

Report to the Texas Legislature

The Early Childhood Health and Nutrition Interagency Council

November 1, 2014



Senate Bill 395

This report was ordered by Senate Bill 395 of the 81st Regular Session of the Texas Legislature and represents a collaboration of these State Agencies



**Report of the Early Childhood Health and Nutrition Interagency Council
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Executive Summary

Background

Senate Bill 395, passed during the 81st Regular Session of the Texas Legislature, created the Early Childhood Health and Nutrition Interagency Council (the Council) to improve the health of Texas infants and children under the age of six. The Council was tasked with reviewing current research and making recommendations for improving the health of Texas children under the age of six. The Council centralizes the efforts of Texas state agencies to combat childhood obesity and address malnutrition and undernourishment by involving children, parents, families, caretakers and communities.

Issues

Teaching the youngest Texans how to eat right and exercise and addressing barriers that prevent them from doing so will benefit the state far into the future. Children and adolescents who are obese or overweight can carry poor health and nutrition habits into adulthood. The future implications for physical inaction include a wide range of economic, social and political consequences. Today, forming good health habits at an early age means giving parents and child care providers the tools they need to feed children healthy meals and to incorporate exercise into their daily routines. Improving infant health also means encouraging parents to make breast milk available to their children.

A wide range of environmental factors can influence a child's risk for obesity in the first years of life. While important steps have been taken to reduce the incidence of obesity in the general population, many national efforts to prevent obesity overlook infants, toddlers and preschool children. Understanding the implications of that oversight and preventing its continuation is imperative.¹

Texas has made great strides in educating parents and child care providers about the steps needed to improve health and nutrition for children under the age of six. Statewide initiatives, education efforts and research endeavors have improved nutrition and increased physical activity for many young Texans. Despite considerable progress, barriers to realizing the Council's charge remain.

The Council has updated the following recommendations to advance Texas efforts in improving early childhood health and nutrition.

2014 Recommendations of the Early Childhood Health and Nutrition Interagency Council

- Provide statewide support and recognition of the Texas Mother-Friendly Worksite program that provides businesses with a written policy of support of breastfeeding for employees, including suitable accommodations and flexible scheduling for breastfeeding or milk expression.
- Provide statewide support of the Texas Ten Step Program that recognizes hospitals and birthing facilities that address 85 percent of the "Ten Steps to Successful Breastfeeding" and provide technical assistance to help facilitate earning the Baby Friendly designation.
- Provide statewide support and implement a campaign to increase awareness of and access by eligible participants to nutrition assistance programs such as Child and Adult Care Food Program (CACFP), The Supplemental Nutrition Program for Women, Infants and Children (WIC) and Nutrition, Supplemental Nutrition Assistance Program (SNAP) and Supplemental Nutrition Assistance Program Education (SNAPed) that provides guidance for improving nutrition and health in early childhood settings.

- Align nutrition standards and meal patterns between CACFP and Texas Department of Family and Protective Services (DFPS) Child Care Licensing (CCL) for consistency and improved nutrient quality across all child care facilities preparing foods for infants and children under the age of six.
- Continue efforts with DFPS CCL to include additional minimum physical activity standards in child care facilities for infants and children under the age of six.
- Provide support to the DFPS CCL in training child care providers on how to support breastfeeding duration and exclusivity in child care facilities and improve DFPS CCL minimum standards for breastfeeding supportive child care practices.
- Provide child care facilities, children and parents with information on Farm to Child Care (FTC) which is similar to the established Farm to School model that helps to establish: connections with local farmers, purchasing local fruits and vegetables, integrating more fresh fruits and vegetables into meals and snacks, consumption of fresh produce, children participating in the food system and growing child care gardens.
- Determine a system for assessing and monitoring physical activity trends using “The Child Care Centers/Homes Physical Activity Self-Assessment Survey” in child care settings for infants and children under 6 years of age to establish baseline data for: number of minutes of structured and unstructured physical activity, frequency and duration of screen time, and barriers to physical activity.

Introduction

Texas Senate Bill 395, introduced by Senator Eddie Lucio, Jr., and Representative Eddie Lucio, III, during the 81st Texas Legislature called for the creation of a council to improve the health of Texas infants and children under the age of six by addressing the nutrition and physical activity practices in early childhood care settings.

The Council has been tasked with using its findings to provide the legislature with recommendations for removing barriers to improving nutrition and physical activity standards in early childhood care settings to lower the incidence of childhood obesity and food insecurity.

As mandated by SB 395, a council was formed with representatives from seven state agencies:

- Texas Department of Agriculture (TDA)
- Texas Department of State Health Services (DSHS): The Supplemental Nutrition Program for Women, Infants and Children (WIC) and Health Promotion and Chronic Disease Prevention Section (HPCDPS)
- Texas A&M AgriLife Extension Service
- Texas Workforce Commission (TWC)
- Texas Department of Family and Protective Services (DFPS)
- Texas Health and Human Services Commission (HHSC)
- Texas Education Agency (TEA)

These agencies have authority and expertise in the areas of infant and early childhood nutrition, physical activity and health. Each agency’s commissioner or director appointed the corresponding representative.

SB 395 required the Council to ask for input and participation from stakeholders in at least two council meetings each year. The Council was required to invite at least six stakeholders with expertise in areas such as early childhood nutrition, child care, physical activity, community health and pediatric medicine. Stakeholders contributed outcomes specific to their programs and/or profession through surveys, data collection and evaluations which are noted in the report.

Early Childhood Nutrition and Physical Activity Six-Year Plan

The Council's six-year plan calls for creating an evidence-based approach to promoting best practices for improving early childhood health through good nutrition and physical activity for children under the age of six. The Council was tasked with improving the health of young children in the state of Texas by centralizing efforts among Texas state agencies to combat childhood obesity, address malnutrition and undernourishment by involving children, parents, families, caretakers and communities. The Council reviewed existing standards for early childhood care settings and examined state programs that promote good nutrition and physical activity in early childhood. The Council and stakeholders used the information to prepare the six-year Early Childhood Nutrition and Physical Activity Plan. The six-year plan included numerous objectives, strategies and action steps for each council member and stakeholder to research and pursue. The plan was developed and approved by majority vote of Council members in July 2010 and submitted to the Texas Legislature and Governor November 2010.

As mandated by SB 395, the six-year plan included recommendations to:

- Facilitate the consumption of breast milk in early childhood care settings
- Increase awareness among parents of the benefits of breastfeeding, healthy eating and appropriate activity in children under the age of six
- Increase fruit and vegetable consumption among children under the age of six
- Increase daily structured and unstructured physical activity in early childhood care settings
- Decrease malnutrition and undernourishment among children under the age of six
- Engage existing community and state resources and service providers to educate and increase the awareness of parents and caretakers regarding the need for proper nutrition

Sec. 115.011 of SB 395 requires the Council to submit a written report to both houses of the Texas Legislature and the Governor on or before November 1 of each even-numbered year beginning in 2012. This report satisfies the 2014 requirement and includes:

- The actions taken in furtherance of the six-year plan
- The areas that need improvement in implementing the six-year plan
- The programs and practices that address nutrition and physical activity in early childhood settings in the state

Data gathered in the past year from outcomes in the six-year plan were used to prepare the following report. These outcomes highlight the success and opportunities the state agencies and stakeholders have promoted to:

- Increase access to breast milk, whether direct-fed, expressed, or donor milk
- Increase consumption of fruits and vegetables
- Increase physical activity for infants and children under the age of six
- Increase awareness of nutrition assistance programs

The Council members and stakeholders gathered information from current data, surveys of existing programs, previous studies and held collaborative public meetings in 2012, 2013 and 2014 to discuss and compile the information contained in this report. Background material and meeting minutes for the preparation of this report may be obtained by contacting TDA at (877) TEX-MEAL.

Organization of the Report

This report explains the Council's work in furtherance of the approved Early Childhood Nutrition and Physical Activity Six-Year Plan by listing the action steps found in the plan followed by background information related to the Action Step and the Council's response since November 2012. The responses include information submitted by state agency representatives and stakeholders that show successes, relevant data and other detailed information. For this report, each piece of the six-year plan will be organized in the following way:

- Action step from the approved Early Childhood Nutrition and Physical Activity Six-Year Plan followed by the description as it appears in the plan
- 2012 Council recommendations
- Background information and research relating to the action step
- Actions taken in furtherance of the six-year plan from December 1, 2012 – March 31, 2014

Childhood Health and Nutrition: Definitions

Phases in Early Childhood

Because of significant changes during the formative years of early childhood, the terms describing the different age groups need to be specific. This report uses the terms from The Minimum Standards for Child Care Centers Definitions of Terms from DFPS, and they are as follows:ⁱⁱ

- **Infant** — from birth to 17 months
- **Toddler** — from 18 months through 35 months
- **Pre-kindergarten age** — three and four years of age
- **Kindergarten age** — at least five years of age on Sept. 1
- **School age** — five years old or older and will attend school in August or September of that year
- **Levels of Activity**

In an early childhood care setting, the caregiver can control a child's level of physical activity. It is important that any physical activity is age appropriate. According to the "Physical Activity Definitions from National Policy & Legal Analysis Network to Prevent Childhood Obesity" (NPLAN) the following are definitions used for physical activity:ⁱⁱⁱ

- **Physical activity** — any bodily movement produced by skeletal muscles that results in energy expenditure.
- **Structured physical activity** — developmentally appropriate physical activity that is guided by the caregiver.
- **Unstructured physical activity** — child-initiated physical activity that occurs as the child explores his or her environment.

Food Insecurity and Hunger

In 2011 more than a quarter of children in Texas were food insecure.^{iv} Definitions of food insecurity and hunger are as follows:

- **Food insecurity** — is the condition as assessed in the food security survey and represented in USDA food security reports as a household-level economic and social condition of limited or uncertain access to adequate food

- **Hunger** — an individual-level physiological condition that may result from food insecurity or prolonged, involuntary lack of food; results in discomfort, illness, weakness, or pain that goes beyond the usual uneasy sensation^v

Childhood Overweight and Obesity

The Centers for Disease Control and Prevention (CDC) uses Body Mass Index (BMI) to determine a child's overweight or obesity level.^{vi} Important information regarding BMI includes:

- BMI at or above the 85th percentile but below the 95th percentile is the overweight category.
- BMI at or above the 95th percentile is the obese category.

Breast Milk and Breastfeeding

Breast milk is human milk fed directly from the breast or expressed and fed via bottle, cup, or other device and contains nutrients that closely matches infant requirements for brain development, growth, and a healthy immune system. Human milk also contains immunologic agents and other compounds that act against viruses, bacteria, and parasites.

World Health Organization (WHO) Breastfeeding Terminology^{vii}

Exclusive Breastfeeding

- Requires that the infant receive breast milk (including milk expressed or from a wet nurse)
- Allows the infant to receive medically necessary drops, syrups (vitamins, minerals, medicines)
- Does not allow the infant to receive anything else

Predominant Breastfeeding

- Requires that the infant receive breast milk (including milk expressed or from a wet nurse) as the predominant source of nourishment
- Allows the infant to receive liquids (water and water-based drinks, fruit juice, oral rehydration solution), ritual fluids and drops or syrups (vitamins, minerals, medicines)
- Does not allow the infant to receive anything else (in particular non-human milk, food-based fluids)

Complementary Feeding

- Requires that the infant receive breast milk and solid or semi-solid foods
- Allows the infant to receive any food or liquid including non-human milk

Breastfeeding

- Requires that the infant receive breast milk
- Allows the infant to receive any food or liquid including non-human milk

Breastfeeding Peer Counselors

- Provide basic breastfeeding support

International Board Certified Lactation Consultants

- Assist moms with more complicated issues

The American Academy of Pediatrics (AAP)

- Recommends exclusive breastfeeding through 6 months of age, at which point other foods can be introduced slowly. The AAP recommends then continuing breastfeeding through 12 months of age or longer at the discretion of the breastfeeding mom.

Child Care Facilities and Caregivers

Child care in early childhood can range from the parents or grandparents caring for a single child to a network of centers in different locales overseeing the care of hundreds of children. The licensing division of DFPS oversees these facilities using *The Minimum Standards for Child-Care Centers*. For this report, the current DFPS descriptions from its *Definitions of Terms* will be used.^{viii}

