release milk.

Areas of Assessment

- **Breastfeeding history**
  - Medical conditions and medications related to hormonal imbalance.
  - Birth and early feeding practices that might have affected milk production.
  - When milk volume began to increase.

  - Breast changes during pregnancy.
  - Placental retention (excessive bleeding, clotting, continual pain, or fever).
  - Advice from the healthcare provider.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Unusual presentation such as hypoplasia and other signs of IGT.
  - Breast and nipple conditions that might affect milk production and transfer.
  - Signs of breast changes.
- **Feeding assessment** - to observe the baby's behavior at the breast (e.g., excessive sleepiness and lethargy) and whether the baby can latch and remove milk.

Tips and Solutions

- Speak with healthcare provider about safe treatment/medication during pregnancy.
- Skin-to-skin care in the first hour and beyond.
- Early, frequent feedings at the breast.
- Weight checks at the WIC clinic to monitor weight gain. (*See the "Complex Infant Problems" section for more solutions for slow gaining infants.*)
- If supplementation is needed, a nursing supplementer stimulates release of lactation hormones while the baby feeds at the breast.
- Milk expression using a quality double electric breast pump to stimulate production.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Work with DBE to develop the feeding plan. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth.	▪ Follow-up treatment and needed medications.

Other Complex Conditions – Bariatric Surgery

	Signs	Complications
 *Courtesy of Lisa Marasco, IBCLC.*	**Bariatric surgery is done on the stomach or intestines for treatment of a metabolic condition resulting in rapid weight loss. Increasing among parents, with gastric bypass the most common.** ▪ DOL. ▪ Low milk production. ▪ Uncomfortable position/latch. ▪ Slow/faltered infant weight. ▪ Lack of breast changes.	▪ Sagging or long, pendulous breasts from reduction of fat tissue (pic). Hard to latch. ▪ Breast lift surgery to correct sagging breasts. ▪ Vitamin B12 deficiency or iron-deficiency anemia, affects infant weight gain.

Areas of Assessment

- **Breastfeeding history**
  - Reason for the surgery and when it was conducted; other surgeries conducted.
  - Vitamin deficiency and/or nutrition modification advised by the CPA or healthcare provider.
  - Low milk production, including DOL and lack of breast changes.
  - Infant latch concerns.
  - Issues with infant weight gain.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Signs of breast ptosis (sagging).
  - Breast or nipple concerns (e.g., large areolas, long nipples).
  - Scarring from breast surgeries.
- **Feeding assessment** - to determine the effect of the parent's sagging breasts on the baby's ability to latch effectively and transfer milk, and alternative positions to suggest.
- **Infant assessment** - to determine if any low milk production relates to infant concerns. (*See the "Complex Infant Problems" section.*)

Tips and Solutions

- Anticipatory guidance during pregnancy to emphasize getting a good start with breastfeeding.
- Frequent skin-to-skin care.
- Positions for pendulous or sagging breasts.
- Compress areola to fit in the baby's mouth.
  - Sandwich hold to compress areolar tissue to better fit the baby's mouth.
  - Dancer hand hold to help baby stay latched.
  - Laid-back position to work with gravity to get a larger mouthful of breast tissue.
  - Football hold or cross-cradle for more support.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth.	▪ Recommendations for addressing vitamin deficiencies.

Other Complex Conditions – Chronic Illness

Signs

▪ Chronic illness can affect the ability to breastfeed. This can include:
  ▪ Autoimmune disease (e.g., lupus, multiple sclerosis, or rheumatoid arthritis).
  ▪ Musculoskeletal injury.
  ▪ Neurological injury/disease (e.g., epilepsy or spinal injury).
  ▪ Cancer.

Potential Causes

- Each condition has its own risks and can impact varied breastfeeding issues (e.g., milk production, positioning, contraindicated medication).
- Mothers with:
  - *Lupus:* vasospasm and extreme fatigue.
  - *Multiple sclerosis:* lower risk of relapse during pregnancy and lactation but may flare up and affect handling the baby.
  - *Rheumatoid arthritis:* may have reduced symptoms in pregnancy and lactation but may need meds incompatible with breastfeeding.
  - *Muscular or neurological disorders:* mobility issues positioning baby.
  - *Epilepsy:* increased risk of seizures due to maternal fatigue, labor/delivery stress on the body, and hormonal imbalances. Many medications are safe during lactation.
  - *Cancer:* milk cessation if treatment options require it.

Areas of Assessment

- **Breastfeeding history**
  - Concerns related to the chronic illness.
  - Treatment plans prescribed by the healthcare provider.
  - Early feeding challenges and level of fatigue.
  - Healthcare provider recommendations for breastfeeding.
  - Parent's knowledge about breastfeeding with the condition.
- **Feeding assessment** - might help determine need for creative options for positioning and latch.

Tips and Solutions

- The parent's healthcare provider will provide the medical treatment plan and follow-up. The DBE assists with making breastfeeding easier. Tips will be customized to the illness and the parent's goals, and might include:
  - Solutions to gain more rest (*see the "Ongoing Breastfeeding" section*).
  - Positioning options (*see the "Physical Challenges" section*).
  - Options for securing practical help to meet daily parenting challenges.
  - Breastfeeding aids that might make it easier to maintain or build milk production.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop feeding plan if unable to fully breastfeed. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth.	▪ Efficacy of breastfeeding with the illness. ▪ Safety of medications and prescribed treatment plans while breastfeeding.

Other Complex Conditions – Physical Challenges

	Signs	Potential Causes
 *Photo courtesy of the Centers for Disease Control and Prevention, Every Mother, Inc., and Regina Maria Roig-Romero.*	▪ Physical challenges that may include: · Spinal cord injury. · Congenital limb absence. · Stroke or condition affecting use or strength of arms and hands. · Visual impairment. · Surgery postpartum.	▪ Ways challenges affect breastfeeding: · Inability to hold baby to latch. · Wheelchair confinement may limit movement for positioning and latch. · Absence of a limb needed to adjust clothing and latch. · Significant fatigue. · Low milk production from impaired MER due to spinal cord injury. · Negative comments that breastfeeding is too challenging.

Areas of Assessment

- **Breastfeeding history**
  - History and nature of the physical challenge.
  - Medications the parent is taking.
  - Early breastfeeding issues, prior experiences, and how the parent compensated for them.
  - Creative solutions the parent has already tried.
  - Breastfeeding goals and available support.
  - Advice from healthcare providers.
- **Feeding assessment** - to determine whether the baby can initiate and maintain latch. Learn if the parent is open to using a breastfeeding aid if the baby is unable to latch effectively.

Tips and Solutions


Courtesy of Tricia Cassi, IBCLC.

- Parents with physical challenges can breastfeed with creative positioning and latch. In some cases, it might be easier to breastfeed than to prepare and feed bottles. Consider:
  - Side-lying position to more easily roll over to baby.
  - Hold baby in a sling for access to the breast.
  - A support person brings the baby for feedings.
  - Adjust changing table height so the baby can lie on it while the parent feeds from the wheelchair. A countertop or table or might also work if baby is secure.
  - Elevate the parent's feet in the wheelchair to raise their lap. Pillows can help to bring the baby to the breast.
  - If one breast is too challenging to maneuver, pump milk on that breast and feed on the other breast.
  - Exclusive pumping may be a better option than breastfeeding given the physical limitations.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Other Resources
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop feeding plan if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth.	▪ Local support groups for people with disabilities. ▪ Online support networks for breastfeeding parents with physical disabilities.

Bring It Home!
Use the handout, "**Complex Maternal Problems Summary - Level 4**" for a synopsis of the key teaching points in this section that can serve as a handy resource.

Problem Solving—Complex Infant Problems

Sneak Preview:
The Level 4 content in the "Complex Infant Problems" section addresses a wide variety of complicated breastfeeding challenges that can arise with the infant. It also addresses the DBE's role in assisting parents, and when to make appropriate referrals.

Level 4 Competencies

- Assess breastfeeding for infants with physical, neurological, or other conditions that affect breastfeeding.
- Assist parents with breastfeeding infants that have complex problems that affect breastfeeding.
- Assess breastfeeding for parents whose infants have gastrointestinal concerns affecting breastfeeding.

Complex Latch Issues

Signs

Latch difficulties can range from total inability to latch to latching but causing pain or not suckling appropriately.
 	
▪ Common signs include:
  ▪ Unable to latch onto the breast.
  ▪ Arching, screaming, pushing away, and other resistant behaviors.
  ▪ Unable to maintain a seal.
  ▪ Unable to suckle effectively or transfer milk to gain weight.

Potential Causes

Oral Suctioning

iStock Photo#91047196

- Oral aversion from suctioning the baby's oral cavity; deep suctioning can trigger a vagal response resulting in oral defensiveness. Baby might also reject a bottle nipple.
- Weak suck from hypotonia (poor muscle tone), or babies who are sleepy, ill, preterm, malnourished, or jaundiced.
- Disorganized suck or sucking disorder as a result of:
  - Delayed feedings.
  - Underdeveloped motor skills.
  - Gastroesophageal reflux.
  - Fatigue from heart condition.
  - Neurological challenges.

Tongue Tie

Pierre Robin Syndrome

Torticollis

Janell Aby, MD. All Rights Reserved.

- Oral anomaly such as tongue tie, cleft lip/palate, lack of fat pads in the cheeks to maintain a seal, bubble or high palate, Pierre Robin syndrome torticollis or jaw asymmetry; long or large tongue.

Areas of Assessment

- **Breastfeeding history**
  - Early breastfeeding practices or medical interventions (e.g., separation or use of formula).
  - Birth experience.
  - Any medical condition of the parent or baby.
  - Recommendations of the baby's healthcare provider.
- **Infant assessment**
  - Oral cavity (fat pads in cheeks, tongue or lip tie, high palate, thrush).
  - Cranial defect such as a recessed jaw or asymmetry.
  - Body tone.
- **Feeding assessment**
  - Baby's behaviors when latching and throughout the feeding.
  - Parent's response when baby attempts to latch (e.g., fatigue, frustration, or overwhelmed).
  - Overactive MER.
  - Clicking sounds during sucking (can occur with tongue restriction or other issues).
  - Audible swallowing throughout the feeding.
  - Infant signs of satiation.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Flat/inverted nipples, large areola, nipple anomalies, or breast edema.
  - Nipple when baby detaches; should be rounded and no trauma, blistering, or blanching.
  - Signs of infection.

Tips and Solutions

When babies have difficulty latching, a variety of solutions can be tried depending on the cause. In addition to the Level 2 basic solutions (*See "Common Infant Issues"*), consider:

- Vary the breastfeeding position. For example:
  - If unable to maintain a seal or baby slips into a shallow latch in the cradle position, laid-back breastfeeding or the football hold may provide better support.
  - Try laid-back breastfeeding if unable to get a deep latch due to a cranial defect.
  - Sandwich or Dancer hold for support.
- Supplementation might be indicated if the baby does not transfer milk.
- For oral aversion, transition back to the breast in stages, beginning with a small syringe and gradually regaining trust in feedings. (*See "Management Tools" section.*)
- Use a quality breast pump to remove milk and maintain production.
- Temporarily use a nipple shield to help form a teat or to transition back to the breast.
- Work with the CPA to monitor the baby's weight to ensure adequate weight gain.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Develop feeding plan with DBE. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Further assessment and monitoring of the infant.	▪ Further assessment and any medical treatment that might be needed to treat nipple trauma or infection.

Underweight

	Signs	Potential Causes
	**The primary sign of an underweight infant is that the baby is not gaining sufficient weight or growing properly.** ▪ Weight loss after a slow start with breastfeeding. ▪ Sudden weight loss. ▪ Warning signs: • Fewer than the recommended number of diapers. • Scant or meconium stools several days after the birth (see pic). • Excessive sleepiness; doesn't wake easily for feedings. • Weak or disorganized suck. • Weak cry. • "Hanging out" at the breast and non-nutritive sucking.	▪ Complex infant problems (addressed throughout this section), such as: ▪ Weak or disorganized suck. ▪ Oral anomaly inhibiting milk transfer. ▪ Neurological problem. ▪ Congenital heart defect. ▪ Tires easily. ▪ GERD. ▪ Illness (common or chronic). ▪ Lactose overload. ▪ Complex maternal problems (*see the "Complex Maternal Problems" section.*): ▪ Anatomical breast issue (e.g., IGT or nipple anomaly). ▪ Prior breast surgery. ▪ Hormonal condition (e.g., PCOS or hypothyroidism). ▪ Chronic medical condition.

Areas of Assessment

- **Breastfeeding history**
  - Birth experience.
  - Early feeding practices and challenges (e.g., DOL, early supplementation).
  - Current practices (e.g., feeding frequency, offering both breasts at feedings).
  - Illness or medical condition of the parent or baby.
  - Recommendations of the baby's healthcare provider.
- **Infant assessment**
  - Developmental issues related to the baby's oral cavity.
  - Cranial defects such as jaw asymmetry or flat head that might affect milk transfer.
- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Breast or nipple anomalies.
  - Breast edema.
  - Scarring from surgery.
- **Feeding assessment** - to note any position, latch, or infant feeding behaviors that might explain the baby's inability to gain weight.

Tips and Solutions

- Work closely with the CPA to monitor progress and tailor the food package accordingly.
- In addition to basic solutions outlined in Levels 2 and 3, solutions to address underlying causes of poor weight gain related to specific conditions are outlined in this section.

- Supplementation might be needed:
  - If milk volume is sufficient, assist with milk expression to stimulate milk production. The baby can receive the expressed milk after feedings for extra calories.
  - After the feeding, pump remaining milk which is higher in fat. The fatty part rises to the top after refrigeration. Spoon off the fattier milk and feed it to the baby using an alternative device.
  - If large amounts of supplements are needed, consider a nursing supplementer, if acceptable.
  - Gradually wean from supplements when the healthcare provider advises. (*See the "Supplementation" section.*) Monitor diapers and changes in the baby's stools that indicate the baby is taking in more milk.

Courtesy of Tricia Cassi, IBCLC.

- Assist the family with strategies to address the underlying challenges.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider
CPA ▪ Monitor baby's weight and growth trends. ▪ Develop a feeding plan with DBE if low milk production. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby exhibits signs of dehydration. ▪ Baby experiences slow or faltered growth as a result of the condition.

GI/Nutrition Issues – Managing Lactose Overload

	Signs	Potential Causes


Courtesy of Lisa Marasco, IBCLC.
	▪ In addition to common signs related to feeding patterns in Level 3, signs of lactose overload include:
	  ▪ Baby not gaining weight well.
	  ▪ Baby seems unhappy.
	  ▪ Baby pulls off breast after MER.
	  ▪ Parents tried various remedies for colic.
	  ▪ Parent "stockpiling" milk for later use.
	  ▪ Recurrent engorgement,
		▪ In addition to common causes in Level 3, overproduction of milk can be a factor and can be caused by:
		  ▪ Hyperthyroidism.
		  ▪ Pituitary concerns.
		  ▪ Prolactinoma (benign tumor of the pituitary gland).
		  ▪ Excessive pumping.
		▪ Overproduction can also *cause:*
		  ▪ Forceful MER, causing baby to pull off the breast.
		  ▪ Baby appears to be choking on the milk.
		  ▪ Baby takes in excess air or spits up milk.
		  ▪ Frequent, large, watery, greenish, explosive stools
		  ▪ Baby screams or cries in pain.

	Signs	Potential Causes
	plugged ducts, or mastitis.	▪ Overfull, leaking breasts do not soften after feedings. ▪ Breast inflammation and edema can lead to plugged ducts and mastitis.

Areas of Assessment

- **Breastfeeding history**
  - Current feeding practices.
  - Parent's perception of how breastfeeding is going.
  - Signs of overproduction (e.g., breast fullness after feeding, excessive pumping, recurrent mastitis).
  - What the parent has already tried.
  - Medical condition of the parent or infant.
  - Recommendations of the baby's healthcare provider.
- **Feeding assessment**
  - Baby's behaviors before, during, and after feedings, including pulling off the breast and gasping, coughing, choking, or crying.
  - Effectiveness of the baby's latch.
  - Clicking sounds while baby is nursing.
  - Signs of milk transfer.
- **Infant assessment** - to determine the baby's weight patterns and output.

Tips and Solutions

- Therapeutic breast massage before feedings to help dislodge fat globules within the milk ducts.
- Breast compression during feeding to move milk through the breast (*See the "Management Tools" section*).
- Express a small amount of milk before latch to slow the flow to a comfortable level.
- Laid-back position to control the flow of milk.
- Avoid over-use of a breast pump.
- "Block" feedings (i.e., feed frequently on one breast) may be recommended with caution and under supervision of a DBE as it can increase the risk of plugged ducts, mastitis, poor infant weight gain, and too great a decrease in milk production.
  - Feed one breast for 3 hours and then the second breast for 3 hours.
  - Express enough milk from the opposite breast to alleviate discomfort without overstimulating production. This gradually down-regulates production to match the baby's needs.
  - Monitor diapers for improved consistency and color.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Develop a feeding plan with DBE if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth. ▪ Rule out any medical conditions that might be causing the infant's distress.

GI/Nutrition Issues – GERD

Signs	Potential Causes
When gastroesophageal reflux becomes *disease,* it is referred to as GERD. It can have a significant effect on the baby's health. ▪ Signs are similar to lactose overload and food sensitivity. ▪ The baby might experience: • Slow or faltered growth. • Coughing and wheezing. • Excessive crying and irritability. • Arching and pulling away from the breast. • Sleep disturbances. • Vomiting. • Persistent diarrhea. • Gastrointestinal bleeding.	▪ Conditions that increase the risk of GERD for infants include: ▪ Prematurity. ▪ Neurological impairment. ▪ Respiratory disorder. ▪ Genetic disorder, such as Down syndrome.