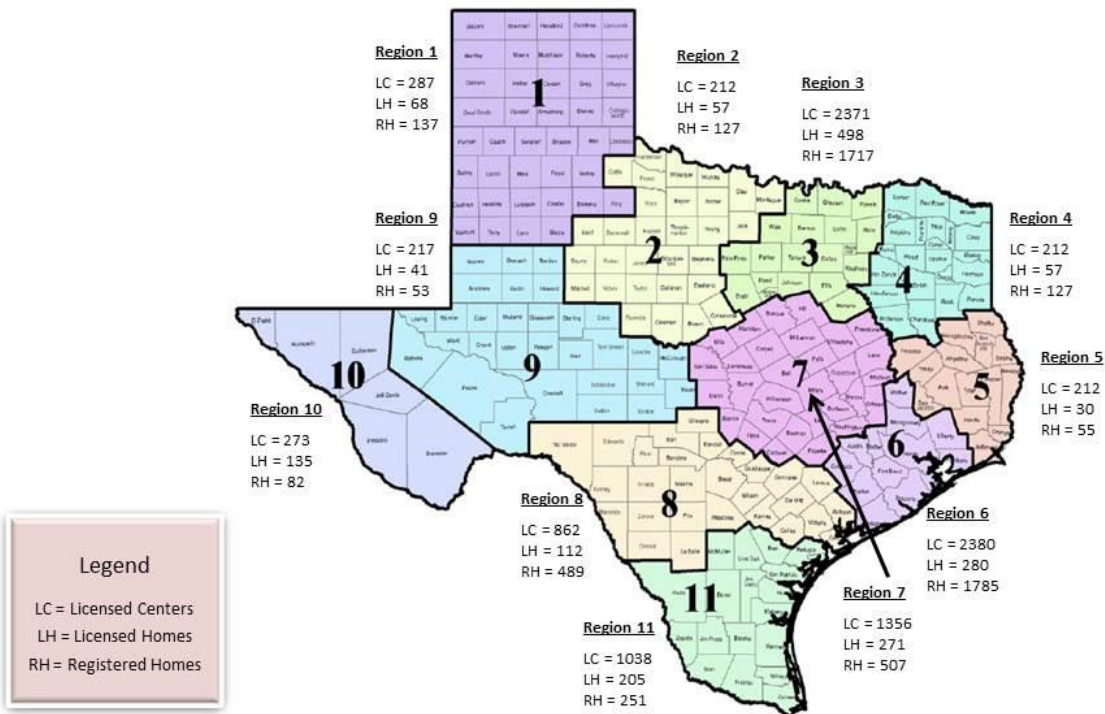
- **Caregiver** — A person whose duties include the supervision, guidance and protection of a child or children
- **Center-based** — A type of child day care in which the operation is licensed to care for seven or more children for less than 24 hours per day
- **Child care center** — A child day care operation that is licensed to care for seven or more children for less than 24 hours per day, at a location other than the permit holder's home
- **Child care home** — The registered primary caregiver provides care in the caregiver's own residence for not more than six children from birth through 13 years, and may provide care after school hours for not more than six additional elementary school children. The total number of children in care at any given time, including the children related to the caregiver, must not exceed 12. The term does not include a home that provides care exclusively for any number of children who are related to the caregiver.
- **Child care facility** — An establishment subject to regulation by licensing that provides assessment, care, training, education, custody, treatment or supervision for a child who is not related by blood, marriage, or adoption to the owner or operator of the facility, for all or part of the 24-hour day, whether or not the establishment operates for profit or charges for its services. A child care facility includes the people, administration, governing body, activities on or off the premises, operations, buildings, grounds, equipment, furnishings, and materials.
- **Child day care** — The care, supervision, training, or education of an unrelated child or children under 14 years old for less than 24 hours per day that occurs in a place other than the child's own home. This definition includes child day care provided to school-age children before the customary school day, after the customary school day, or both.
- **Children who are related to the caregiver** — Children who are the children, grandchildren, siblings, great-grandchildren, first cousins, nieces, or nephews of the caregiver, whether by affinity (marriage), consanguinity (blood) or as the result of a relationship created by court decree
- **Home-based care** — A type of child day care in which the operation is licensed or registered to care for up to 12 children for less than 24 hours per day
- **Licensed child care home** — A child day-care operation that is licensed. The primary caregiver provides care in the caregiver's own residence for children from birth through 13 years. The total number of children in care varies with the ages of the children, but the total number of children in care at any given time, including the children related to the caregiver, must not exceed 12.

- **Listed family home** — A child day care operation that receives a listing permit. The caregiver is at least 18 years old and provides care for compensation in the caregiver's own home, for three or fewer children unrelated to the caregiver, birth through 13 years. Care is provided for at least four hours a day, three or more days a week, and for more than nine consecutive weeks. The total number of children in care, including children related to the caregiver, may not exceed 12.
- **Parent** — A person who has legal responsibility for or legal custody of a child, including the managing conservator or legal guardian
- **Primary caregiver** — the permit holder for a licensed or registered child-care home. The primary caregiver is the person with ultimate authority and responsibility for the child care home's overall operation and compliance with Chapter 747, Minimum Standards for Child-Care Homes, Licensing statutes, and DFPS rules. The primary caregiver must live in the home where the care is provided.
- **Regular care** — A child care arrangement in which care is provided at least four hours a day, three or more days a week, for more than nine consecutive weeks in a registered child care home or listed family home

In Texas, there are 5,937 licensed child care centers providing infant care, which represents a capacity for 90,381 children under the age of 18 months. There are 8,365 licensed child care centers providing care to infant, toddler or pre-kindergarten children or all three groups. There are 1,726 licensed child care homes providing infant care and 5,171 registered child care homes providing infant care. Teaching these children good nutrition habits could impact Texas health costs for years to come.

Texas Department of Family and Protective Services

Regional Boundaries Map



Actions Taken in Furtherance of the Six-Year Plan and Programs and Practices that Address Nutrition and Physical Activity in Early Childhood Settings in the State

In the five years since the Council's creation, the state agencies and stakeholders participating on the Council have taken numerous steps to combat obesity and reduce food insecurity through outreach efforts that increase awareness of and access to nutrition-assistance programs for infants and children under the age of six.

The six-year plan divides the approach into action steps that address ways to increase breastfeeding; raise nutrition standards and increase physical activity in licensed child care facilities; increase consumption of fruits and vegetables for children under the age of six; and increase structured and unstructured moderate to vigorous physical activity requirements that simultaneously reduce screen time for infants and children under the age of six at licensed day care centers and homes. Following are the action steps, background information and the Council's actions in furtherance of the six-year plan.

Action A: Breast Milk and Breastfeeding

Increase the health and well-being of infants by promoting awareness among parents, families, caretakers and communities about the benefits of breastfeeding and facilitate the consumption of breast milk in early childhood care settings.

Recommendations in 2012 Legislative Report

- Provide statewide support and recognition of the Texas Mother-Friendly Worksite program that provides businesses with a written policy supporting breastfeeding for employees, including providing suitable accommodations and flexible scheduling for breastfeeding or milk expression.
- Support statewide the Texas Ten Step Program, a statewide effort to improve infant health and increase rates of exclusive breastfeeding. The program recognizes hospitals and birthing facilities that address 85 percent of the “Ten Steps to Successful Breastfeeding” and provide technical assistance to help facilitate earning the Baby Friendly designation.

Background Information and Research

Breastfeeding rates in Texas lag behind national averages, and many women report they are unable to meet their breastfeeding goals. Choosing to start breastfeeding and how long to continue are closely tied to the patient care practices a mother and her infant experience during the newborn’s first few minutes, hours and days. Practices that delay or interrupt the first breastfeed, that cause separation of babies and mothers, or that result in formula supplementation of breastfed babies make it difficult for mothers and babies to successfully breastfeed. When hospitals support mothers by encouraging them to remain in close contact with their infants and to feed their babies only breast milk, they help ensure successful breastfeeding from the start and continue with exclusive breastfeeding once they go home.

A multi-center, randomized control study found that babies born in hospitals where policies promoted exclusive breastfeeding were significantly more likely to be exclusively breastfed at six months.¹ Other studies confirm that evidence-based maternity practices, including “Baby-Friendly” hospital standards, improve mothers’ chances of achieving their breastfeeding goals (see Figure 1).²

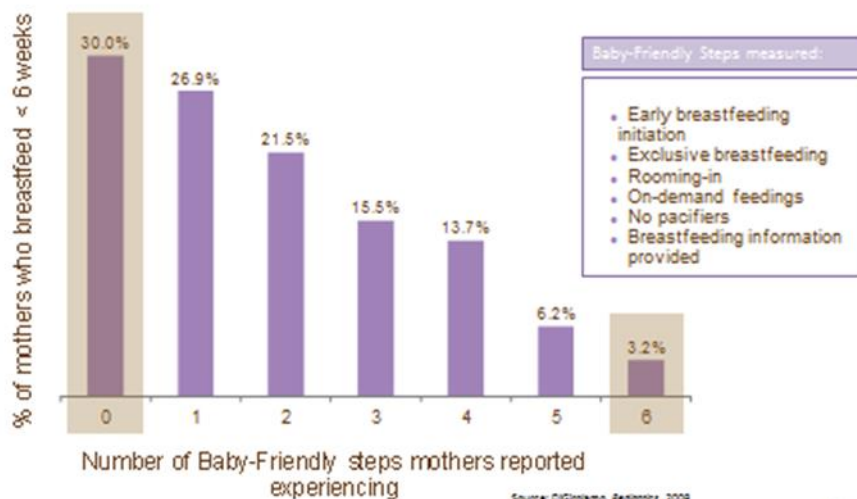
Although breastfeeding is natural for mother and baby, it also requires a set of skills that needs to be learned. During this critical period, birthing facilities are best positioned to foster skill development and nurture behaviors to support the successful establishment of lactation.

Figure 1: Among women who initiated breastfeeding and intended to breastfeed for more than 2 months, the percentage who stopped breastfeeding before 6 weeks of age according to the number of the “Baby Friendly” Steps that they reported experiencing.

¹ Kramer, et al, 2001.

² DiGirolamo, et al, 2008

INCREASED NUMBER OF BABY-FRIENDLY HOSPITAL PRACTICES IN PLACE DECREASES RISK OF BREASTFEEDING CESSATION



Infants receiving non-maternal care are likely to experience a variety of feeding patterns that lead to cessation of maternal breastfeeding or fewer breastfeeds a day.^{ix} Nearly 35 percent of U.S. mothers report that their babies, at just three months old, were cared for regularly by someone other than the mother.^x Among mothers of three-month-old babies cared for outside of the home, 27 percent reported that their child care providers do not feed the baby pumped breast milk from the mother.^{xi} Even if a mother provides both formula and breast milk for her infant to receive during child care, some breastfeeding or expressed human milk from their mothers is beneficial.^{xii} Making breast milk available to infants when they are not in the care of their mothers is a critical step in improving the availability of breast milk. Providing worksite lactation support programs, such as the “Mother-Friendly Worksite” designation, so that mothers may maintain lactation and provide breast milk for their child even during periods of separation due to employment and day care facilities providing arrangements for breastfeeding supports such availability.

Because of the proven impact of maternity practices and return to work on breastfeeding outcomes, national Healthy People 2020 objectives include:

- Increase the proportion of employers that have worksite lactation support programs
- Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies [as measured by number of live births occurring in Baby-Friendly designated facilities]
- Reduce the proportion of breastfed newborns who receive formula supplementation within the first two days of life

Actions Taken in Furtherance of the Six-Year Plan

DSHS promotes awareness to the community about the benefits of breastfeeding through the Texas Mother-Friendly Worksite (TMFW) designation. This is a recognition program that provides businesses with a written policy of support of breastfeeding for employees. To earn the designation, businesses must also provide suitable accommodations and flexible scheduling for breastfeeding or milk expression. The designation was developed to fulfill requirements of Texas Health and Safety Code 165.003,

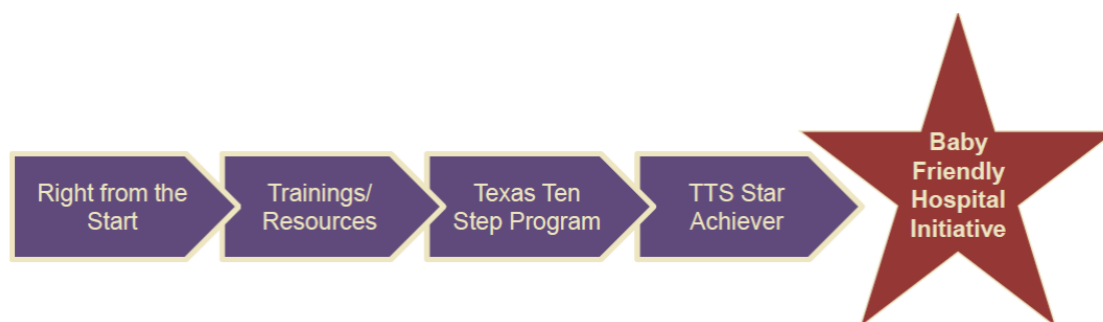
Breastfeeding. DSHS was directed to establish recommendations supporting the practice of worksite breastfeeding and to maintain a registry of worksites that have a written breastfeeding policy addressing the recommendations, including provision of: work schedule flexibility for expression of milk; accessible locations allowing privacy; access to clean running water; and access to hygienic storage alternatives for storage of mother's breast milk. The department designated 580 new TMFW organizations between April 1, 2013 and March 31, 2014 bringing the total number of designated sites to more than 1,700 Texas worksites currently registered in the program, including three municipalities (the cities of San Antonio, Austin and Edinburg). TMFW was reviewed by an expert panel and recognized as meeting the criteria as a Practice Tested Intervention for obesity prevention by the Centers for Disease Control and Prevention (CDC)-funded Center of Excellence for Training and Research Translation (Center TRT). Center TRT, a prevention research center based at the University of North Carolina at Chapel Hill, is supported by CDC, and connects research and practice efforts of public health practitioners working on nutrition, physical activity and obesity prevention. A TMFW intervention package is featured on the Center TRT site and has been disseminated nationally to encourage replication.

DSHS Community and Worksite Wellness Program community based contractor, Hidalgo County WIC, successfully earned the TMFW designation for the City of Edinburg in 2013. A TMFW policy was included in the Human Resources Policies and Procedures Handbook for the City of Edinburg.

The DSHS Cardiovascular Disease and Stroke Program administers the Texas Healthy Communities Program which assesses cities according to nine priority indicators. One of the indicators is support for breastfeeding. Texas Healthy Communities is currently conducting its first assessment cycle so data is not yet available. Below are the assessment questions related to the TMFW:

- How many of the worksites in your city are designated as a TMFW?
- How many of the TMFWs are located in low socioeconomic ZIP codes?

DSHS launched a “Better by Breastfeeding/Right from the Start” campaign in November 2011 to increase awareness among key decision makers of the impact of hospital policies and practices on breastfeeding outcomes. The campaign is the first phase of a DSHS continuum to encourage hospitals and birthing facilities to adopt the World Health Organization/United Nations Children's Emergency Fund Ten Steps to Successful Breastfeeding. These 10 steps include evidenced-based practices proven to improve breastfeeding outcomes. Hospitals and birthing facilities that fully adopt the Ten Steps to Successful Breastfeeding are eligible for the Baby Friendly designation through Baby Friendly, USA. The campaign illustrates the impact that hospital policies and practices have on breastfeeding outcomes and encourages hospitals to assess their current practices and consider opportunities for improvement.



The DSHS Texas Ten Step (TTS) Program, the third phase in the continuum, recognizes hospitals and birthing facilities that are addressing 85 percent of the Ten Steps to Successful Breastfeeding.

The Ten Steps to Successful Breastfeeding are:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff
2. Train all health care staff in the skills necessary to implement this policy
3. Inform all pregnant women about the benefits and management of breastfeeding
4. Help mothers initiate breastfeeding within one hour of birth
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants
6. Give infants no food or drink other than breast milk, unless medically indicated
7. Practice rooming in — allow mothers and infants to remain together 24 hours a day
8. Encourage breastfeeding on demand
9. Give no pacifiers or artificial nipples to breastfeeding infants
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center

Source: www.babyfriendlyusa.org

The program itself is free and allows for total support throughout the application process. Technical assistance provided includes free on-site training with contracting entities, policy writing assistance, and identification and assistance with areas of needed improvement. Hospitals and birthing facilities that fully adopt the “Ten Steps to Successful Breastfeeding” are well-poised to achieve the Baby-Friendly designation, the gold standard for maternity care. However, any hospital is eligible to apply for Baby-Friendly and does not have to complete TTS first. DSHS designated an additional 10 TTS facilities between April 1, 2013 and March 31, 2014 with 106 designated facilities in total. There are currently seven Baby-Friendly facilities in the state (out of 252) that have been designated through Baby-Friendly USA. At least 26 facilities have officially started the Baby-Friendly designation process.