Areas of Assessment

- **Breastfeeding history**
  - Baby's feeding patterns (e.g., frequency and how the parent knows it is time to feed).
  - Parent's description of the baby's discomfort and when it occurs.
  - Recommendations from the baby's healthcare provider.
  - What the parent has already tried.
- **Feeding assessment**
  - Baby's behaviors during and after feeding (e.g., coughing, irritability, pulling off the breast).
  - Length of the feeding, and how the feeding ends.
  - Effectiveness of the latch.

Tips and Solutions

- The baby's healthcare provider diagnoses GERD and recommends treatment, which might include medications.
- Offer solutions to assist with breastfeeding, including:
  - Feed in an upright position, such as the football hold or sitting upright on the parent's lap.
  - Keep baby upright for 10-20 minutes after feedings.
  - If formula supplements are recommended, offer it in a nursing supplementer (*see the "Management Tools" section*) or after the feeding to encourage vigorous sucking to occur at the breast to stimulate production.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Assist the parent if food sensitivity also occurs. ▪ Develop a feeding plan with the DBE if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth. ▪ Baby experiences signs of illness, such as vomiting, coughing/wheezing, or fever.

Other Conditions – Ankyloglossia

	Signs	Potential Causes
	**Ankyloglossia (tongue tie) is a congenital anomaly in which the lingual frenulum, which connects the underside of the tongue to the floor of the mouth, is tight or restricted.** ▪ Signs of tongue tie: • Unable to extend the tongue forward beyond the gum line because of limited range of motion. • Heart-shaped appearance to the tip of the baby's tongue.	▪ A restricted lingual frenulum (tongue tie) is caused by an abnormally short and/or thick lingual frenulum. ▪ It affects over 10% of infants and can run in families. ▪ It can potentially cause: · Nipple pain/trauma. · Limited milk transfer. · Low weight gain in baby. · Low milk production if not expressing milk baby does not remove.
 *Courtesy of Amber Ewing.*	**"Lip tie" occurs when the *labial frenum,* the tissue that anchors the upper lip to the top gum, is thick or too tight.** ▪ Signs of lip tie: • Thick labial frenum. • Pursed lips. • Lips do not flare out over the areola when latched.	▪ A restricted labial frenum (lip tie) can cause: · Shallow latch. · Ineffective/weak suck. · Poor milk transfer. · Slow weight gain. · Reflux and colic. · Nipple pain and trauma. ▪ Low milk production if not expressing residual milk.

Areas of Assessment

- **Breastfeeding history**
  - Parent's description of pain.
  - Family history of tongue tie and poor breastfeeding outcomes with previous children.
  - Ankyloglossia identified by the baby's healthcare provider or hospital staff.
  - Recommendations of baby's healthcare provider regarding severity and treatment options.
- **Infant assessment** - to determine issues with slow or faltered weight, signs of milk transfer, and presence of a tight lingual frenulum or labial frenum.
- **Feeding assessment** - to determine how the parent has been helping the baby position and latch, including shallow latch, baby's feeding behaviors, and issues with positioning and latch.

- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Nipple trauma, damage, or evidence of infection.
  - Milk production issues that might have resulted from the baby's inefficient feeding.

Tips and Solutions

- A *frenotomy* might be recommended by the baby's healthcare provider or a medical specialist (e.g., pediatric dentist or ENT) skilled in identifying and treating infant tongue tie. Research shows that this simple surgical intervention often results in significant improvement.
- **NOTE:** It is *not* the DBE's role to diagnose a tongue-tie, recommend treatment, or manage the condition. However, the DBE can assist with solutions to improve breastfeeding, such as:
  - Feeding positions that encourage deep latch (e.g., laid-back or football hold).
  - Upright position if the baby has reflux.
  - Ways to address nipple pain. (*See the "Complex Maternal Problems" section*.)
  - Work with the CPA to monitor the baby's weight and output.
  - May need to rebuild milk production. This might include pumping after feedings if baby does not drain breasts sufficiently.

Bring It Home!
Consider this language when counseling a WIC participant about your concerns over tongue or lip tie:

It appears your baby has a hard time draining your breasts. It is possible it is due to restricted tongue or mouth movement. We suggest you speak with your baby's healthcare provider about how it is affecting your breastfeeding. Would you like me to share what I have observed with your baby's healthcare provider?

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Develop a feeding plan with DBE if insufficient milk production. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Assessment and possible treatment of ankyloglossia. ▪ Baby has slow or faltered growth.	▪ Nipple trauma or infection requiring medical treatment.

Other Conditions – Common Illnesses

	Signs	Potential Causes
 *iStock #00001411301*	**Infants can experience a variety of common illnesses in the first year of life, including colds, viruses, ear infections, and eczema.** ▪ Signs of illness in an otherwise healthy infant can include: • Diminished interest in feedings. • Stuffy or runny nose. • Pulling on the ear. • Vomiting or diarrhea. • Fever. • Rashes. • Fussiness and crying. • Lethargy.	▪ Common childhood illnesses can have a temporary negative effect on breastfeeding, including: · Pulling off the breast frequently to breathe. · Disinterest or refusal to breastfeed. · Excessive fussiness or crying. · Not finishing the feeding. · Insufficient draining of the breast. · Excessive sleepiness. · Engorgement.

Areas of Assessment

- **Breastfeeding history**
  - Signs of illness (mentioned above).
  - Parent's concerns about their baby.
  - Concerns that might affect the baby's ability to feed effectively.
  - What the parent has already tried.
  - Milk production or signs of engorgement.
  - Recommendations from the baby's healthcare provider.
- **Infant assessment** – following State approved protocols for a breast observation, note:
  - Signs of illness.
  - Infant's behaviors.
- **Feeding assessment** - to determine how the baby latches, and positions that might be more comfortable for the infant.

Tips and Solutions

- Breastfeeding provides nutrition and immunological protection as the baby recovers from illness.
- If baby cannot feed well due to excess fluid and mucous, breastfeed in an upright position.
- Use an alternative feeding device in an upright position.
- Prompt referral to the baby's healthcare provider; baby with vomiting or diarrhea is at high risk for dehydration.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Tailor the food package. ▪ Work with DBE to develop feeding plan. Peer Counselor ▪ Ongoing support.	▪ Assessment, diagnosis, and treatment of the baby's illness. ▪ Baby has slow or faltered growth.

Other Conditions – Jaundice

	Signs	Potential Causes


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	Hyperbilirubinemia (jaundice) is a condition where there is too much bilirubin in the blood.
	▪ Yellowish color to eyes or skin (not always visible in dark pigments).
	▪ Sleepiness or difficulty waking for feeds.
	▪ Lethargy.
	▪ Hypotonia.
	▪ Poor feeding behaviors.
	▪ Weak suck.
	▪ Weight loss.
		▪ All people have bilirubin in the blood. It comes from red blood cells that are broken down by the liver. It can take several days for the newborn's immature liver to adequately remove bilirubin.
		▪ Colostrum acts as a laxative to excrete bilirubin.
		▪ Jaundice results from a build-up of bilirubin.
		▪ *Breastfeeding jaundice** occurs from insufficient milk intake or mismanagement of breastfeeding.
		  ▪ Delayed first feedings, poor positioning and latch, and infrequent feeds.
		  ▪ Lack of milk reduces stooling. Baby reabsorbs bilirubin and it builds up.
		  ▪ Late preterm/early term infants are at risk.
		▪ *Breastmilk jaundice* is prolonged jaundice that persists for several weeks, despite early weight gain. Breastfeeding should continue. Bilirubin levels will gradually decrease over time.

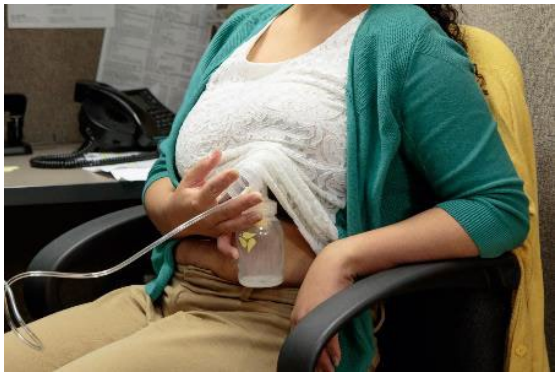
Curriculum Update:
The American Academy of Pediatrics provided a 2022 update to their "Clinical Practice Guideline Revision: Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation." The update notes that "breastfeeding jaundice" is the term used to describe jaundice that typically peaks on days 3 to 5 after birth, and is "almost always" associated with excess infant weight loss. However, the AAP notes that this type of jaundice might be more correctly described as "suboptimal intake hyperbilirubinemia" since low milk and caloric intake contribute to the condition rather than breastfeeding per se. Learn more at:
https://publications.aap.org/pediatrics/article/150/3/e2022058859/188726/Clinical-Practice-Guideline-Revision-Management-of

Areas of Assessment

- **Breastfeeding history**
  - Baby's age and any medical complication, including the birth experience.
  - Early feeding practices, including issues with positioning, latch, and feeding frequency.
  - Recommendations from the baby's healthcare provider.
- **Infant assessment** - to identify any yellowish coloring in the baby's eyes or skin, baby's ability to wake for feedings, baby's weight trends, and output.
- **Feeding assessment**
  - Milk transfer.
  - Baby's behaviors/sleepiness at the breast.
  - Effective positioning and latch to stimulate effective milk removal.
  - Flat or inverted nipples, breast, or nipple anomaly.

Curriculum Update:
The AAP 2022 "Clinical Practice Revision" notes that breastfeeding or "suboptimal intake" jaundice can be prevented by encouraging breastfeeding within the first hour after birth and frequent feedings (at least 8 times in 24 hours). The AAP also notes that clinicians should assess for adequate suckling, audible swallowing, and appropriate output to determine appropriate intake. They also advise that "breastfed infants who are adequately hydrated should not routinely receive supplementation with commercially available infant formula" and "oral supplementation with water or dextrose water should not be provided to prevent hyperbilirubinemia or decrease bilirubin concentrations."

Tips and Solutions



- Enhance milk transfer as needed:
  - Adjust position and latch.
  - Increase skin-to-skin contact.
  - Respond to infant feeding cues.
  - Increase feeding frequency and duration.
- Express milk after feedings to maintain/build production. Feed expressed milk to the baby for extra calories and to increase stooling.
- High bilirubin levels can be serious. The baby's healthcare provider will order blood work to determine the need for phototherapy.
- If breastfeeding must be interrupted temporarily, express milk to maintain production.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with the DBE to develop a feeding plan if temporary interruption of breastfeeding or supplements are advised. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Assess, diagnose, treat, and monitor the infant's jaundice. ▪ Baby has slow or faltered growth.

Compromised Infants

Highly compromised infants receive care from a specialized team of healthcare professionals as part of a comprehensive plan of care. The team might include the baby's primary care provider, neonatologist, cardiac, respiratory, and other specialist, respiratory therapist, occupational therapist, lactation team, case workers, home visiting specialist, and child development expert.

The DBEs role is to support the goals of the baby's care team and assist parents with meeting their breastfeeding goals. This may include assisting with pumping to maintain milk production or assisting with feedings. The DBE also works with other WIC staff, such as the CPA, to support the family in meeting their goals, tailor food packages, and promote optimal health outcomes for the baby.

Compromised Infants – Chronic Illness

	Signs	Potential Causes


©Texas Department of Health Services
	Chronic illnesses last for a long time and require ongoing medical attention.
	▪ Baby born with a congenital defect.
	▪ Chronic illness (e.g., cancer, asthma, or seizure disorder).
	▪ Requires surgery, medication, or treatment.
	▪ Baby needs referral to the healthcare provider for:
	  ▪ Faltered growth.
	  ▪ Fever.
	  ▪ Lethargy.
	  ▪ Respiratory distress.
	  ▪ Persistent vomiting or diarrhea.
	  ▪ Rapid breathing.
	  ▪ Sleep issues or apnea.
	  ▪ Poor muscle tone.
		▪ Chronic illnesses vary in their intensity and impact on breastfeeding.
		▪ Some require supplementation or not breastfeeding (e.g., galactosemia).
		▪ Some have incompatible medications.
		▪ Some require hospitalization or separation.
		▪ Milk production can be impacted because of the baby's:
		  ▪ Suppressed appetite.
		  ▪ Inability to latch well.
		  ▪ Fatigue and inability to feed long enough to remove milk efficiently.

Areas of Assessment

- **Breastfeeding history**
  - Advice from the baby's healthcare provider about breastfeeding.
  - Parent's goals for breastfeeding.
  - Discomfort with breastfeeding.
  - Strategies from the hospital team.
  - Comfort with breast pump or other device to provide expressed milk to the baby, if needed.

Tips and Solutions

- Short, frequent feeds if baby tires easily.
- Frequent burping if baby pulls off the breast often and takes in more air.
- Vary feeding positions as needed.
- Nipple shield to aid in latch, nursing supplementer, breast pump for milk production.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop feeding plan if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Any sign of infant illness or medical issues identified. ▪ Baby has slow or faltered growth.	▪ Parent shows signs of depression or anxiety from caring for infant. ▪ Any medical concerns or medication questions.

Compromised Infants – Cleft Palate/Lip

	Signs	Potential Causes


 
Photos by Janell Aby, M.D., Stanford University. All Rights Reserved.
	A cleft defect occurs when the baby's lip or mouth does not form properly during pregnancy.
	
	▪ A *cleft lip* occurs when the tissue that makes up the lip does not completely join before birth.
	  ▪ Opening in the upper lip.
	  ▪ Slit or large opening through the lip into the nose.
	
	▪ A *cleft palate* occurs when the tissue that makes up the roof of the mouth does not join properly.
	  ▪ Opening size can vary.
	  ▪ Can involve the hard or soft palate, or both.
	  ▪ A *complete* cleft extends from upper lip to soft palate, may involve nose.
		▪ The causes of cleft defects are not entirely known.
		▪ Can cause feeding problems.
		▪ Can be hard to seal the oral cavity well enough to generate suction. Weak suction and leak of air affects the ability to remove milk. The baby may:
		  ▪ Want to feed constantly because of inability to remove sufficient milk to feel full.
		  ▪ Tire easily breastfeeding without good suction. Fall asleep soon after latching.

Areas of Assessment

- **Breastfeeding history**
  - Previous children with similar defects and how feedings went.
  - Low milk production.
  - Baby's growth and development trends.
- **Feeding assessment**
  - Baby's comfort during the feeding.
  - Signs of infant distress during the feeding (e.g., pulling off, choking, coughing).
  - Excessive milk leakage during the feeding.
  - Baby's ability to transfer milk.
  - Parent's efforts to close the cleft during the feeding to improve suction.

Tips and Solutions

- Breastfeeding is especially important as the baby is more likely to develop ear infections.
- To help improve the feeding experience for the baby, suggest:
  - Positions that help breast tissue fill the gap in the lip or gum to improve vacuum.
  - Press the two sides of the cleft together during the feeding to improve vacuum.
  - Upright position to limit the amount of milk going into the nasal passage.
  - Football hold to better support the baby.
  - Dancer hand hold (pictured) for extra support.
  - Keep feedings short to avoid tiring the baby.
  - Breast compressions to rekindle interest in the feeding if the baby falls asleep too quickly.
  - Frequent burping since babies with cleft defects tend to take in more air.
- Milk expression to recover or rebuild production.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop feeding plan if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Baby has slow or faltered growth. ▪ Medical questions about the care plan prescribed by the baby's care team, including medication questions.	▪ Depression or anxiety from caring for the infant. ▪ Any medical concerns or medication questions.

Compromised Infants – Cranial Defects

Signs	Potential Causes

Cranial defect includes various conditions that compress cranial nerves or inhibit effective latch.	▪ Torticollis and plagiocephaly are positional defects. Pressure against the baby's head when in certain positions creates a misshapen cranium.
	▪ Cranial defects can put pressure against nerves involved with sucking and swallowing reflexes, resulting in:
	  ▪ Weak or dysfunctional suck.
	  ▪ Ineffective or painful latch.
	  ▪ Inability to latch on one side.
	▪ Low milk production can occur if milk is not removed effectively.

	▪ *Plagiocephaly* may cause one side or the back of the head to flatten. It can appear when the baby is older.	▪ Plagiocephaly: ・ Often occurs after birth. ・ Can result from the baby lying mostly on one side. ・ Can result from lack of "tummy time" that allows for free movement of the baby's head. ・ Baby might feed well for a period of time and then have difficulty as the malformation develops.
 *Photo by Janell Aby, MD, Stanford University. All Rights Reserved.*	▪ *Torticollis* may cause: ・ Jaw asymmetrical. ・ Ears and eyes misaligned. ・ Neck twisted abnormally. ・ Corner of mouth droops. ・ Baby prefers feeding on only one breast.	▪ Torticollis: ・ Can develop in utero from limited space for adequate movement. ・ Tight muscles in the neck cause baby to turn head to one side. ・ Baby may resist breastfeeding in certain positions.
	▪ *Pierre Robin Syndrome* appears as a severely receding jaw. The defect often occurs alongside a cleft palate and lack of gag reflex.	▪ Pierre Robin syndrome: ・ Congenital defect linked to other genetic anomalies. ・ Can obstruct the airway. ・ Compromises effective latch. ・ Baby may be unable to feed properly.