Texas Ten Step Star Achiever Breastfeeding Learning Collaborative with National Institute for Children’s Health Quality (NICHQ).

The TTS Star Achiever Breastfeeding Learning Collaborative (Texas Breastfeeding Learning Collaborative) is the next phase of the DSHS continuum for improvement and is designed to accelerate integration of the ten steps and to support continuity of care from the hospital to the community. Using a rapid cycle quality improvement model, the initiative offers a learning collaborative, training, community partner meetings, ongoing technical assistance and tools for facilities to improve policies and processes that impact infant nutrition and care. Launched in 2012, the Texas Breastfeeding Learning Collaborative will be engaging up to 81 birthing hospitals and focuses on:

- Reducing breastfeeding disparities
- Creating environments at all facilities using Ten Steps to Successful Breastfeeding in which a family’s choices concerning breastfeeding are best supported
- Engaging with and connecting to community partners and resources to promote continued exclusive breastfeeding

The aim of the collaborative is to increase the average aggregate performance for exclusive breastfeeding throughout the hospital stay to more than or equal to 65 percent by June 2017 among participating facilities. Supplementation of breastfeeding infants during hospital stays will decrease proportionately. The overall project runs June 2012 to June 2017 (including learning collaborative, evaluation, and dissemination). Twenty hospitals (see below) in Health Service Regions (HSR) 1-3 (the first of three cohorts) participated between April 1, 2013 and March 31, 2014. Cohort A ended in March 2014 and Cohort B (HSR 4-7) launched in April 2014. Cohort C (HSR 8-11) will launch in 2015.

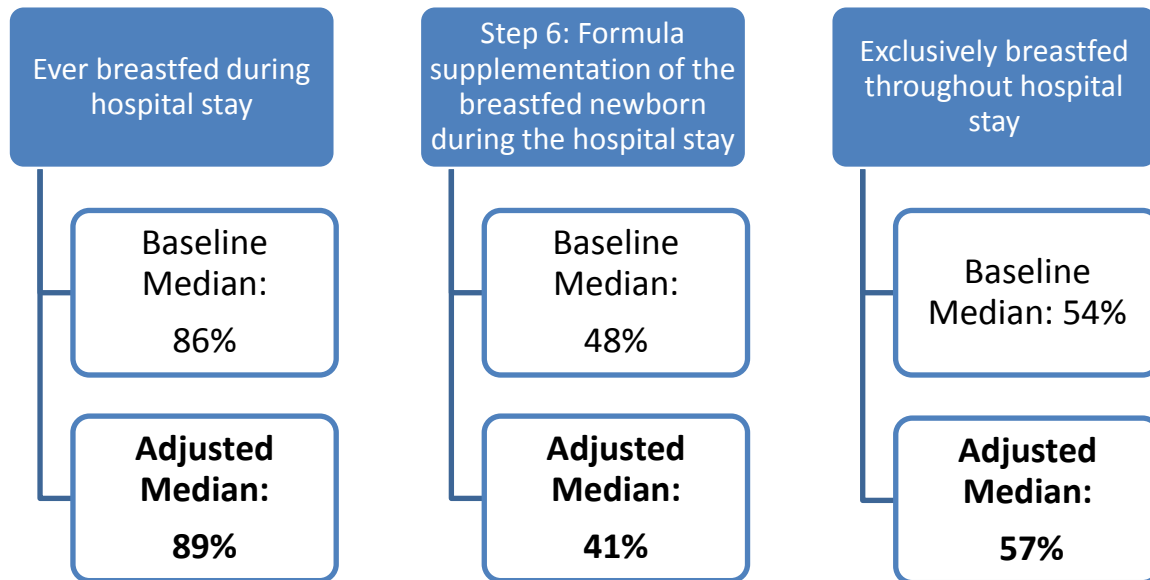
- Baylor All Saints Medical Center - Andrew's Women's Hospital, Fort Worth, Texas
- Baylor Medical Center at Carrollton, Carrollton, Texas
- Baylor Medical Center at McKinney, McKinney, Texas
- Baylor Regional Medical Center at Grapevine, Grapevine, Texas
- Baylor University Medical Center, Dallas, Texas
- Hughley Memorial Medical Center, Fort Worth, Texas
- JPS Health Network, Fort Worth, Texas
- Medical Center Arlington, Arlington, Texas
- Medical Center of McKinney, McKinney, Texas
- Methodist Charlton Medical Center, Dallas, Texas
- Methodist Mansfield Medical Center, Mansfield, Texas
- North Hills Hospital, North Richland Hills, Texas
- Texas Health Arlington Memorial Hospital, Arlington, Texas
- Texas Health Harris Methodist Fort Worth, Fort Worth, Texas
- Texas Health Harris Methodist Hospital Hurst-Euless-Bedford, Bedford, Texas
- Texas Health Harris Methodist Hospital Stephenville, Stephenville, Texas
- Texas Health Harris Methodist Southwest, Fort Worth, Texas
- Texas Health Presbyterian Rockwall, Rockwall, Texas
- The Medical Center of Plano, Plano, Texas
- United Regional Health Care System, Wichita Falls, Texas

Texas Breastfeeding Learning Collaborative Cohort A Achievements

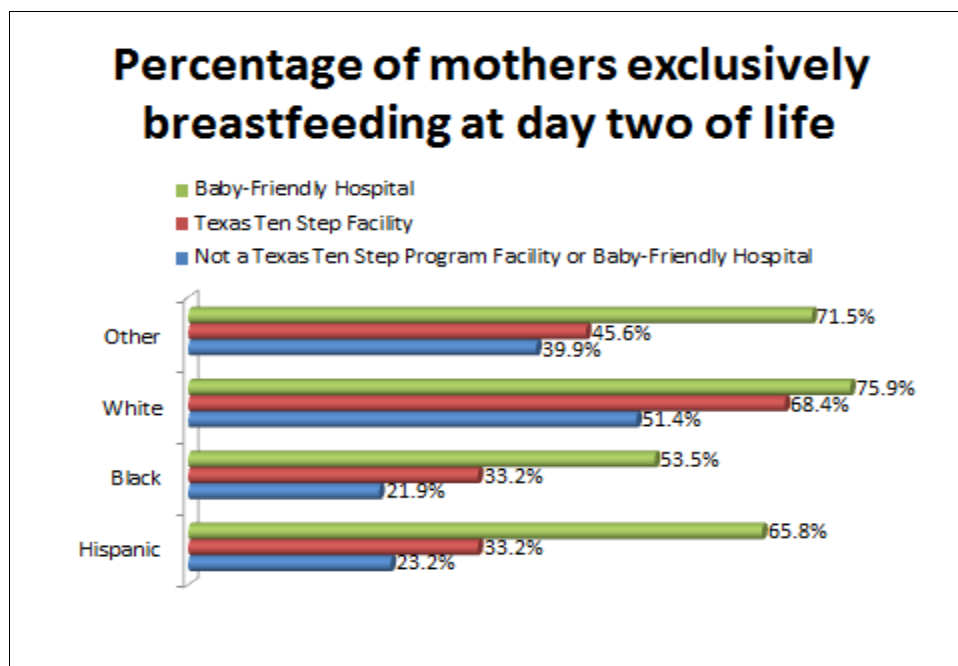
Process Measures - Jan-Dec 2013

Measure	Baseline median	Adjusted median
Step 3: Prenatal BF instruction completed and documented	21%	35%
Step 4: Immediate Skin-to-Skin for 1 hour/ until first feeding completed (vaginal delivery)	34%	45%
Step 4: (cesarean delivery)	39%	46%
Step 5: BF assistance and support (no medical separation)	87%	90%
Step 5: (medical separation)	54%	65%
Step 7: Continuous rooming-in throughout entire hospital stay (at least 23 per 24 hours)	32%	37%
Step 8: Education provided about cue-based feeding	79%	86%
Step 9: Education on potential risks of artificial nipples and pacifiers	49%	67%
Step 10: Discharge support for transition home- Link to community support resources	80%	85%
Step 10: Discharge support for transition home- Follow-up appointment scheduled	54%	65%

Cohort A-Outcome measures- Jan-Dec 2013



Cohort A Impact – Texas Mothers and Infant January-December 2013		
Educated on pacifier use	35% increase	8,160 more mothers educated
Rooming in	40% increase	6,240 more infants rooming-in
Skin-to-skin contact after vaginal birth	38% increase	6,240 more infants going skin-to-skin
Prenatal education	52% increase	5,760 more mothers receiving documented prenatal education
Exclusive breastfeeding rates	6% increase	1,140 more infants being exclusively breastfed at discharge



This chart shows how breastfeeding education in Texas birthing facilities impacts parents' decisions to breast feed for at least the first two days of an infant's life.

Data Source: Texas DSHS Office of Program Decision Support. Texas Vital Statistics, Provisional Live Births, 2009. Newborn Screening, 2009

Women, Infants and Children

WIC offers breastfeeding consultations to its clients through 67 local agencies that oversee more than 500 clinics. The program employs and trains breastfeeding peer counselors who provide basic breastfeeding support and international board certified lactation consultants to assist moms with more complicated issues. WIC has lactation resource and training centers in Houston, Dallas and Austin that provide breastfeeding assistance to high-risk infant/mother pairs and act as training centers for WIC staff. DSHS breastfeeding trainers offer nationally recognized breastfeeding trainings throughout the state. A total of 176 community breastfeeding trainings were held between April 1, 2013 and March 31, 2014.

In addition to the in-person trainings offered through the WIC program, a one-hour breastfeeding module for health care professionals is available on the "Texas Health Steps Online Provider Education" portal (www.thsteps.com). DSHS Community and Worksite Wellness Program (CWW) [the former Nutrition, Physical Activity and Obesity Prevention Program] is working in collaboration with DSHS' breastfeeding subject-matter experts to provide and promote a new free online breastfeeding training module for health care professionals in maternity care settings. The module has been designed to fulfill staff training requirements (step 2) of the "Ten Steps to Successful Breastfeeding," providing Texas hospitals with an accessible tool to aid work toward Baby-Friendly designation. The training module will provide comprehensive, professional, continuing education in a self-paced format and is expected to be available in 2015 on the Texas Health Steps website.

DSHS Cardiovascular Disease and Stroke Program administers the Texas Healthy Communities Program which assesses cities on nine priority indicators. One of the indicators is support for breastfeeding. Texas Healthy Communities is currently conducting its first assessment cycle so data is not yet available. Below are the assessment questions related to TTS:

- How many birthing facilities in your city are designated as TTS?
- How many of the hospitals in your city are designated as TTS?

DSHS Community Transformation Grant (CTG) sub awardee Project Vida worked with the Binational Breastfeeding Coalition to launch the coalition's website, <http://borderbreastfeeding.org/>, in 2013. The site is a resource to community members in the border areas of West Texas and features information on the Baby Cafés in the area which support Step 10 of the Ten Steps to Successful Breastfeeding which provide social support for mothers discharged from hospitals and birthing centers. Project Vida's Van Horn Baby Café, created with CTG funding, continued to operate during the time period of April 1, 2013 – March 31, 2014 on Wednesdays from 10 a.m. to noon. The Van Horn Baby Café receives referrals of discharged mothers from Big Bend Regional Medical Center in Alpine.

The WIC program developed "The Physician's Pocket Guide to Breastfeeding" in 1999. The fourth edition (2011), now called "The Health Care Provider's Guide to Breastfeeding," was recently developed into an application for Apple devices. An Android version and another update to both applications was completed in the time period between April 1, 2013 and March 31, 2014

DSHS also provided support to Baby Cafés in El Paso and Edinburg which staff lactation counselors to provide mom-to-mom support and individual counseling for mothers who need more professional assistance.

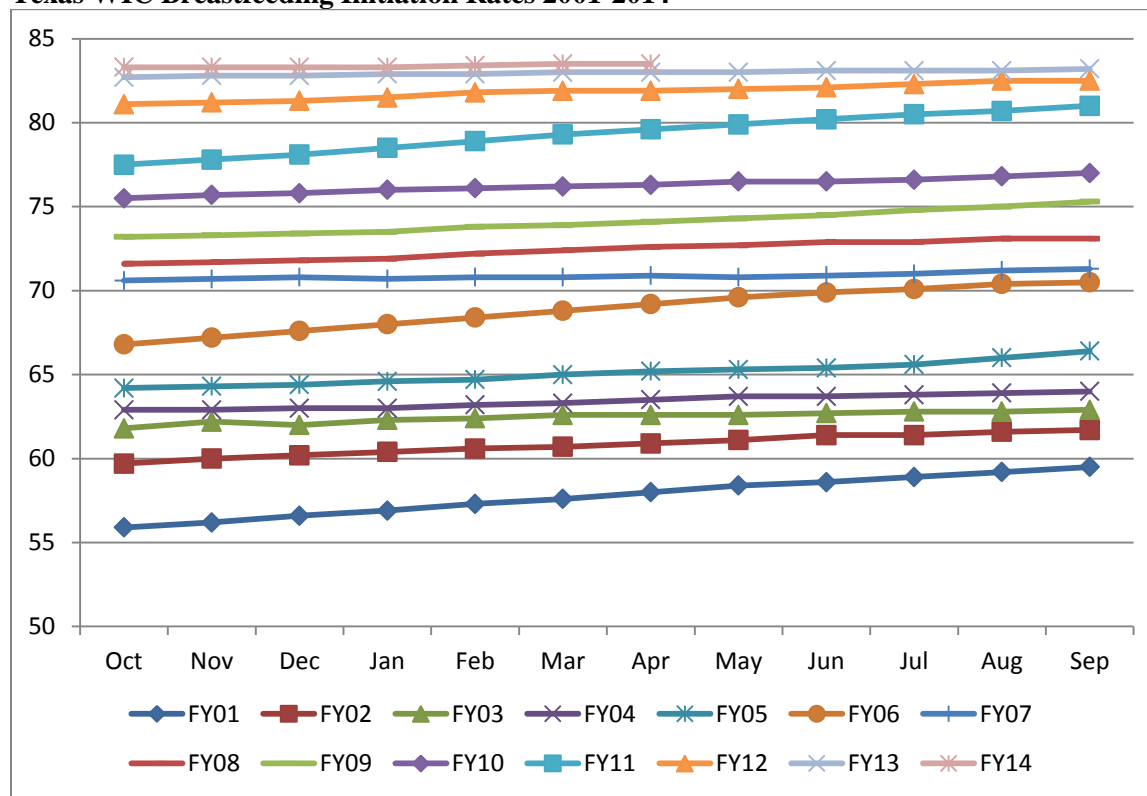
As an adjunct to individualized counseling, WIC peer counselors issue prenatal breastfeeding education bags to every pregnant WIC participant regardless of their infant-feeding intent. Breastfeeding education bags accompany counseling. The bags contain a breastfeeding book, a two-part DVD, and a brochure for dads and grandparents. During a 2008 pilot of the bags, 60 percent of moms said the contents of the bag helped them overcome concerns about breastfeeding, 56 percent said it made their partners and/or grandparent(s) more supportive of breastfeeding, 50 percent said it influenced their decision to breastfeed, and 17 percent said they used items in the bag to keep them going when they thought they might quit. DSHS issued 19,500 Spanish-language bags and 121,000 English-language bags between April 1, 2013 and March 31, 2014.

The Texas Lactation Support Hotline at (855) 550-6667 serves as a referral system for people in need of breastfeeding support. The toll-free line is available to anyone in Texas. Lactation specialists provide answers to breastfeeding questions. They will also give referral numbers of lactation specialists local to the Texas caller.

WIC's Every Ounce Counts campaign features an easy-to-use website, www.breastmilkcounts.com, which highlights important information about breastfeeding for mothers and is also available in Spanish. The website outlines steps mothers need to take to prepare for the baby, what to do in the first days after their child is born, and what to do when they get home. Additional information for working mothers includes the protections breastfeeding mothers are allowed under Texas law. The site also features TV, radio and outdoor ads and a downloadable lullaby album including songs about breastfeeding. Of the 91,030 total visits to the website, there were 22,722 sessions from 428 cities in Texas between April 1, 2013 and March 31, 2014.

WIC has seen a steady increase in breastfeeding initiation rates over the last decade, with another .5 percentage increase between April 1, 2013 and March 31, 2014. Texas WIC reached the Healthy People 2020 target of 81.9 percent for breastfeeding initiation in April 2012.

Texas WIC Breastfeeding Initiation Rates 2001-2014



This chart shows breastfeeding initiation rates in Texas' Supplemental Nutrition Program for Women, Infants and Children (WIC) only.

DSHS is a part of the Texas Interagency Obesity Council and DSHS Obesity Workgroup.^{xiii} The DSHS Community and Worksite Wellness Program (CWW) [the former Nutrition, Physical Activity and Obesity Prevention Program] supports and promotes projects that focus on CDC's six target areas for obesity prevention:

- Increasing physical activity
- Increasing consumption of fruits and vegetables
- Decreasing consumption of sugar-sweetened beverages
- Reducing consumption of high-energy-dense foods
- Increasing breastfeeding initiation, duration and exclusivity
- Decreasing television viewing

DSHS's The Growing Community communications campaign and DSHS CWW highlight community-based change strategies in Texas using video clips that are six to eight minutes long and correspond to the CDC's six target areas for obesity prevention, one of which is a segment on breastfeeding. The videos are available in English and Spanish.

Department of Family and Protective Services (DFPS)

Currently, DFPS minimum standards for child care centers states a comfortable room other than a restroom must be established for breastfeeding. Providing a mother with a place to sit and breastfeed her child helps to support this practice. Use of an adult-size chair in the classroom meets the intent of this

requirement. A place where mothers feel they are welcome to breastfeed or pump breast milk can create a positive environment when offered in a supportive way. Day cares should ensure that all staff receive training in breastfeeding support and promotions and are trained in the proper handling and feeding of each milk product, including human milk.^{xiv} Regarding breastfeeding policy, Standard 746.501(25) is in Subchapter B, Administration. Between April 1, 2013 and March 31, 2014 DFPS CCL evaluated Subchapter B, Administration at 4877 inspections of licensed child care centers. Standard 746.201 (25) was cited as deficient 220 times and written technical assistance was provided a total of 58 times.

Other suggestions to provide additional support include providing:

- Pillow to support her infant in her lap
- Stepstool for her to prop her feet and prevent back strain
- Water or other liquid to help her stay hydrated

Prenatal Breastfeeding Promotion Project

Dallas/Ft. Worth Prenatal Breastfeeding Promotion Project is an initiative in the Dallas area to encourage obstetricians and gynecologists to educate during prenatal care about the benefits of breastfeeding. The goal is to encourage breastfeeding during the prenatal period (in the OB's office during prenatal visits) to increase the rate of breastfeeding after the baby is born and ultimately decrease risk of the obesity, since studies have shown that breastfed babies are less likely to be obese.

The initiative targeted private practice obstetricians in McKinney, Plano, Frisco, Dallas and Tarrant County. Sites are trained to use the "Baby Steps in Texas Toolkit" link (<http://txpeds.org/breastfeeding-toolkit>) on the Texas Pediatric Society (TPS) website.

The project envisions that the doctor would say "I hope you will breastfeed — it's the best thing for your baby and for your body" at some point during each trimester of prenatal care. The nursing staff would also support this idea by offering information in the way of handouts (which are already developed and ready to use), websites and verbal feedback and bring up breastfeeding and how important it is to be educated about it and prepare for it in order to be successful. The waiting room would also have various media promoting breastfeeding, including the brochures and posters (in the toolkit for printing), and videos included in the toolkit that could be played on the TV screens in waiting room.

The project was implemented in three pilot sites in April and May 2013. Two of the sites have collected preliminary data and the analysis of the data shows that women are more inclined to choose to breastfeed rather than bottle feed if recommended by their physician during prenatal visits. Three additional practices sites have been targeted to include in the project and plans are to implement over the next four months using the additional \$2,500 received from the Texas Pediatric Society. It is believed that the prenatal team encouraging breastfeeding and encouraging the family to plan and prepare for it are crucial to breastfeeding initiation and maintenance. The research supports this as well.

Of the three pilot sites, two have been actively participating by having patients fill out the first trimester and third trimester breastfeeding surveys along with having the participating physicians promote breastfeeding at a prenatal appointment at least once per trimester. Preliminary results of the surveys collected thus far are below:

- 1) In the first trimester: Of the participants that have not made a decision to breastfeed, 16.67% would be influenced by their doctor's recommendation.
- 2) In the first trimester: Of the participants that did not have adequate knowledge about breastfeeding, 54.55% would be influenced by their doctor's recommendation.
- 3) In the first trimester: Of the participants that did not request additional information regarding breastfeeding, 86.49% have already made the decision to breastfeed.

4) In the third trimester: Of the participants that had received a recommendation from their doctor and have access to information, 77.78% have already made the decision to breastfeed.

The preliminary results show that a physician's promotion of breastfeeding in the prenatal period does encourage women who do not have adequate knowledge about breastfeeding to breastfeed their babies after delivery. In April 2014 and onward, the initiative will continue follow-up with pilot sites to collect completed surveys and locating new sites to implement the project.

New York, Breastfeeding: First Step to Good Health

DSHS WIC revised and updated designated sections of New York curriculum, *Breastfeeding: First Step to Good Health* for Texas Education Agency (TEA) to review and suggest for curriculum guidance and use. *Breastfeeding: First Step to Good Health* is a breastfeeding education activity package that includes curriculum for grades K-12. Each lesson can be incorporated into a content area such as social studies, science, mathematics, language arts, or family life education. This process will encourage teachers to choose lessons that can easily be integrated into their current curriculum rather than forcing them to incorporate one more required curriculum. Incorporating breastfeeding curriculum into grades K-12 will help normalize breastfeeding. When breastfeeding is perceived as the norm, more women will choose to breastfeed and society will better support it. TEA will make the curriculum available to teachers as a resource tool.

<http://www.health.ny.gov/community/pregnancy/breastfeeding/education.htm>

Texas Early Learning Council

TEA, DFPS, and Head Start provided resources released in April 2013 by the Texas Early Learning Council (TELC). The TELC is made up of 18* members representing state agencies, institutes of higher education (IHE), child care and Head Start programs. The TELC developed the "Infant and Toddler, and Three-Year-Old Early Learning Guidelines" (ITELGS) which includes a Physical Health and Motor Development domain. This domain includes health and well-being, gross motor skills, fine motor skills and physical health and motor special needs scenarios. Additionally, the ITELGs have a breastfeeding section. This document was developed to be aligned with the Texas Prekindergarten Guidelines. The ITELGS and the Texas Core Competencies for Early Childhood Practitioners and Administrators have health, safety and nutrition components. The ITELG Mission, Vision, and Guiding Principles can be found at the [ITELG Initiative page](#). The Core Competencies are statements about the knowledge and skills that early childhood professionals should be able to demonstrate to be successful in their careers. The Core Competencies are a critical piece of the Texas Early Childhood Professional Development System.

The TELC developed a statewide early childhood public awareness campaign available at www.littletexans.org on the importance of early childhood and responsive caregiving. Television, radio, and internet ads ran at different locations throughout the state, encouraging adults to learn more about early childhood and ways they can support healthy development for the children in their lives. The campaign distributed 30,000 print copies of ITELGS, and used posters, fliers, PBS, and email blasts to publicize. The ITELGS manuals are now available for the cost of printing.

The Texas Early Childhood Program Standards Comparison Tool is a searchable database of early childhood program standards, categorized by topic. Federal and state program standards, as well as other national and state program accreditations, are included in the tool. The goal of the tool is to provide information about various program standards and accreditations to support increased collaboration among early childhood programs.

Beginning Education: Early Childcare at Home (BEECH)

<http://earlylearningtexas.org/beeceh.aspx>

<http://www.childrenslearninginstitute.org/our-research/project-overview/BEECH/>

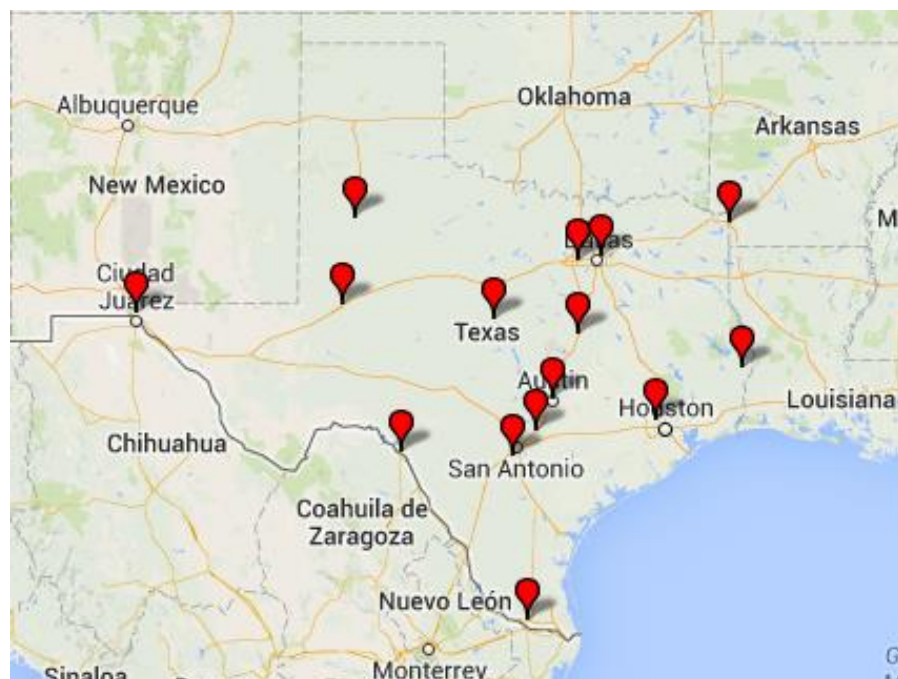
<http://www.childrenslearninginstitute.org/our-research/project-overview/BEECH/research.html>

Refer to Appendix A for detailed information regarding the priorities and the council members of the TELC.

Texas Department of Agriculture (TDA)

In 2010, TDA received a \$1 million USDA CACFP Child Care Wellness Grant which partially funded “Breastfeeding Supportive Child Care Practices” (BSC) that provide funds for CACFP child care centers and day care homes to enhance breastfeeding support.³ The grants support: Step 10 of Ten Steps to Successful Breastfeeding: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center. During this reporting period, TDA awarded grants to CACFP contracting entities with the following outcomes:

- 17 grants awarded
- 158 sites participated
- More than 5,600 parent volunteers
- 91 outreach events held



³ The remaining grant funds were used for Farm to Child Care initiative addressed later in this report.

TDA also offered all CACFP contracting entities the complimentary training, “Feeding Infants: The First Year of Life.” The training covers benefits, handling and storage of breast milk. The CACFP Infant Meal Pattern allows breast milk as a creditable food item toward a reimbursable meal.

Texas A&M AgriLife Extension Service

“Infant and Toddler Care Training for Parents and Families” features eight free courses covering a variety of infant and toddler care topics on the Texas A&M AgriLife Extension Service website. These include:

- “Infant Nutrition — Baby’s First Year,” developed by Texas A&M AgriLife Extension Service is available to county extension agents for their use with new and expectant parents. The session plan emphasizes the value and benefits of breastfeeding.
- Breastfeeding-related online educational courses for caregivers and parents include “Supporting Breast Feeding in Child Care Settings” 2012 attendance – 220; 2013 attendance – 159 .
- AgriLife made “Growing Healthy Little Ones” videos available online at: www.youtube.com/texasfeedingminds

Mothers’ Milk Bank at Austin

The Mothers’ Milk Bank at Austin (MMBA) is a community-based non-profit organization whose mission is to accept, pasteurize and dispense donor human milk by physician prescription, primarily to premature and ill infants. This non-profit organization reviews scientific literature regarding the benefits of human milk in preventing obesity and improving other health outcomes communicates these data via social media, print media, and presentations to health care providers and the public. Weekly Breastfeeding Facts distributed via www.milkbank.org, and daily Facebook postings, help to inform mothers about breast milk benefits.

MMBA research regarding nutritional composition of human milk and its relationship to infant growth is presented to appropriate conferences (research conferences of the American Academy of Pediatrics and the annual conference of the American College of Nurse Midwives) and published in appropriate scientific journals. Also, scientific evidence of human milk benefits is presented on a regular, rotational basis at many of the 60 hospitals served by the milk bank in and around Texas.