Areas of Assessment

- **Breastfeeding history**
  - Feeding plan recommended by the healthcare provider.
  - Parent's goals.
  - Nipple trauma because of poor latch.
  - Milk production concerns and how breastfeeding has gone thus far.
  - Healthcare provider concerns related to the baby's growth and weight trends.
- **Infant assessment**
  - Facial structures including any asymmetry or misalignment.
- **Feeding assessment**
  - Baby's ability to latch comfortably and remove milk effectively.
  - Baby's behaviors during the feeding, including active resistance breastfeeding on one side.

Tips and Solutions

- Feed with both breasts and try positions that support the baby such as:
  - Football hold or side-lying to support neck.
  - Laid-back position to feed in prone position.
  - Dancer hand hold to support the baby's cheek on the weaker side.
  - Begin the feeding on the side baby prefers and gently slide baby over to the other side once baby is calmer and more relaxed.
- Supervised tummy time to allow head movement.
- Nipple shield to form a teat for a baby with torticollis or plagiocephaly to help with latch.
- Nursing supplementer to provide additional nutrition at the breast.
- Double electric breast pump to build milk production.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop feeding plan if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Assessment and follow-up for treatment or physical therapy. ▪ Baby has slow or faltered growth.	▪ Any medical concern as a result of damaged nipples from poor latch.

Compromised Infants – Neonatal Abstinence Syndrome (NAS)

Signs	Potential Causes
Neonatal Abstinence Syndrome (NAS) occurs when a newborn goes through withdrawal from prescribed or illegal drugs the parent used during pregnancy. ▪ Signs of NAS include: · Shaking and tremors. · Poor feeding or sucking. · Crying. · Fever. · Diarrhea and/or vomiting. · Sleep problems.	▪ Breastfeeding challenges include: · Crying when trying to latch. · Hypertonia (high or rigid muscle tone) causes nipple trauma. · Arching when trying to latch. · Inability to stay latched. · Uncoordinated or disorganized sucking patterns. · Inability to transfer milk.

Areas of Assessment

- **Breastfeeding history**
  - How the parent is already addressing feeding challenges.
  - Feeding plan recommended by the healthcare provider.
  - Concerns about the baby's growth or weight patterns.
  - Parent's feelings about their own recovery treatment program.
- **Feeding assessment**

- Baby's ability to latch and transfer milk.
- Baby's behaviors at the breast (e.g., sleepiness, weak or disorganized suck, excessive irritability, or pulling off the breast).

Tips and Solutions

- NAS symptoms are temporary.
- ACOG and AAP recommend breastfeeding if no contraindications and drug treatment is stable.
- Calm the baby and help the baby feel safe and secure before feedings. Options to consider:
  - Skin-to-skin contact.
  - Swaddle the baby.
  - Gentle rhythmic movements such as rocking or swaying to help baby relax and calm.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop feeding plan if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Follow-up treatment, medications, and breastfeeding recommendations. ▪ Baby has slow or faltered growth.	▪ Parent has questions or concerns about their recovery treatment program. ▪ Depression or anxiety from caring for infant. ▪ Medical concerns or medication questions.

Compromised Infants – Neurological Problems

	Signs	Potential Complications
 *iStock #140471849*	**Neurological impairment includes conditions that damage the infant's neurological system.** ▪ Signs might include: • Hypotonia (low muscle tone), cannot stay latched or maintain a vacuum. • Hypertonia (high muscle tone), baby arches or resists parent or breast. • Down Syndrome (flat face, almond shaped eyes that slant up; small ears, hands, and feet; large tongue that extends out of the mouth; a single line across the palm of the hand; short height. • Hydrocephalus.	▪ Hypotonia: - Sleepiness and weak suck. - Ineffective tongue movement at breast. - Poor lip seal and cannot generate suction. - Shallow latch. - Cannot keep breast inside oral cavity. ▪ Hypertonia: - Disorganized suck. - Tight mouth and tongue. - Nipple trauma and pain. - Overactive gag reflex, swallowing difficulty. - Arching away from the breast. ▪ Down Syndrome (extra chromosome #21): - Hypotonia - Tongue protrusion. - Sucking issues. - Slow weight gain. ▪ Neural tube defect can cause: - Tendency to gag easily.

	• Excessive crying and slow infant weight gain.	• Positioning challenges to avoid surgical site. • Poor oral-motor control.

Areas of Assessment

- **Breastfeeding**
  - Early practices with breastfeeding and how problems were resolved.
  - Feeding frequency and patterns.
  - Baby's growth and weight trends.
  - Solutions the parent has already implemented.
  - Available support for caring for infant.
  - Treatment options/feeding plan recommended by the baby's healthcare provider.
  - Supplements that may already have begun.
- **Feeding assessment**
  - Baby's ability to latch and maintain a seal.
  - Baby's ability to retain a large amount of breast in the mouth.
  - Baby's behaviors (e.g., excessive sleepiness, excessive crying, arching, gagging, or coughing).

Tips and Solutions

- Hypotonia:
  - Football hold or an upright position.
  - Dancer hand hold to support the baby's chin and cheeks.
  - Position with the baby's throat higher than the nipple to help prevent choking and gagging.
- Hypertonia:
  - Upright position.
  - Massage around the baby's lips before latching to help relax the baby's tone.
  - Avoid pushing against the baby's head, which can trigger arching behaviors.
  - With a neural tube defect, the side-lying position might be more comfortable for the baby.
- Stimulate milk release before the baby latches to get more milk with less effort.
- Swaddle the baby to help the baby feel safe and secure.

When to Refer

WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop feeding plan if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Further assessment, follow-up, and treatment plan/feeding plan. ▪ Baby has slow or faltered growth.	▪ Any medical issues (such as damaged nipples) as a result of the baby's poor latch that requires medical treatment.

Bring it Home! Use the handout, "Complex Infant Problems Summary - Level 4" for a synopsis of the key teaching points in this section that can serve as a handy resource.

Problem Solving—Preterm Infants

Sneak Preview:
The Level 4 content in the "Preterm Infants" section addresses assessment and practical solutions to assist parents of preterm infants with managing breastfeeding.

Level 4 Competencies:

- Provide tips/solutions for parents breastfeeding premature infants.
- Provide tips/solutions for parents breastfeeding early term infants.

Managing Feedings—Hospitalized Preterm Infants <34 Weeks

	Signs	Potential Causes
 *©Texas Department of Health Services.*	**There are a variety of milk expression approaches when parents provide their milk for preterm infants in the NICU. These include pumping:** ▪ While baby is in the NICU, and then transitioning to full breastfeeding by discharge. ▪ While baby is in the NICU and continuing to exclusively pump post-discharge instead of directly breastfeeding. ▪ While baby is in the NICU and switching to formula feeding after discharge. ▪ Partially while the baby is in the NICU.	▪ Emotional and physical challenges can affect pumping success over time. ▪ Milk production may decline due to: ▪ Glandular tissue in the breast did not complete development during pregnancy. ▪ DOL from delays in expressing milk after birth. ▪ Ineffective milk expression technique, incorrect flange size or vacuum setting, inefficient pump. ▪ Not removing milk 8 or more times in 24 hours. ▪ Impaired MER from stress, especially when baby is not progressing well. ▪ Prior breast surgery, hormonal concerns, or medications affecting production.

Note: *The DBEs role while the baby is in the hospital NICU is to support the parent with effective milk expression techniques, and to assess any milk production issues that might arise as a result.*

Areas of Assessment

- **Breastfeeding history**
  - Birth experience, including any hemorrhaging.
  - Health concerns that might affect long-term pumping.
  - Infant's age and health concerns being addressed by the medical team.
  - Breastfeeding/milk expression goals.
  - Milk production concerns, including milk yield during pumping and medical conditions.
  - Support and feeding recommendations from the NICU care team.
  - Prior breastfeeding or milk expression practices.
- **Pumping assessment to protect milk production**

- Frequency of pumping sessions.
- How breasts feel before and after pumping.
- Use of hands-on expression techniques.
- Appropriate use of the breast pump.
- Correct-fitting flange.

- **Breast assessment** - following State approved protocols for a breast observation, note:
  - Signs of breast changes during pregnancy.
  - Insufficient glandular tissue.
  - Prior breast surgeries or trauma.

Tips and Solutions

- Ways to improve milk yield through pumping, such as:
  - Increasing number of pumping sessions.
  - Warm compresses and gentle massage before pumping to elicit MER.
  - "Hands-on" techniques while pumping to drain breasts more fully.
  - Skin to skin while the baby is in NICU.
  - Flange size to assure a proper fit.
- Help the parent set realistic expectations for milk expression if the assessment identifies conditions that can affect production.