MMBA promotes breastfeeding using a variety of methods including, but not limited to, outreach and educational brochures, fliers and newsletters for families of childbearing ages and their health care providers (especially pediatricians and obstetricians). MMBA speaks with local and national press outlets about the benefits of breastfeeding at least bimonthly, and offers monthly breastfeeding classes free to the public in both English and Spanish. The MMBA website and Facebook are sources of educational materials about breastfeeding that are updated on a weekly basis.

WIC personnel, who are peer counselors, tour the milk bank and receive an educational lecture on a monthly basis. Typically three to four persons per month attend the lectures. Tours of the milk bank are provided to both medical and nursing students, and 19 dietetic students from Texas State University completed week-long internships at the milk bank. Educational sessions regarding breast milk are provided to multiple WIC sites. There were 18 sessions provided from April 1, 2012 – March 31, 2014. The breastfeeding classes have been temporarily dropped because of site restrictions and low attendance.

Refer to Appendix B for reports representing efforts by the Mothers’ Milk Bank at Austin and the Mothers’ Milk Bank of Fort Worth to support expanded breastfeeding in the Texas community, and to improve access to human milk.**DSRIP Maternal and Child Health Project**

University of Texas (UT) Physicians clinics in Houston, in collaboration with the UT School of Public Health, will implement several evidence-based interventions that will ensure that women, predominantly Medicaid patients, receive quality preconception, prenatal, postpartum, and interconception care to improve infant and child health and manage risk factors that lead to adverse pregnancy outcomes. These interventions include nutrition and physical activity promotion programs targeting pregnant women and women with infants. Examples include *A Legacy of Health*, *The Happy Kitchen*, cooking classes and weekly access to fresh produce via the Houston Food Bank, and home visits during the pregnancy and postpartum period to promote breastfeeding and prevent post-partum depression.

Texas Pediatric Society (TPS) Committee on Obesity Survey

Dr. Stephen Pont, MD, MPH, FAAP and Dr. Arthi Krishnan, MD, FAAP, prepared an online survey that was emailed to 43 pediatricians who are members of the Texas Pediatric Society Committee on Obesity. The pediatricians practice in different parts of the state and in a variety of practice settings. Of the 43 members that received the invitation to take the survey, 29 responded (67 percent response rate — some members of the committee do not practice general pediatrics and are pediatric subspecialists) and answered the questions based on their individual practice patterns/routines. The 2011 results represent 18 of the 39 pediatrician committee members from around the state.

When rounding on newborns in the hospital or during the hospital discharge check up in the office: Is Breastfeeding Recommended/Encouraged?

	Response % (2011)	Response % (2014)
Always	84%	79%
Sometimes	6%	10%
Never		
I don't know*	11%	10%

Are Barriers to Breastfeeding Discussed?

	Response % (2011)	Response % (2014)
Always	33%	48%
Sometimes	45%	41%
Never	6%	4%
I don't know*	17%	7%

*These respondents do not see newborns in their practice

How many hospitals in your area (with a newborn nursery) are adopting breastfeeding friendly practices?

	Response % (2011)	Response % (2014)
100% of the hospitals	11%	21%
75% of the hospitals	17%	35%
50% of the hospitals	33%	24%
25% of the hospitals		3%
None of the hospitals	6%	3%
Other	33%*	14%

*Four respondents stated they do not know since they do not see newborns in the hospital setting. One respondent listed less than 10 percent of the hospitals in their area are breastfeeding friendly.

Action B: Increase Consumption of Fruits and Vegetables

Increase consumption of fruits and vegetables by promoting educational, recreational and hands-on opportunities that encourage healthy eating for children under the age of six and raise nutrition standards in licensed day care facilities for children under the age of six by promoting recommendations and policies to improve the child care minimum standards guidelines.

Recommendations in 2012 Legislative Report

- Align nutrition standards and meal patterns between CACFP and Texas Department of Family and Protective Services (DFPS) Child Care Licensing (CCL) for consistency and improved nutrient quality across all child care facilities preparing foods for infants and children under the age of six.
- Efforts will continue within child care facilities to increase the offering of fruits and vegetables on menus within cost restraints. However, consumption of vegetables and fruits as noted in SB 395 would incur evaluation costs that are not feasible for the Council. The Council will continue to receive feedback from these facilities on consumption but recognize this data cannot be validated.

Background Information and Research

Increasing fruit and vegetable consumption provides children a diet based on a variety of nutrient-dense foods that provide substantial amounts of essential nutrients and appropriate calories to meet the child's needs. For children, the availability of a variety of clean, safe, nourishing foods is essential during a period of rapid growth and development. Beyond providing these foods, family homes and center-based out-of-home early childhood care facilities have the opportunity to guide and support children's sound eating habits and food learning experiences.^{xv}

The 2010 Dietary Guidelines for Americans (DGA) recommendations are intended for people two years of age and older. DGA recommends two cups per day for fruits and 2½ cups per day for vegetables for adults. Vegetables are adjusted to include dark green vegetables, red and orange vegetables, legumes, starchy vegetables and other vegetables with weekly recommendations designed to maintain a dietary balanced vegetable consumption. The MyPlate eating plan from the U.S. Department of Agriculture's Center for Nutrition Policy and Promotion outlines serving amounts according to age groups and recommends children aged two to three years consume at least one cup of fruits and one cup of vegetables daily and all children aged four to eight years should aim for 1½ cups fruits and 1½ cups vegetables daily.

Nationally, WIC improves the health of low-income pregnant women, new mothers and children by providing nutritional education, nutritious foods and assistance in accessing health care. WIC food packages were updated in 2009 to encourage exclusive breastfeeding, to increase fiber, and to reduce saturated fat and cholesterol. These food packages include a cash value for fruits and vegetables for children and adults and jarred fruits and vegetables for infants to increase fiber, reduce saturated fat and cholesterol. The food packages also delay introduction of infant cereal and eliminate infant juice.

CACFP improves the nutrition and health of the nation's most vulnerable individuals — more than 3 million infants and children primarily from low-income households. The meals and snacks provided by the program can account for the majority of food consumed by many of these individuals, so the quality of the foods provided has the potential to affect their diets substantially.^{xvi}

The CDC released its first set of comprehensive recommended strategies and measures for obesity prevention and one of the strategies includes improving the mechanisms for purchasing foods from farms.^{xvii} While evidence is limited regarding a direct link to improved diet, experts suggest that this strategy could reduce costs and increase access to fresh fruits and vegetables in areas without adequate markets, and improve the appeal and taste of produce by harvesting produce at peak ripeness. An

additional CDC strategy includes providing incentives for the production, distribution and procurement of foods from local farms.

Experts suggest this strategy could impact the amount of produce that is grown and available throughout the country, since the U.S. currently does not produce enough fruits and vegetables to meet the expected demand if all residents ate the amounts recommended in the 2010 DGA. USDA launched the “Know Your Farmer, Know Your Food” campaign to start a national dialogue on the issue.

Actions Taken in Furtherance of the Six-Year Plan

The Healthy Hunger-Free Kids Act (HHFKA) of 2010 establishes Administration for Children and Families, Health and Human Service (HHS) to work with state licensing representatives to have consistent nutrition standards that align with CACFP. DFPS and TDA along with recommendations from HHS will work together to help accomplish this goal.

Texas Workforce Commission (TWC)

Texas Rising Star (TRS) Review Work Group — HB 376 (83rd Legislature, Regular Session) HB 376 amends section 2308.321, Government Code, to include the requirements of the Texas Rising Star Review Work Group. (HB 376 also denotes actions taken in the furtherance of the Six-Year Plan by voluntary guidelines that promote the consumption of breast milk, increases consumption of fruits and vegetables and increases moderate to vigorous physical activity for children six and under.)

TRS is a TWC certification program aimed at improving the quality of child care services provided in Texas. A TRS is a child care provider that has an agreement with a board's child care contractor to serve TWC subsidized children and that voluntarily meets requirements that exceed the state's DFPS Minimum Licensing Standards for child care facilities. The TRS program provides graduated levels of certification as providers meet progressively higher certification requirements. Legislation enacted by the 83rd Texas Legislature established the TRS Workgroup for the purpose of reviewing the certification criteria and providing recommendations to TWC no later than May 1, 2014.

The newly formed TRS Work Group held a public meeting in Austin on October 9, 2013 to begin reviewing the TRS child care provider certification program guidelines and formulating its recommendations to be presented to TWC spring of 2015.

Pursuant to section 2308.321(b), the work group shall consist of the following:

- At least one member from the commission (TWC);
- At least one member from the Department of Family and Protective Services;
- At least one member from the Texas Education Agency;
- At least one member from the governor 's Texas Early Learning Council who participated on the Quality Rating and Improvement System subcommittee;
- At least one member who is appointed to a workforce development board;
- At least four members who are Texas Rising Star Program providers with different Texas Rising Star Program ratings:
 - At least one of whom must be a for-profit private provider;
 - At least one of whom must be a single-site provider;
 - At least one of whom must be a multi-site provider; and
 - At least one of whom must be an individual who provides child care in the provider 's own home;
- At least one provider who has participated in the Texas School Ready! project; and

- At least three members employed by different boards who work in the employing board's child-care program and have experience and expertise in early childhood development or the Texas Rising Star Program or other similar certification or accreditation programs.

There are four subcommittees (see below) on the TRS Work Group. Only the Curriculum/Physical and Social Activities is charged with nutrition and physical activity related recommendations.

Director and Staff Qualifications and Training

- Director Qualification Criteria Measurement
- Licensed Centers (Ages 0–12) Training Recommendation
- Licensed Centers (Ages 6–12) Training Recommendation
- Licensed Centers (Ages 0–5) Training Recommendation
- Licensed and Registered Homes Training Recommendations

Caregiver-Child Interactions

- Caregiver Child interaction Items
- TRS Subcommittee on Child and Adult Interactions Report

Curriculum/Physical and Social Activities

- Curriculum and Activities Ideas
- Health Nutrition Criteria Measurement
- Outdoor Environment Criteria
- Indoor Environment Criteria

Parent Involvement and Education

- Parent Involvement and Education Measures
- Provider/Parent Education Recommendations
- Feedback Related to HB 376 for Board Areas
- Draft TRS Logos

The Curriculum/Physical and Social Activities subcommittee reviewed national nutrition and physical activity standards, including CACFP and Caring for Our Children, to draft nutrition, breastfeeding, and physical activity recommendations. The recommendations were made available for public comment just prior to the next TRS Work Group meeting on March 6, 2014. Based on comments received, the Work Group revised the recommendations accordingly. The standards will go out for at least one public comment period as proposed rules when they are posted in the Texas Register in fall of 2014.

TRS providers for the last fiscal year (October 1, 2012 through September 30, 2013) are:

Licensed TRS Child Care Centers: 1,201

This total represents 17.23% of universe of centers with agreements to serve subsidized children.

Family TRS Child Care Homes: 197

This total represents 5.91% of universe of non-relative homes with agreements to serve subsidized children.

Total TRS providers over the fiscal year (combined totals from above): 1,398

Texas Department of Agriculture

USDA CACFP Child Care Wellness Grant – Farm to Child Care (FTC)

In 2010, TDA received a \$1 million USDA CACFP Child Care Wellness Grant which partially funded FTC. TDA's FTC initiative improved the connection between local farmers, local produce and children in early child care settings. These types of initiative partnerships have the potential to create a sustainable system change that enables CACFP sites to purchase directly from Texas farmers. During this reporting period, TDA awarded grants to CACFP contracting entities with the following outcomes:

- 32 grants
- 292 sites participated
- More than 8,300 community members reached
- More than 6,800 parent volunteers reached
- 141 outreach events held



The funds were used to establish FTC projects that promote purchasing from local producers and increasing fruits and vegetables served at snacks and meals to children on the CACFP. Grant funds have been used to create a sustainable program by providing resources to:

- Provide staff training
- Purchase equipment to store and prepare fruits and vegetables
- Organize field trips to local farms and urban gardens
- Purchase materials to grow a vegetable garden
- Provide fruits and vegetables for tasting parties
- Stage cooking demonstrations
- Provide information for parents on local food sources

FTC wellness grants serve preschool children throughout Texas and encourage child care providers to buy local produce and increase the appeal and nutrition of preschool meals. The FTC strategy could shift

children toward fresh produce. Preschool children will learn the nutritional value of fruits and veggies and how it helps little bodies grow strong and healthy and develop properly.

Funmi and Friends Visit an Urban Farm

- This short online video is an educational tool for preschoolers, parents and child care providers used as a supplemental resource for Farm to Child Care grant recipients. The video reinforces one of the grant's main tenets — when children participate in the food system and know where their food comes from, they are more likely to select and consume fresh fruits and vegetables. The video features a visit to an urban farm where fruits and vegetables are grown and the preparation of a healthy snack using the fresh produce bought at the farm. The FTC video can be viewed at: <http://squaremeals.org/Programs/ChildandAdultCareFoodProgram.aspx>

WIC Food Package

WIC encourages consumption of fruits and vegetables by promoting educational, recreational and hands-on opportunities, such as web-based lessons, nutrition fairs and cooking classes that encourage healthy eating. The WIC program further encourages the consumption of fruits and vegetables by children through the recent distribution of two physical activity/healthy eating DVDs, *The Adventures of Zobey Barnyard Dance Party* and *The Adventures of Zobey Jungle Jive*. Texas WIC redemption rates for fruits and vegetables averaged 78 percent between April 1, 2013 and March 31, 2014

Local WIC agencies may apply for Obesity Prevention Mini Grants from the state agency each fiscal year to help fund obesity prevention activities in their communities. Objectives of the grants include promoting and supporting healthy lifestyles for WIC families and WIC staff. This is intended to encourage the family to move toward healthier eating and regular physical activity, supporting parents in making healthy food choices, and helping parents develop skills to become good role models for their children. About half of all WIC agencies (35 out of 67) received the grants between April 1, 2013, and March 31, 2014. Examples of projects include cooking classes focused on foods in the WIC package such as fruits, vegetables and whole grains; gardening activities, including community gardens and simple container gardening; grocery store tours; nutrition carnivals; and increasing physical activity.

Head Start

Head Start is a federal program that promotes the school readiness of children ages birth to five from low income families by enhancing their cognitive social and emotional development. Early Head Start serves infants, toddlers, pregnant women and their families who have incomes below the federal poverty level. All Head Start programs are mandated by the Office of Head Start to be a sponsor or contractor with the CACFP to provide reimbursement of meals to Head Start children and add enhancements to accommodate children who are at a nutritional disadvantage. Head Start enrolled children are categorically eligible for free meals under CACFP and/or National School Lunch if services are provided through a partnering school district.

In Texas, 69,033 0-5 year old children or pregnant mothers are served in Early Head Start and Head Start throughout the state. Each family enrolled received information about CACFP and WIC. Of the 69,033 children, 52 percent of Early Head Start children are served in center or Family Child Care that receive meals under CACFP, and 92 percent of Head Start children are served in centers or Family Child Care that receive CACFP meals. Most programs are utilizing the *I am Moving, I am Learning* curriculum or a version of *Let's Move! Child Care*.

In March 2014, Administration for Children (AFC) and Head Start began collecting stories on the Head Start website that highlight examples of how Head Start and Early Head Start programs and Family Child Care homes throughout Texas and the country are supporting schedules and lesson plans that give children opportunities to be active and eat healthy meals and snacks. These stories will be published in

June 2014 in conjunction with the anniversary of the Let's Move initiative and will describe how the programs added creative movement and increased physical activity into the daily schedule.

The National Head Start Association partnered with Share Our Strength to connect young children to healthy food by offering Cooking Matters at the Store mini-grants to Head Start programs. Cooking Matters at the Store is an interactive grocery store tour that offers families tips and tricks for healthy eating on a budget. Smart shopping techniques like comparing unit prices, identifying whole grain products, and buying fruits and vegetables on a limited budget are shared during the tours. All the grants have been distributed including some programs in Texas and must be completed by June 15, 2014.

The Texas Head Start Collaboration Office website provides on-going information and links to Team Nutrition and Let's Move along with dozens of information sites for pregnant mothers, nutrition, physical activity and general nutrition and health information and CACFP.

Enrollment for 2014-15 Head Start has begun and another 69,000-plus families will be recruited for Head Start and provided information on CACFP and WIC.

Department of State Health Services

DSHS Community Transformation Grant sub awardee Northeast Texas Public Health District (NET Health) worked with three local farmers markets to accept WIC Farmers Market Nutrition Program (FMNP) vouchers and encouraged WIC participants to redeem the vouchers. From May 4, 2013 – September 30, 2013, 784 participants representing 18 percent of families receiving WIC benefits in Smith County redeemed 6,025 vouchers totaling \$24,100.

Texas Pediatric Society (TPS) Committee on Obesity Survey

Online survey was emailed to 43 pediatricians who are members of the Texas Pediatric Society Committee on Obesity. The pediatricians practice in different parts of the state and in a variety of practice settings. Of the 43 members that received the invitation to take the survey, 29 responded (67 percent response rate — some members of the committee do not practice general pediatrics and are pediatric subspecialists) and answered the questions based on their individual practice patterns/routines. The 2011 results represent 18 of the 39 pediatrician committee members from around the state.

Educating parents on the 5-2-1-0 model that reaches children and families where they live, learn, work and play with a consistent message that promotes four healthy behaviors. These behaviors are based in science and recommended by the medical community to promote good health:

- 5 – vegetables and fruits daily
- 2 – hours or less of TV and video/computer games per day
- 1 – hour or more of physical activity
- 0 – sugary drinks

How often is BMI calculated and plotted at well-child visits for ages 2 and above?

	Response % (2011)	Response % (2014)
100% of the time	89%	86%
75% of the time	11%	10%
Other		4%

Once parents are made aware of their child's BMI percentile, are they counseled on lifestyle modifications such as 5-2-1-0?

	Response % (2011)	Response % (2014)
100% of the time	50%	59%
75% of the time	33%	34%

50% of the time	11%	
Other	6%*	7%

*No standard counseling message is delivered among the practice – varies by practitioner in their group
When counseling parents on lifestyle modifications, how often is a piece of paper/handout/resource given?

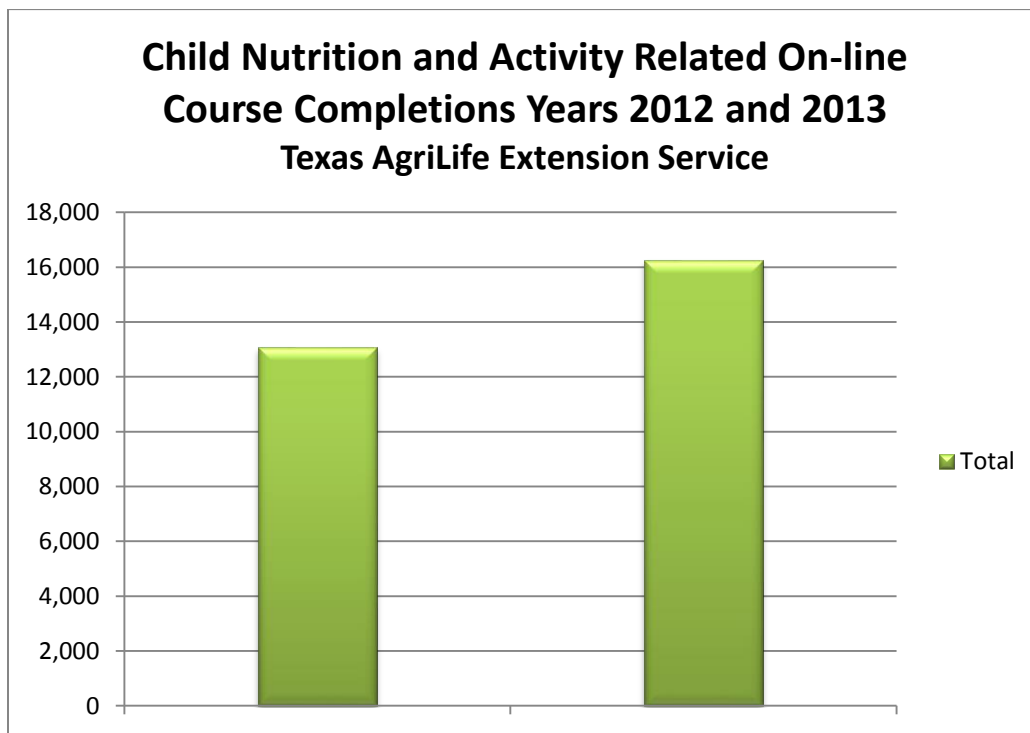
	Response % (2011)	Response % (2014)
100% of the time	28%	17%
75% of the time	39%	38%
50% of the time	17%	21%
25% of the time	11%	17%
Never		7%
Other	6%*	

*No specific written materials for overweight/obesity are given, just basic nutrition information handout

Texas A&M AgriLife Extension Service

Texas A&M AgriLife Extension Service *Healthy Food Healthy Families* curriculum from the Expanded Food and Nutrition Education Program (EFNEP) reached 18,255 parents of children under the age of 5 during 2012 and 11,521 of those parents in 2013. Self-paced, online courses that explained the importance of physical activity and nutrition for pre-school children were made available. A total of 13,059 individuals completed the online training in 2012 and 16,237 individuals completed online training in 2013. Courses were offered with titles such as *Healthy Habits: Encouraging Healthy Eating and Physical Activity in Young Children*.

Child Nutrition and Activity Related Online Course Completions
Years 2012 and 2013
Texas A&M AgriLife Extension Service



Refer to Appendix C for a breakdown of Child and Nutrition Online courses completed, by course title.

Food Brought from Home

This is treated as a separate component of Action B because it applies to increasing fruit and vegetable consumption by developing relationships between child care providers and parents instead of changing behaviors in the child care environment.

Background Information and Research

Changes in Texas state regulations of child care food service in 2003 (effective date Sept. 1, 2003) resulted in more centers halting meal and snack preparation and requiring parents to provide food from home for their children. The minimum child nutrition standards for child care centers changed from a required nutrition standard similar to the one set forth by the American Dietetic Association recommendations to an option that allows facilities to request that parents sign an affidavit that releases the center from the responsibility of meeting the child's nutritional needs and providing safe and proper food storage.^{xviii}

Lunch is in the Bag

Drs. Briley and Hoelscher worked on the pilot study, Lunch is in the Bag, that evaluated effects on behavioral constructs and their predictive relationship to lunch-packing behaviors of parents of young children in child care facilities. The recommendations related to this study are as follows:

- The child care facility should provide parents/guardians with written guidelines that outline the facility's comprehensive plan to meet the nutritional requirements of the children in the facility's care and suggest ways parents and guardians can assist the facility in meeting these guidelines. The facility should develop policies for foods brought from home, with parent/guardian consultation, so that expectations are the same for all families.
- The facility should have food available to supplement a child's food brought from home if the food brought from home is deficient in meeting the child's nutrient requirements. If the food the parent or guardian provides consistently does not meet the nutritional or food safety requirements, the facility should provide the food and refer the parent or guardian for consultation to a nutritionist or registered dietitian, to the child's primary care provider, or to community resources with trained nutritionists or registered dietitians such as WIC Supplemental Food Program, extension services and health departments.
- The parent or guardian may provide meals for the child upon written agreement between the parent or guardian and the staff. Food brought into the facility should have a clear label showing the child's full name, the date, and the type of food. Lunches and snacks the parent or guardian provides for one individual child's meals should not be shared with other children. When foods are brought to the facility from home or elsewhere, these foods should be limited to those listed in the facility's written policy on nutritional quality of food brought from home. Potentially hazardous and perishable foods should be refrigerated and all foods should be protected against contamination.
- The facility, in collaboration with parents and the food service staff, nutritionist or registered dietitian, should establish a policy on foods brought from home for celebrating a child's birthday or any similar festive occasion. Programs should inform parents/guardians about healthy food alternatives like fresh fruit cups or fruit salad for such celebrations. Sweetened treats are highly

discouraged, but if provided by the parent or guardian, then the portion size of the treat served should be small.

The study examined ways parents could be influenced to include fruits, vegetables and whole grains in children's sack lunches. The study included researching Lunch is in the Bag, a five-week program for parents and children who use child care centers requiring lunches sent from home. The program includes classes created to provide education for the children and prompt parents to include healthy foods in their children's lunches. The program also includes activity stations outside the class once a week when parents pick up their children.

Current outcomes and progression of Lunch is in the Bag initiative can be found in Appendix D which includes two abstracts and research article in *Am J Health Educ.* 2012; 43(3): 135-142. "Lunch is in the Bag" research project: Unbundling outcomes of a multilevel intervention to increase fruit, vegetables, and whole grains parents pack for their preschool children in sack lunches.

Texas Childhood Obesity Research Demonstration Project

The Michael & Susan Dell Center for Healthy Living, part of The University of Texas Health Science Center at Houston (UT Health), and the USDA/Agricultural Research Service (ARS) Children's Nutrition Research Center at Baylor College of Medicine have been awarded a \$6.28 million grant from CDC. The Texas Childhood Obesity Research Demonstration (CORD) is a CDC funded project designed to evaluate community-based obesity prevention and treatment programs in Austin and Houston. The project takes place in Austin and Houston with collaborators from MEND (Mind, Exercise, Nutrition, Do it), Central Texas Children's Hospital, the Texas Center for the Prevention and Treatment of Childhood Obesity at Dell Children's Medical Center, Texas Department of State Health Services, Duke University, University of Nebraska Medical Center, the YMCA, the Sustainable Foods Center and Coordinated Approach to Child Health (CATCH). CORD connects the dots between families, pediatricians, schools and local youth organizations to support children's healthy eating and active living. If successful, CORD will become a national model for medical and community practice.

The Texas CORD project includes a primary prevention trial, a total of 51 Head Starts and school (Head Starts embedded in a school) centers. Of those, 34 are receiving the intervention now, and the rest will receive a delayed intervention in 2014. The primary prevention intervention consists of our CATCH Early Childhood program. Thirty of the Head Start Centers are in Houston and 21 are in Austin. For the secondary prevention part of the project, which includes 288 2 to 5 year olds, half will receive a year-long intervention with Texas CORD that includes the MEND 2 through 5 program for three months, followed by monthly family meetings with cooking lessons and role model stories. The other half will receive Next Steps, a self-guided obesity prevention program promoted by the American Academy of Pediatrics (AAP).

https://www.nfaap.org/eweb/dynamicpage.aspx?webcode=aapbks_productdetail&key=810e31a8-571d-4903-b1b3-f0c3c4693dee

Seton Healthcare Family and the Texas Center for the Prevention and Treatment of Childhood Obesity have been awarded 1,115 Medicaid Waiver/Delivery System Reform Incentive Payment funds to dramatically expand the childhood obesity center and obesity programs at Dell Children's Medical Center. One of the programs that is being developed and implemented through this grant is a young child intervention that provides parent training and counseling so that parents can best support their children in making healthy changes. Knowledge and best practices developed through this project will be shared with other providers across Texas.

The Texas Pediatric Society continues to present the Be Our Voice training workshop annually in Austin. At this statewide training, health care professionals are trained in how to develop and implement projects

that seek to improve the health of the communities they serve. Each year, teams have focused on a variety of topics, including working with Head Start programs and promoting breastfeeding.

Over the last two years, the AAP has developed and released a number of tools and resources to address the obesity epidemic across all ages. The AAP recently established the Institute for a Healthy Childhood Weight and the AAP Section on Obesity www.aap.org/obesity. Dr. Stephen Pont, a stakeholder on the Council, currently serves as the inaugural chair of the AAP Section on Obesity. Additional resources from the AAP include Change Talk, an interactive training simulation to help pediatricians and other health professionals learn motivational interviewing techniques to counsel families on childhood obesity, and Healthy Active Living for Families, which developed and tested a series of positive, family-focused messages specific to obesity prevention and care for the following developmental stages: infancy, toddlerhood, and early childhood. Texas families participated in focus groups and contributed to the development of this national tool.

Action C: Raise Nutrition Standards

Raise nutrition standards in licensed child care facilities for children under the age of six by promoting recommendations and policies to improve the child care minimum standards guidelines.

Recommendation in 2012 Legislative Report

- Align nutrition standards and meal patterns between CACFP and Texas Department of Family and Protective Services (DFPS) Child Care Licensing (CCL) for consistency and improved nutrient quality across all child care facilities preparing foods for infants and children under the age of six.