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When to Refer

WIC Staff Collaboration	Hospital Care Team
Peer Counselor ▪ Ongoing support while the baby is in the NICU.	▪ Develop and implement the medical care plan and manage feedings for the baby. ▪ Support the parent's goals and assist with effective milk expression until the baby is discharged.

Managing Feedings – NICU Grads

	Signs	Potential Causes
 *©Texas Department of Health Services*	**Preterm babies discharged from the NICU require close follow-up and care once they are home.** ▪ Infant behaviors and feeding issues that can occur after NICU discharge include: · Tire easily resulting in excessive sleepiness. · Inability to latch or maintain a seal at the breast. · Slow weight gain.	▪ Common causes of breastfeeding challenges for NICU grads: ▪ Underdeveloped sucking patterns. ▪ Low muscle tone leading to sluggishness. ▪ Underdeveloped oral structures (e.g., small mouth, lack of buccal pads in cheeks, thin lips). ▪ Low energy levels. ▪ Milk production can be compromised due to: ▪ Ineffective milk expression.

	Signs	Potential Causes
	• Declining milk production due to ineffective milk transfer.	▪ Not expressing milk regularly. ▪ Ineffective MER if stress continues.

Managing Feedings – Late Preterm/Early Term

	Signs	Potential Causes
 *©Texas Department of Health Services*	**Feeding challenges can be missed for late preterm infants (born between 34 and 37 weeks), and early term infants (born between 37 and 38 6/7 weeks) when regarded as "small term babies."** ▪ Possible signs of inefficient feedings can include: • Hyperbilirubinemia. • Weight loss. • Apnea. • Weak suck or uncoordinated suck-swallow-breathe patterns. • Tire easily during the feedings.	▪ Common causes of breastfeeding challenges: ▪ Underdeveloped oral structures and sucking patterns. ▪ Low muscle tone. ▪ Easily overstimulated. ▪ Low energy levels. ▪ Nipple damage and low milk production may occur from inadequate nipple stimulation and milk removal.

Areas of Assessment for NICU grads and Late Preterm/Early Term Infants

- **Breastfeeding history**
  - Baby's birth, including length of time in the NICU and problems that might affect feeding.
  - Parent's breastfeeding history, including when milk expression began, and attempts to directly feed the baby during the NICU stay.
  - Continuing medical concerns that the medical team is addressing.
  - Milk production concerns.
- **Pumping assessment** - (*See suggestions in the "Preterm Infants <34 Weeks" section*).
- **Infant assessment** - to determine any developmental issues that might affect feedings, such as underdeveloped oral structures, as well as the baby's growth and weight trends.
- **Feeding assessment**
  - Baby's ability to latch comfortably and transfer milk.
  - Baby's sucking rhythm.
  - Baby's behaviors during the feeding, including resistance to breastfeeding on one side.

Tips and Solutions for NICU grads and Late Preterm/Early Term Infants

- **Milk expression.** It is generally recommended that milk expression continue for hospitalized or early term babies until the baby has fully transitioned to the breast and is steadily gaining weight. Suggestions:
  - Express milk after feedings at the breast when baby is not able to effectively remove sufficient milk.
  - Feed the expressed milk to the baby to support continued growth until the baby can effectively and efficiently remove milk. .

- A nursing supplementer can provide large amounts of milk while stimulating production.
- A cup, spoon, or syringe could be used for small amounts of milk given to the baby after feedings.

- **Postural support.** Feeding positions that provide postural support for the baby include:
  - Cross-cradle hold (pictured) provides more support across baby's back and shoulders to stabilize baby with low tone.
  - Football hold provides stability and avoids weight of the breast on baby's chest.
  - Dancer hand hold under the baby's chin provides jaw stability for the baby.

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WIC Staff Collaboration	Baby's Healthcare Provider	Parent's Healthcare Provider
CPA ▪ Monitor baby's weight trends. ▪ Work with DBE to develop the feeding plan if insufficient milk. ▪ Tailor the food package. Peer Counselor ▪ Ongoing support.	▪ Further assessment, follow-up, and treatment plan/feeding plan. ▪ Baby has slow or faltered growth.	▪ Medical issues, such as damaged nipples from poor latch that require medical treatment. ▪ Questions about medications; preterm and early term infants may be at higher risk of exposure than full term infants.

Bring It Home!
Use the handout, "**Preterm Infants**" for a synopsis of the key teaching points in this section that can serve as a handy resource.

Problem Solving—Management Tools

Sneak Preview:
The Level 4 content in the "Management Tools" section addresses the proper use of breastfeeding techniques devices that can be included in the DBE's care plan for complex breastfeeding problems.

Level 4 Competencies:

- Assist parents in the proper use of breastfeeding techniques and aids as part of complex breastfeeding management and provide follow-up monitoring.
- Instruct parents in feeding expressed milk or formula to their baby using alternative feeding devices.

Techniques – Therapeutic Breast Massage

	Indications	Considerations
	**Therapeutic breast massage is a gentle massage to improve blood flow and drain lymphatic fluid from engorgement, edema, plugged ducts, or mastitis.** ▪ Augments other solutions as part of a comprehensive care plan. ▪ Reasons to use: • Relieve pain and swelling from inflammation and fluid stasis. • Stimulate MER before expressing milk by hand or pump.	▪ For plugged ducts, massage toward axillae (armpit) to improve blood flow and move fluids through to the lymph nodes. ▪ For mastitis or plugged ducts, massage while undergoing therapeutic treatment. ▪ Parent's comfort handling their breasts or doing massage. ▪ Parent's need for privacy.

	Technique	Follow-Up
 *©2015 by Regina Maria Roig-Romero. All Rights Reserved.*	▪ Demonstrate on a breast model and parent perform on their breast. ▪ Warm compress before massage improves circulation/drainage. ▪ Comfortable, light touch to stroke from areola toward the axillae. This area consists of important blood vessels, nerves, and lymph nodes that filter toxins and drain fluids. ▪ When stasis causes inflammation, additional movements gently shift fluids. • Roll breasts between both hands in rhythmic circular motion. • Knead with the back of the hands. • Use light tapping of fingertips up and down around the breast.	▪ Breastfeed following massage. ▪ If still uncomfortably full, express enough to relieve discomfort. ▪ Express only to comfort. Too much milk removal can increase inflammation. ▪ If therapeutic massage does not alleviate discomfort, refer the parent to their healthcare provider for additional assessment.

Techniques – Reverse Pressure Softening

	Indications	Considerations
 *Courtesy of Lisa Marasco, IBCLC.*	**Reverse Pressure Softening (RPS) moves excess fluid away from the areola to help latch.** ▪ Augments other solutions as part of a comprehensive care plan. ▪ Reasons to use: • IV fluids in labor result in edema in the breasts. • Hard, swollen, and painful breasts. • Baby unable to latch due to edema. • Other methods help the baby latch are not successful.	▪ Parent is in pain and baby is unable to latch. ▪ Nipples may have flattened from swelling. ▪ Parent's comfort handling breasts. ▪ Parent's perception of safety and privacy (baby blanket or shawl may help). ▪ Parents with long fingernails may use the two-handed method. ▪ Keep baby close for quick latch after RPS.

	Technique	Follow-Up
 *©2015 by Regina Maria Roig-Romero. All Rights Reserved*  *©Texas Department of Health Services*	One Hand ▪ Place fingers around the base of nipple. The other hand can support the breast. ▪ Push fingers inward toward the chest and hold for up to 90 seconds. ▪ Latch the baby quickly. Two Hands ▪ Place fingers of both hands on either side of the nipple base. ▪ Press inward toward the chest wall and hold for up to 90 seconds.	▪ If baby still cannot latch, or areola is not sufficiently softened, try therapeutic breast massage. ▪ Expressing a little milk first can help milk flow and soften the areola. ▪ Follow up to confirm edema is diminishing and the baby can latch effectively.

Breastfeeding Aids and Devices – General Guidelines

WIC participants may encounter complex breastfeeding challenges that require the use of various breastfeeding devices to resolve. These include a breast pump, nipple shield, nursing supplementer, and breast shells. First offer solutions that do not require the use of a device, if possible. Other simple solutions can make breastfeeding seem less complicated and should be explored first.

Note:
Educating participants about breastfeeding devices to solve complex problems is within the role of the DBE. Selecting devices should be based on assessment and identified need. Devices are part of an overarching plan of care and should only be issued following appropriate counseling and education.

Considerations for Using Breastfeeding Aids and Devices

- Follow State agency policy for issuing and assisting with a breastfeeding aid or device.
- Considerations include:
  - Parent's comfort with using aids and ability to understand the instructions.
  - How often the parent will need to use the aid.
  - Available support for using the aid.
  - Personal or cultural beliefs, experiences, and other factors that might affect willingness to use the aid.
  - Typical daily activities that might interfere with the ability to use the device.