Background Information and Research

Meeting a child's needs for growth and activity is important. Today, parents and caregivers often share the responsibility for facilitating these needs through nutrition and exercise. Providing a stable and consistent diet of whole, minimally processed, nutritious foods becomes more challenging when children divide their time between home and outside child care. Providing children with a consistent nutrition message that is balanced requires coordination between parents and caregivers. Just as parents and caregivers have different influences at different times; children change from year to year. During the second and third years of life, the child grows much less rapidly than during the first year of life. Whether they're experiencing periods of rapid or slower growth, children must continue to eat nutritious foods.

When children are thirsty between meals and snacks, water is the best choice. Encouraging children to learn to drink water in place of fruit drinks, soda, fruit nectars or other sweetened drinks builds a beneficial habit. Drinking water during the day can reduce the extra caloric intake that is associated with being overweight and obese.^{xix} Drinking water is good for a child's hydration and reduces acid in the mouth that contributes to early childhood caries, or tooth decay.^{xx} Water needs vary among young children and increase when exercising or during dry days when dehydration is a risk.^{xxi}

Clean, sanitary, drinking water should be readily available in both indoor and outdoor areas throughout the day. Water should not be a substitute for milk at meals or snacks where milk is a required food component unless it is recommended by the child's primary care provider. The AAP recommends that children aged two and older should be served skim or 1 percent milk.^{xxii}

Actions Taken in Furtherance of the Six-Year Plan

In December 2010, DFPS revised the nutrition standards for child care centers in Title 40 of the Texas Administrative Code, Chapter 746, *Minimum Standards for Child Care Centers*. The revisions included the following requirements:

- Caregivers must ensure a supply of drinking water is always available to each child and is served at every snack, at mealtime and after active play. It must be made available in a safe and sanitary manner
- Caregivers must not serve beverages with added sugars, such as carbonated beverages, fruit punch or sweetened milk except for a special occasion such as a holiday or birthday celebration
- Caregivers must serve only 100 percent fruit or vegetable juice
- Fruit juice must be served only to children ages 12 months and older
- Caregivers only can serve up to four ounces of fruit juice for children ages 12 months through five years of age and six ounces for children ages six and older per day when using towards daily food needs

For child care centers, DFPS revised minimum standards for servings of fruits and vegetables, activity requirements and added limits on screen time. These standards outline the required number of meals and snacks a child needs depending on the amount of time they spend at the center. Accompanying charts make it easy to determine the various food groups that should be represented and the number of servings and serving sizes required for each meal or snack. Different charts are available for different ages.

Texas A&M AgriLife Extension Service

To improve the overall care of young children, the Texas A&M AgriLife Extension Service offers a variety of online professional development courses to child care providers and directors related to child health and nutrition. Courses, such as *Healthy Eaters: Infant and Toddler Nutrition in Child Care Settings* are available in English, Spanish and Vietnamese. Over a two-year span (2011-2013), there were 29,296 completions of courses in English, 488 course completions in Spanish, and 100 completions of the courses in Vietnamese.

In addition to the courses offered to child care providers, parents were offered the nutrition course *Healthy Eaters: Infant and Toddler Nutrition in the Home Environment* in the same three languages. Over a two-year span, parents completed the course 1,847 times in English, 39 times in Spanish, and 79 times in Vietnamese.

Health and Human Services Commission (HHSC)

The Nurses Family Partnership (NFP) statewide meeting for fiscal year 2013, gave 80 Nurse Home Visitors (NHV) the opportunity to experience an outstanding interactive demonstration on *Making Healthy Snacks for Mom and Toddler* presented by one of the WIC educators. Additional discussion was held among conference participants on how best to change long-standing familial patterns of eating behavior among the high-risk families served. NHV reported this skill-building, interaction session provided the knowledge they needed to enhance the education provided to their clients around improving nutrition.

Texas Department of Agriculture (TDA)

TDA's initiative Promoting Healthy Eating and Physical Activity for a Healthier Lifestyle formed a workgroup whose members' expertise included early childhood nutrition, child development, CACFP child care directors and day home sponsors. The workgroup established recommendations to align the CACFP meal patterns with the current Dietary Guidelines for Americans.

- Serve one whole grain daily
- Increase availability of fresh or frozen fruits and vegetables daily

- Offer vitamin C rich food daily
- Offer vitamin A rich food three days per week
- Limit foods with added solid fats and added sugar (SoFAS) to no more than twice a week at snack only
- Serve dry, ready-to-eat cereals with less than 6 grams sugar per serving

TDA announced the release of USDA Team Nutrition's *Nutrition & Wellness Tips for Young Children: Provider Handbook for Child and Adult Care Food Program* and 1,400 copies were distributed to contracting entities participating in CACFP. The handbook highlights tips on how child care facilities can increase offerings and varieties of fruits and vegetables within budget constraints.

TDA provided nutrition training to CACFP contracting entities in three areas:

- Menu planning
- Planning nutritious snacks
- Feeding infants

Trainings conducted April 1, 2013 – March 31, 2014:

Menu Planning

25 trainings

262 participants

Cities — El Paso, Corpus, Edinburg, Tyler, Arlington, Dallas, Houston, Ft. Worth, Austin, San Angelo, Kilgore, Lubbock, San Antonio, Waco, Abilene

Planning Nutritious Snacks

24 trainings

166 participants

Cities — El Paso, Edinburg, Arlington, Corpus Christi, Tyler, Houston, Dallas, Ft. Worth, Austin, San Angelo, Lubbock, Waco, Abilene, San Antonio

Feeding Infants

24 trainings

213 participants

Cities — Lubbock, La Marque, Abilene, Rio Grande City, San Antonio, Houston, Dallas, El Paso, Edinburg, Kilgore, San Angelo, Corpus Christi, Waco, Austin

Texas A&M AgriLife Extension Service

The Texas A&M AgriLife Extension Service continues online and face-to-face trainings to educate and encourage fruit and vegetable consumption. A revised lesson plan promoting the consumption of fruits and vegetables for delivery by Texas A&M AgriLife Extension agents to clients who may have families with preschool children, a set of vegetable fact sheets, and an online series. An introduction to family nutrition is posted at Extension Online. The series serves as professional development for new agents. However, it can be viewed by anyone at no cost.

Texas A&M AgriLife Extension Service posted videos online^{xxiii} for the Texas Feeding Minds Project. This made the project results available online to all target audiences including parents, families, caretakers and communities. By offering parents a curriculum called *Healthy Food Healthy Families*, Expanded Food and Nutrition Education Program (EFNEP) reached a total of 29,776 parents of children under the age of 5 during years 2012-2013.

The results of “Growing Healthy Little Ones” (Healthy Lifestyle Childcare SNAPEd Project in Brazos County) were made available to 105 parents and families of seven child care centers involved in the TDA-funded Nutrition Education Grant Program. A summary report was provided to the three centers in Brazos County and four centers in Travis County as well as a DVD illustrating all project components including gardening, vegetable tasting and recipes for families, reading about nutrition and physical activity, and increasing physical activity at the center.

Actions B and C: Increase Physical Activity for Pre-School Children in Child Care

Increase minutes of structured and unstructured physical activity in licensed day care facilities for children (under the age of 6) by promoting recommendations and policies to improve the child care minimum standards guidelines. Increase moderate to vigorous physical activity and minutes of structured and unstructured physical activity in licensed day care facilities for infants and children under the age of 6 by promoting recommendations and policies to improve the child care minimum standard guidelines.

Recommendation in 2012 Legislative Report

- Continue efforts with DSHS Community and Worksite Wellness (CWW), formerly Nutrition, Physical Activity and Obesity Prevention Program, and DFPS CCL to improve minimum physical activity standards in child care facilities for infants and children under the age of 6.

Background Information and Research

Children in the United States are exposed to media use from their earliest years. A 2003 study from the Kaiser Family Foundation reported that children aged 6 years and younger spend an average of two hours per day with screen media, mostly watching television and videos.^{xxiv} The AAP recommends that television time should be limited to no more than one to two hours of quality programming per day for children over two years old.^{xxv} The 2010 DGA stated that it is “important during leisure time to limit sedentary behaviors, such as television watching and video viewing, and replace them with activities requiring more movement.”^{xxvi} Research has found that television exposure is a risk factor for overweight in preschoolers.^{xxvii}

Physical activity and movement are essential to the development, learning and growth of young children. During the first six years of life, infants, toddlers, and preschoolers are learning fundamental gross motor skills, and need ample opportunities to practice these skills. Recent evidence suggests that children may be more attentive and learn better after periods of activity and movement.^{xxviii} Notably, physical activity is also a crucial part of maintaining a healthy weight and preventing obesity. Physical activity habits are established early in life and develop over time.^{xxix} Therefore, the preschool years are a key time in which to instill healthy physical activity habits that will last a lifetime, primarily through active play.

Although physical activity is essential to young children’s growth and learning, there are potential barriers to daily opportunities for active play, including concerns about children’s safety, time, curricular constraints and inadequate knowledge or training among caregivers about how to integrate these opportunities into the curriculum.

Screen time is another barrier to children getting enough physical activity. A 2003 study showed children aged 6 and under spend an average of two hours per day watching a TV screen or other media device.^{xxx} The maximum amount of time children older than two should be watching videos is actually one to two hours and it should be quality programming.^{xxxi} All this screen time can lead to overweight in pre-school children.^{xxxii}

Experts disagree about the appropriate amount of physical activity for toddlers and preschoolers, what proportion of children's physical activity should be structured, and to what extent structured activities are effective in producing children's physical activity. Researchers do agree that toddlers and preschoolers generally accumulate vigorous physical activity over the course of the day in very short bursts of 15 to 30 seconds.^{xxxiii}

Daily physical activity is an important part of preventing excessive weight gain and childhood obesity. Some evidence also suggests that children may be able to learn better during or immediately after bursts of physical activity, due to improved attention and focus.^{xxxiv}

Numerous reports suggest that children are not meeting daily recommendations for physical activity, and that children spend 70 percent to 87 percent of their time in early care and education being sedentary, i.e., sitting or lying down.^{xxxv} Excluding nap time, children are sedentary 83 percent of the time. Children may only spend about 2 percent to 3 percent of time being moderately or vigorously active.^{xxxvi}

Very young children are entirely dependent on their caregivers and teachers for opportunities to be active.^{xxxvii} Especially for children in full-time care and for children who live in unsafe neighborhoods, the early care and education facility may provide the child's only daily opportunity for active play. Evidence suggests that physical activity habits learned early in life may track into adolescence and adulthood supporting the importance for children to learn lifelong healthy physical activity habits while in the early care and education program.^{xxxviii}

The National Association of the Education of the Young Child (NAEYC) requires accredited centers to follow the guidelines below:

- Children 1 year and older in full-day care should be physically active an hour a day
- Children 3 years and older should have at least 30 minutes structured movement activity
- Children should not remain sedentary for more than an hour at a time, except for rest time

National Association for Sport and Physical Education (NASPE) Physical Activity Guidelines for birth to age five^{xxxix}

Guidelines for Infants:

- Guideline 1.** Infants should interact with caregivers in daily physical activities that are dedicated to exploring movement and the environment.
- Guideline 2.** Caregivers should place infants in settings that encourage and stimulate movement experiences and active play for short periods of time several times a day.
- Guideline 3.** Infants' physical activity should promote skill development in movement.
- Guideline 4.** Infants should be placed in an environment that meets or exceeds recommended safety standards for performing large-muscle activities.
- Guideline 5.** Those in charge of infants' well-being are responsible for understanding the importance of physical activity and should promote movement skills by providing opportunities for structured and unstructured physical activity.

Guidelines for Toddlers:

- Guideline 1.** Toddlers should engage in a total of at least 30 minutes of structured physical activity each day.
- Guideline 2.** Toddlers should engage in at least 60 minutes – and up to several hours – per day of

unstructured physical activity and should not be sedentary for more than 60 minutes at a time, except when sleeping.

- Guideline 3.** Toddlers should be given ample opportunities to develop movement skills that will serve as the building blocks for future motor skillfulness and physical activity.
- Guideline 4.** Toddlers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.
- Guideline 5.** Those in charge of toddlers' well-being are responsible for understanding the importance of physical activity and promoting movement skills by providing opportunities for structured and unstructured physical activity and movement experiences.

Guidelines for Preschoolers:

- Guideline 1.** Preschoolers should accumulate at least 60 minutes of structured physical activity each day.
- Guideline 2.** Preschoolers should engage in at least 60 minutes – and up to several hours – of unstructured physical activity each day, and should not be sedentary for more than 60 minutes at a time, except when sleeping.
- Guideline 3.** Preschoolers should be encouraged to develop competence in fundamental motor skills that will serve as the building blocks for future motor skillfulness and physical activity.
- Guideline 4.** Preschoolers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.
- Guideline 5.** Caregivers and parents in charge of preschoolers' health and well-being are responsible for understanding the importance of physical activity and for promoting movement skills by providing opportunities for structured and unstructured physical activity.

Actions Taken in Furtherance of Six-Year Plan

Texas Education Agency (TEA)

In 2011, TEA produced a companion document to the “Texas Prekindergarten Guidelines” for instructors of students with developmental delays titled “Early Childhood Outcomes and Prekindergarten Guidelines Alignment.” Using “Texas Prekindergarten Guidelines” as a foundation, this document extends the guidance to include Early Childhood Outcome guiding questions for providers, the correlating Early Childhood Outcome established by the Individuals with Disabilities Education Act (IDEA), a more extensive developmental continuum that spans 36-48 months of age, foundational skills for those with disabilities and guidance for differentiation of instruction for children with learning differences.

As part of the agency's outreach website, prekindergartenprepares.com, and toolkit, which was made available starting in the fall of 2011, TEA provides a parent information page titled “Healthy Child.” The website, available in English and Spanish, includes links to best practices and resources under the categories of Immunization, Child Passenger Safety, Exercise, Healthy Meals, Fun and Crafts, WIC, CHIP and Children's Medicaid, and the National School Lunch Program. TEA used Title I state level funds to establish the site and conducted extensive stakeholder input and market research in its development. The website has been widely distributed by and among such interagency partners as the Texas Early Learning Council, the Texas Early Childhood Education Coalition (now part of Texans Care for Children), 20 regional education service centers, the Texas Head Start Collaboration Office and UT Health's Children's Learning Institute.