Best Practices

- Use a baby doll and/or breast model to demonstrate the proper use of the aid for parents.
- Allow the parent to try the device following your instruction. This can help build confidence.
- Provide anticipatory guidance on any potential issues.
- Provide ongoing support and follow-up.
- Refer the parents to the peer counselor for ongoing encouragement.

Breastfeeding Aids – Nipple Shield

	Indications	Considerations
 *©Texas Department of Health Services*	**A nipple shield is an artificial nipple placed over the parent's nipple to help achieve and maintain latch.** ▪ Short-term solution when other solutions are not effective. ▪ Augments other solutions as part of a comprehensive care plan. ▪ Reasons to use: • Unusually shaped or sized nipples. • Severely inverted nipples that do not respond to strategies to evert. • Preterm baby lacking oral capacity for a good seal. • Baby with a cranial defect struggling to form a teat to latch. • Baby with tongue tie.	▪ Parent using a nipple shield obtained another way. ▪ Baby has a bottle nipple preference. ▪ Parent losing patience with breastfeeding. ▪ Parent is at risk of low milk production (shield may be problematic; monitoring needed). ▪ Parent willing to use a breast pump to maintain production. ▪ Size of the parent's nipples; accessibility of a proper size.

	Instructions for Use	Follow-Up
 *©Texas Department of Health Services*	▪ Demonstrate the use of the shield on a breast model. ▪ Moisten the shield with water or milk. ▪ Flip up the shield (like a sombrero). ▪ Apply to breast with shield tip centered on nipple tip. ▪ Unroll the shield around the nipple and areola. ▪ Have the parent position and latch baby per usual recommendations. ▪ If baby resists, parent can express a small amount of milk into the shield opening or drip over the shield to entice baby.	▪ Provide manufacturer cleaning instructions. ▪ Monitor output, weight, and other signs of milk production to ensure appropriate weight gain. ▪ Assist with using a breast pump if production might be compromised while using the shield. Options for discontinuing the shield: ▪ Wean once baby latches and transfers milk since the reason for the shield has resolved. ▪ Latch with the shield, then remove it quickly once milk flows or baby becomes sleepy. ▪ Use patience and frequent skin-to-skin contact while weaning from the shield.

Breastfeeding Aids – Breast Shells

	Indications	Considerations
	**Breast shells are plastic devices worn inside the bra over the nipples. Large rings keep nursing pads and clothing away from sore nipples. Small rings encourage nipple eversion.** ▪ Promote healing and comfort with severely damaged nipples. ▪ Allow air circulation and prevent clothing from rubbing off ointments. ▪ Gentle pressure to encourage milk leakage for engorgement or edema. ▪ Augments other solutions as part of a comprehensive care plan.	▪ Nature of the problem (e.g., damaged nipples), ▪ Risk of plugged ducts and mastitis.

	Instructions for Use	Follow-Up
	▪ Demonstrate shell use on a breast model. ▪ Center bottom ring over nipple (photo). Large ring surrounds much of the areola and nipple.	▪ Provide manufacturer cleaning instructions. ▪ Follow up to ensure shells do not cause additional concerns. ▪ Monitor progress of healing. Discontinuing the shells: ▪ Discontinue once nipples are healing and the bra can be worn comfortably again.
 *Courtesy of Tricia Cassi, IBCLC.*	▪ Place the dome covering over the ring and snap into place. ▪ Place bra over the shell to keep it in place. ▪ Remove shell when sleeping.	

Breastfeeding Aids – Nursing Supplementer

	Indications	Considerations

	**A nursing supplementer delivers milk through a small plastic tube at the breast near nipple.**
	
	▪ Deliver nutrition and stimulate production.
	▪ Good for long-term supplementing.
	▪ Avoids giving supplements via bottle with artificial nipples.
	▪ Augments other solutions as part of a comprehensive care plan.
	▪ Reasons to use:
	  ▪ Infant with slow weight gain.
	  ▪ Low milk production.
	  ▪ Induced or relactation.
		▪ Willing to use supplementer.
		▪ May not be effective for infant who cannot latch or suckle well.
		▪ Daily activities might interfere with usage, may not be able to be used discreetly.
		▪ Starter supplementer might be available for a parent to test.
		▪ Supplementer for both breasts may have larger storage capacity for longer-term use.

	Instructions for Use	Follow-Up
  *©Texas Department of Health Services.*	▪ Place expressed milk, if possible, into collection container. ▪ Place the container around the neck or clipped to a shirt. ▪ Place container level with the nipple so milk flows only when baby sucks. (Raise the device to increase flow; lowering it to decrease flow.) ▪ Thread tubes through grooves in the cap to prevent leaking (pic 1). ▪ Place tubing so it extends beyond the nipple (pic 2). ▪ Use sensitive skin first-aid tape or adhesive bandage above the areola to hold the tubing in place. ▪ Open the tubing on the side used to feed the baby and latch baby as usual.	▪ Provide manufacturer cleaning instructions. ▪ Pump milk to use in the supplementer. ▪ Frequent check-ins to ensure the device works well and concerns do not arise. ▪ Regular weight checks, monitor output. Discontinuing the supplementer: ▪ Discontinue gradually as baby's weight and milk production improve. ▪ Babies usually ready to discontinue supplementer when they take all or most of a feeding without supplement. ▪ Baby's weight should be improving. ▪ Milk production increased sufficiently. ▪ If parent discontinues supplementer on their own, assess baby's weight to ensure safe feedings without the supplements, or suggest giving small supplements in an alternative way.

Breastfeeding Aids – Breast Pump

	Indications	Considerations


©Texas Department of Health Services.
	Breast pumps help lactating parents extract milk efficiently. State policies normally address the types of pumps available for various purposes.
	
	▪ This content builds on the Level 3 content on "Milk Expression."
	▪ Augments other solutions as part of a comprehensive care plan.
	▪ Breast pumps are used to manage situations such as:
	  ▪ Recover or rebuild milk production.
	  ▪ Separation due to medical issues or prematurity.
	  ▪ Severe engorgement.
	  ▪ Baby's inability to latch.
		▪ *Electric pump* for:
		  ▪ Infant is not able to feed at the breast.
		  ▪ Induced lactation.
		  ▪ Relactation.
		  ▪ Frequent need to express milk due to exclusive pumping or increasing milk production.
		▪ *Single-user electric pump* for returning to work/school, both breasts simultaneously.
		▪ *Manual pump* for occasional separations or to relieve fullness.
		▪ Also consider:
		  ▪ Typical daily activities that might interfere with the time and energy needed to express milk.
		  ▪ Parent's feeling about pumping, especially if dealing with other issues.
		  ▪ Personal or cultural beliefs.

	Indications	Considerations
	• Maintain production when breastfeeding is temporarily suspended.	▪ Ease of use and comfort. ▪ Availability of pumps from other sources (e.g., insurance companies, Medicaid).

	Instructions for Use	Follow-Up
 *©Texas Department of Health Services.* 	Flange ▪ Some manufacturers offer several sizes. ▪ Appropriate-sized flange allows nipple to fit comfortably inside the flange tunnel without causing undue friction. ▪ Flange that is too large does not allow for sufficient vacuum needed to extract milk. Using the Pump ▪ Warm flange under running water to improve milk yield and comfort. ▪ Elicit MER with warm compresses and massage. ▪ Center nipple in the flange tunnel (pic 1). ▪ Turn pump on lowest suction level and gradually increase suction to comfort (pic 2). ▪ Mimic baby's sucking patterns by increasing the speed to help elicit MER. Slow down speed once milk is flowing well. ▪ Continue until milk stops flowing and breasts feel softer (15-20 minutes).	▪ Provide manufacturer cleaning instructions. ▪ Follow up to ensure the pump is working properly and the parent is comfortable. ▪ If parent reports pain with pumping, advise them to discontinue and reassess. ▪ Monitor progress of the conditions that warranted initial use of a pump.

Alternative Feeding Devices – General Guidelines

Occasionally a newborn needs a brief period of supplementation while breastfeeding is being established. Because bottle nipples can cause concerns with latch, it may be preferable to use an alternative way to feed short-term small volume supplements. These temporary solutions include a spoon, dropper, syringe, cup, or finger feeding. These devices may not be appropriate if longer-term solutions or large amounts of supplements are needed.

Note:
Educating parents about alternative feeding devices and assisting them with their use is within the role of the DBE. Selecting alternative feeding methods should be based on assessment and identified need. Devices are part of an overarching plan of care and should only be suggested following appropriate counseling and education.

Considerations for Using Alternative Devices

- Amount of expressed milk or formula needed. Alternative devices are designed as short-term solutions. Older infants who need larger amounts might need a bottle instead.
- Whether the short-term solution will lead to better longer-term outcomes.
- Comfort level of the parent and caregivers who will use the device to feed the baby.
- Typical daily activities that might interfere with the time needed to feed the baby.
- When to feed the supplement in relation to breastfeeding:
  - To encourage the baby to latch, give the supplement before the feeding to take off the hunger "edge" and help the baby relax.
  - If baby is gaining weight poorly and needs supplements, breastfeed first when baby sucks more vigorously to stimulate milk production and give the supplement after the feeding.
  - If baby lacks energy to feed efficiently, a small supplement before or during the feeding might help rouse the baby with extra calories. Additional supplement could be given after the feeding, if necessary.

Best Practices

- Keep baby in a more upright position to help prevent choking.
- Tuck a blanket or bib under baby's chin to catch spills and keep the arms from getting in the way of the device.
- Be patient! Remind parents to take it slow and follow their baby's lead.
- Use a baby doll to demonstrate the technique. Then parent can directly feed their baby. This helps build confidence and ensures they understand how to feed the baby safely.
- Clean devices between use following manufacturer's cleaning instructions.
- No matter what device is used, follow up to assess the baby's weight and output, as well as milk production, as part of the overall complex problem care plan.

Alternative Feeding Devices – Spoon

	Indications	Considerations
	**An inexpensive plastic spoon can deliver small amounts of expressed colostrum or formula.** ▪ Augments other solutions as part of a comprehensive care plan. ▪ Collect drops of expressed colostrum and feed to baby. ▪ Reasons to use: • Sleepy baby who lacks energy to suck properly. • Take the "edge" off hunger before coaxing baby to the breast. • Deliver small amounts after the feeding for extra calories.	▪ Amount of milk baby will need. Babies who need larger amounts may benefit from other devices. ▪ Comfort of parent/caregiver using a spoon to feed the baby. ▪ Advice from baby's healthcare provider regarding using an alternative feeding device. ▪ Allow parent to feed the baby after instruction and demonstration with a baby doll, if necessary.

	Instructions for Use	Follow-Up
	▪ Hold baby upright or semi-upright. ▪ Wrap or swaddle baby to prevent arms from getting in the way and to catch spills. ▪ Follow baby's lead. Do not pour milk from spoon into mouth. ▪ Rest the edge of the spoon on baby's lip angled so the tip of baby's tongue just touches the liquid. The baby can then easily protrude their tongue into the spoon and begin to lap the milk. ▪ Alternatively, gently ladle a few drops at a time onto the baby's tongue, pausing to allow the baby to swallow.	▪ Follow up to assess baby's weight and output, and milk production. ▪ Find out if baby is showing more interest in feedings and feeding more efficiently. ▪ Refer the family to the peer counselor for ongoing support. ▪ Refer to the baby's healthcare provider if growth and weight trends do not improve.

Alternative Feeding Devices – Dropper/Syringe

	Indications	Considerations
	**A dropper or syringe is a temporary way to deliver small amounts (5-10 mL) of milk to the baby.** ▪ Augments other solutions as part of a comprehensive care plan. ▪ Common uses (in addition to those for a spoon) include: • Baby lacks energy to feed efficiently at the breast. • Baby has oral aversion or other latch difficulty. • Incentive to encourage the baby to latch. • Build parent's confidence that baby receives milk.	▪ Amount of milk baby needs. ▪ Comfort of parent/caregivers using dropper or syringe to feed baby. ▪ Accessibility and affordability of droppers or syringes. ▪ Advice from the baby's healthcare provider regarding using an alternative feeding device. ▪ The DBE should allow the parent to feed the baby following instruction and demonstration with a baby doll, if necessary.

	Instructions for Use	Follow-Up
 *©2018 by Cathy Carothers. All Rights Reserved.*	▪ Hold baby upright or semi-upright. ▪ Wrap or swaddle baby to prevent arms from getting in the way and to catch spills. ▪ Follow baby's lead. Do not push large amounts of milk through dropper or syringe plunger. ▪ Place dropper or syringe near corner of baby's mouth.	▪ Clean device following package directions. ▪ Syringes are usually considered for one-time use. ▪ Follow up to assess baby's weight and output, and milk production. ▪ Find out if baby is showing more interest in feedings and feeding more efficiently. ▪ Refer the family to the peer counselor for ongoing support.

	Instructions for Use	Follow-Up
	When baby sucks, give small amount (.25-.5 mL). ▪ Allow baby to swallow before offering more.	▪ Refer to the baby's healthcare provider if growth and weight trends do not improve.

Alternative Feeding Devices – Cup

	Indications	Considerations
 *©Texas Department of Health Services*	**Cup feeding is a good temporary option to deliver slightly larger amounts of milk, or when colostrum volume is more than what a spoon can hold.** ▪ Augments other solutions as part of a comprehensive care plan. ▪ Uses are similar to those for using a spoon or dropper/syringe. ▪ Soft, flexible medicine cup or paper cup can be used. ▪ Commercial cup-feeding device fills a small section with milk to help control the amount of milk the baby receives at one time.	▪ Amount of milk baby needs (can accommodate up to an ounce or so). ▪ Baby's willingness to accept milk from the cup. ▪ Comfort of parent/caregiver using a cup to feed the baby. ▪ Advice from the baby's healthcare provider regarding using an alternative feeding device. ▪ Allow the parent to feed the baby following instruction and demonstration with a baby doll.

	Instructions for Use	Follow-Up
	▪ Hold baby upright or semi-upright. ▪ Wrap or swaddle baby to prevent arms from getting in the way and catch spills. ▪ Allow baby to lap milk from cup at baby's pace. Do not pour milk from cup into mouth. ▪ Rest the rim of the cup on the baby's lower lip. ▪ Tilt the cup until the milk just touches the baby's lips. ▪ Tongue may trough to bring milk back to throat to swallow. ▪ Allow the baby to set the pace for drinking and swallowing.	▪ Clean commercial cup following manufacturer instructions. ▪ Medicine and paper cups are one-time use. ▪ Monitor baby's weight and output, and milk production. ▪ Find out if baby has interest in feedings and feeding efficiently. ▪ Refer the family to the peer counselor for ongoing support. ▪ Refer to the baby's healthcare provider if growth and weight trends do not improve.

Alternative Feeding Devices – Finger Feeding

Courtesy of Tricia Cassi, IBCLC.

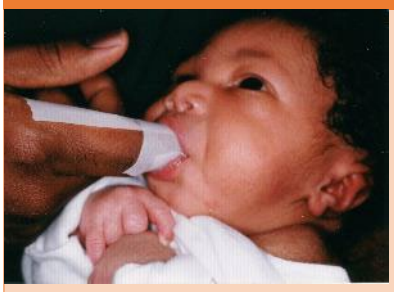
Indications

Finger feeding is a short-term solution using tubing (e.g., nursing supplementer) taped to the adult's finger. It is an alternative to bottle feeding and helps transition to the breast.

- Augments other solutions as part of a comprehensive care plan.
- Common uses include:
  - Baby unwilling or unable to latch at the breast.
  - Transitioning to the breast by encouraging proper latch and suckling at the finger.
  - Temporary means of coaxing baby to the breast with small amounts of milk directly before latching.
  - Temporary feeding when nipples are too damaged to tolerate direct latching.
  - Baby cannot suck properly.
  - Boost parent's confidence that the baby receives milk.

Considerations

- Baby's willingness to accept milk from the finger and tube. (e.g., a baby with oral aversion might not accept the finger and might benefit instead from a narrow syringe.)
- Comfort of parent/caregiver to finger feed the baby.
- Accessibility of tubing, which can be obtained from a nursing supplementer, finger feeding device, or gavage tubing.
- Advice from the baby's healthcare provider regarding using an alternative feeding device.
- The DBE should allow the parent to feed the baby following instruction and demonstration with a baby doll, if necessary.



Courtesy of Cathy Watson Genna, IBCLC.

Instructions for Use

- Wash hands and trim long fingernails. Parents can use gloves, if desired.
- Use a "starter" supplementer or other tubing placed in a bottle or container of expressed milk or formula
- Place the tube lengthwise along the finger. Apply first-aid tape, if desired, to hold the tubing in place.
- Bring finger pad side up to baby's lips, with tip touching philtrum (indented area between nose and upper lip). Gently stroke.
- When baby opens widely, insert finger gently (pad side up so nail does not scratch baby) into baby's mouth to junction between hard and soft palates. Nail should be centered against the baby's tongue.

Follow-Up

- Follow manufacturer's instructions for cleaning the tubing.
- Follow up to assess baby's weight and output, and milk production.
- Find out if baby is showing more interest in feedings and feeding more efficiently.
- Discontinue finger feeding when baby is able to directly latch and transfer milk.
- Refer the family to the peer counselor for ongoing support.
- Refer to the baby's healthcare provider if

	Instructions for Use	Follow-Up
	▪ Follow baby's lead. If baby gags or seems uncomfortable, move the finger forward until baby is more comfortable. ▪ Be sure baby's lips are well flanged around finger.	growth and weight trends do not improve.

Bring It Home!
Use the handout, "**Management Tools: Scenarios**" to apply the information learned to various WIC situations in which a device might be needed.