TEA's "Texas Prekindergarten Guidelines" have been established in recognition that the learning experiences of the preschool years provide a foundation that guides children academically, socially and emotionally. These experiences can influence the rest of a child's life. The guidelines include, as one of 10 domains, physical development. Although the guidelines are voluntary, they are widely used throughout the state by public prekindergarten programs and other early childhood education providers serving 3- and 4-year-old children. The guidelines include both gross motor development and fine motor development. Descriptions are provided of the skills and abilities of typically developing children by around 48 months of age, at the end of their prekindergarten year. In addition, examples are provided of what instructors should observe in child behaviors and further examples of instructional strategies to support the child's development. The Guidelines are available in both English and Spanish from the agency's website.

As mentioned in the report previously, TEA, DFPS, and Head Start provided resources released in April 2013 by the Texas Early Learning Council (TELC). The TELC developed the "Infant and Toddler, and Three-Year-Old Early Learning Guidelines" which include a physical health and motor development domain. This domain includes health and well-being, gross motor skills, fine motor skills and physical health and motor special needs scenarios. This document was developed to be aligned with "Texas Prekindergarten Guidelines."

Senate Bill 891, passed during the 81st Texas Legislative Session (2009), requires that students enrolled in full-day prekindergarten must participate in moderate to vigorous physical activity for a minimum of 30 minutes a day or 135 minutes per week. The legislation also states that to the extent practicable, a school district shall require a student enrolled in prekindergarten on less than a full-day basis to participate in the same type and amount of physical activity as a student enrolled in full-day prekindergarten. Full-day prekindergarten programs are defined in the Texas Education Code §25.082(a) as one that is at least seven hours each day including intermissions and recesses. A half-day program is a minimum of three hours.

UT School of Public Health/ Let's Move Child Care

The Let's Move Child Care (LMCC) quiz is a self-administered checklist available online nationwide to child care providers to determine if best practices for nutrition, physical activity and breastfeeding are being met in early care education centers (ECE centers) across the country. The LMCC quiz has been taken by over 5,000 providers from hundreds of ECE organizations nationwide. The UT School of Public Health is conducting the data management and analysis for the LMCC quiz.

The Texas CORD Project, as part of a systems level approach to obesity prevention in Texas, and the CATCH Early Childhood preschool-based nutrition and physical activity program was implemented using a train-the-trainer model in over 25 Head Start centers and preschools across the Austin and Houston areas.

DSHS Community and Worksite Wellness

The DSHS Health Promotion and Chronic Disease Prevention section was awarded the CDC grant, DP13-1305, State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health. The grant started July 1, 2013 with a project period of five years. DSHS received basic non-competitive funding of \$700,000. Short-term outcomes increase state, community, worksite, school, and early care and education (ECE) environments that promote and reinforce healthful behaviors and practices across the life span related to the prevention of diabetes, cardiovascular disease and stroke, and obesity. DSHS Community and Worksite Wellness (CWW) is working to promote the adoption of food service guidelines/nutrition standards, which include sodium, and to promote the adoption of physical activity in early care and education.

Child Care Centers/Homes Physical Activity Self-Assessment Survey Draft

A physical activity draft survey was drafted by the Council. The purpose of the physical activity survey is to collect baseline data on the number of minutes children (under the age of six) spend in physical activity (structured and unstructured) while attending outside care at child care centers and day care homes in Texas. The survey also captures information related to sedentary activities, barriers of physical activity, types of physical activity equipment and resources used in outside care and physical activity training for staff. The physical activity survey will be completed and administered in 2014 – 2016. Refer to Appendix E to view the draft survey

Department of Family and Protective Services (DFPS)

DFPS CCL minimum standards state that center and home-based child care providers are expected to provide planned activities on a daily basis and include a variety of both child-initiated and caregiver-initiated activities. The DFPS “Basic Care Requirements for Infants ” calls for infant activities that include opportunities for reaching, grasping, pulling up, creeping, crawling and walking in a safe, clean, uncluttered area. In addition, children ages 18 months and older are required to have morning and afternoon opportunities for outdoor play as well as opportunities for active play both indoors and outdoors on a daily basis.

DFPS CCL offers a variety of online courses aimed at improving the child-health options available to child care providers and parents. DFPS’ “Developmental Activities and Activity Plan” includes requirements for child care providers include helpful recommendations such as incorporating a variety of physical activities into each day and offering both child-initiated and caregiver-initiated activities.

DFPS also established guidelines for screen time in front of televisions, computers or video games in a child care center. In the guidelines, screen time is prohibited for children under the age of 2. For children 2 years and older, televisions, computers or video games may be used to supplement, but not replace, activities. The guidelines also stipulate that any screen time must be related to the planned activities, age appropriate and must not exceed two hours per day.

Texas A&M AgriLife Extension Service

The Texas A&M AgriLife Extension Service offers online professional development programs that meet caregivers’ needs for clock hours (continuing education need to meet Child Care Licensing minimum standards). A series titled “Introduction to Family Nutrition” was developed in 2013. Within the series, a module titled “Baby’s First Year” has reference to physical activity. Likewise the module titled “Toddlers, Preschoolers and Children” includes a brief section on physical activity. The session “Ten Behaviors that Promote a Healthy Weight in Preschoolers” was developed in 2012. The entire courses can be viewed (for free) at the website: http://extensiononline.tamu.edu/courses/food_nutrition.php

Other modules located at http://extensiononline.tamu.edu/courses/child_care.php include:

- “Why Play? Understanding the Role of Play in Early Childhood”
- “Developing Appropriate Learning Environments for Infants and Toddlers”
- “More Outside Play Please: Importance of Outside Play; the Value of Play for Preschool Children”

Child care providers were also offered a variety of self-paced online courses that explained the importance of physical activity and nutrition for pre-school children. A total of 13,059 individuals completed the online training in 2012. Courses with titles such as “Developing Healthy Eating Habits In Preschoolers” and “Supporting Breastfeeding In Child Care Settings” provided information on nutrition while courses with titles such as “The Value Of Play For Preschool Children” and “More Outside Play Please: Importance Of Outside Play” encouraged incorporating physical activities into a child’s day.

TDA and DSHS

In an interagency effort to promote nutrition and exercise to 2 to 5 year olds, TDA partnered with DSHS WIC in the production and distribution of “The Adventures of Zobey Barn Dance Party/Jungle Jive” and educator DVD “The Adventures of Zobey in Preventing Childhood Obesity.” The DVDs are designed to help the children be physically active and learn about healthy foods while viewing the video. The DVDs include recipes and nutrition tips as well as video clips of fun physical activities. TDA distributed Zobey DVDs for participants who attended Menu Planning and DSHS WIC taught “Zobey Jungle Jive” and “Zobey Barn Dance” classes and distributed “The Adventures of Zobey Jungle Jive” and “The Adventures of Zobey Barn Dance Party” DVDs.

Decreasing Malnutrition and Undernourishment Among Children Under the Age of Six

Recommendation in 2012 Legislative Report

- Provide statewide support and implement a campaign to increase awareness of and access to nutrition assistance programs such as Child and Adult Care Food Program (CACFP), Supplemental Nutrition Program for Women, Infants and Children (WIC), Supplemental Nutrition Assistance Program (SNAP), Supplemental Nutrition Assistance Program Education (SNAP-Ed), and Expanded Food and Nutrition Education Program (EFNEP) that provide guidance for improving nutrition and health in early childhood settings.

Texas Workforce Commission (TWC)

TWC distributed TDA CACFP informational brochures to 28 boards to inform day care providers about CACFP. Brochures were sent to Workforce Development Boards in December 2012 asking them to forward the brochures to child care providers in their area. The average number of providers serving subsidized children in that month — and thus receiving the brochure — was 6,144.

In addition, when the brochures were distributed, a one-page information sheet regarding CACFP was posted on the Texas Workforce Commission Provider Web Portal. The CACFP notice can be viewed at: <http://www.workforcesolutionschildcare.com/ccaa/> The notice itself is linked at: <http://www.workforcesolutionschildcare.com/ccaa/pdf/CACFP.pdf>

Workforce Development Boards

1. Workforce Solutions Panhandle
2. Workforce Solutions South Plains
3. Workforce Solutions North Texas
4. Workforce Solutions for North Central Texas
5. Workforce Solutions for Tarrant County
6. Workforce Solutions Greater Dallas
7. Workforce Solutions Northeast Texas
8. Workforce Solutions East Texas
9. Workforce Solutions of West Central Texas
10. Workforce Solutions Upper Rio Grande
11. Workforce Solutions Permian Basin
12. Workforce Solutions Concho Valley
13. Workforce Solutions for the Heart of Texas
14. Workforce Solutions Capital Area
15. Workforce Solutions Rural Capital Area
16. Workforce Solutions Brazos Valley
17. Workforce Solutions Deep East Texas

18. Workforce Solutions Southeast Texas
19. Workforce Solutions Golden Crescent
20. Workforce Solutions Alamo
21. Workforce Solutions for South Texas
22. Workforce Solutions of the Coastal Bend
23. Workforce Solutions Lower Rio Grande Valley
24. Workforce Solutions Cameron
25. Workforce Solutions Texoma
26. Workforce Solutions of Central Texas
27. Workforce Solutions Middle Rio Grande
28. Workforce Solutions Gulf Coast

Texas Department of Agriculture

TDA distributed CACFP information brochures by the regional ESC during CACFP nutrition trainings to inform interested parties about the CACFP. TDA's February 2014 CACFP e-News highlighted the National CACFP Sponsors Association resources/educational materials for national CACFP week March 16 – 22, 2014. The CACFP e-News is circulated to 1,400 contracting entities in the CACFP program.

Health and Human Services Commission (HHSC)

HHSC identified Home Visiting Programs as collaborative partners to increase awareness of and access to nutrition assistance programs. Evidence-based home visiting programs funded through HHSC, including Nurse Family Partnership (NFP), Parents as Teachers (PAT), Early Head-Start Home Base (EHS-HB), and Home Instruction for Parents of Preschool Youth (HIPPY), assists families in accessing nutrition assistance through state and locally funded programs including SNAP, WIC services. Each of these evidence-based programs has a wider audience of home visitors in their programs where funding streams other than HHSC exist.

Nutrition Assistance Programs in Texas

For food-insecure children, meals provided in child care centers may comprise a large fraction of food that they eat — making the provision of *healthy* food through these programs especially important. Food insecurity also triggers obesity when young children develop poor nutritional habits. Texas is among the states with the highest rates of food insecurity in the nation for children with more than 1.8 million children living in food insecure households. It is also estimated that almost one in four Texas children live in food insecure households.^{xi} While national food assistance programs are invaluable in providing assistance to those in need, additional support and increasing participation in these nutrition programs is needed.

To reach very young children, food assistance programs must connect with early child care providers. While approximately 15 percent of preschool children are primarily cared for by their relatives, most preschoolers who spend time in non-parental care arrangements are placed in center-based care such as child care centers, preschools, Head Start programs or family child care homes. Child care settings such as CACFP provide numerous opportunities to promote healthy eating and physical activity behaviors among preschool children.^{xii}

Many low-income working parents rely on child care and afterschool programs to provide a safe and healthy place for their children while they commute and work. By providing partial reimbursement for nutritious meals and snacks for eligible children who are enrolled at participating child care centers, day care homes and Head Start programs, CACFP plays an important role in improving the quality of those programs and in making them more affordable for low-income parents.

While CACFP has several segments, the majority of CACFP participants are preschool-aged children attending participating family child homes, child care centers or Head Start programs. Depending on the type of program, eligibility is based either on the poverty status of the area or on the income of the enrolled children.

Each year the Food Research and Action Center (FRAC) analyzes CACFP participation data for child care centers and family child care homes provided by the United States Department of Agriculture (USDA) for the United States as a whole and for each of the 50 states and the District of Columbia. Key findings for fiscal year 2012 include: FRAC info for Texas that is listed on page 35-

36: <http://frac.org/wp-content/uploads/2010/07/tx.pdf>

Child and Adult Care Food Program (CACFP) (FY 2012) Texas

Number of Participating Family Child Care Homes	6,159
Family Child Care Home Average Daily Participation of Children	83,162
Change in Family Child Care Daily Participation in Last 10 Years	99.6%
Number of Participating Child Care Centers (Includes Head Start)	4,892
Child Care Center Average Daily Participation of Children (Includes Head Start)	267,431
Change in Center Daily Participation in Last 10 Years	85.2%
Federal Funding for CACFP	\$240,733,640

Special Supplemental Nutrition Program for Women, Infants and Children (WIC) (FY 2012)

Average Monthly Participation	969,893
Women	249,607
Infants	227,473
Children	492,814
Change in Average Monthly Participation in the last 10 Years	23.3%
Federal Funding for WIC	\$522,378,714

SNAP/Food Stamp Program (FY 2012)

Average Monthly Participation (Individuals)	4,038,440
Change in Participation in Last 5 Years	59.5%
Average Monthly Benefit per Person	\$123.95
Participation Rate of Eligible Persons (FY 2010)	65.0%
Rank Among States	47
Participation Rate of Eligible Working Poor (FY 2010)	59.0%
Federal Funding for SNAP/Food Stamps	\$6,006,734,649

FRAC

Texas

Demographics, Poverty and Food Insecurity Population (2012)

Total People	26,059,203
Children (Under Age 18)	6,957,682

Income and Poverty (2012)

Median Household Income	\$50,740
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Rank Among States (Highest to Lowest)	26
Total People Living In Poverty	4,562,352
Poverty Rate	17.9%
Rank Among States (Highest to Lowest)	12
Children (Under Age 18) Living In Poverty	1,776,664
Child Poverty Rate	25.8%
Rank Among States (Highest to Lowest)	12
Total People Living Below 185% of Federal Poverty Level	9,257,150

Food Insecurity Among Households (2010-2012, 3-Year Averages)

Number of Households that are Food Insecure	1,734,804
Percent of Households that are Food Insecure	18.4%
Number of Households that are Very Low Food Secure	586,766
Percent of Households that are Very Low Food Secure	6.2%

Texas p.1 | Updated Dec. 1, 2013 **For More Information:** frac.org/reports-and-resources/national-and-state-program-data-2

Conclusion

Moving forward, the Council and stakeholders will continue efforts to increase access to breast milk, whether direct-fed, expressed, or donor milk throughout Texas; increase consumption of fruits and vegetables and increase physical activity in Texas for children ages 6 and under to achieve improved health and nutrition outcomes for the state's youngest population.

APPENDICES and SOURCES

Appendix A: Texas Early Learning Council

*The Texas Early Learning Council (TELC) is made up of 18 members representing state agencies, institutes of higher education (IHE), child care centers and Head Start programs. The TELC is an advisory council established by Governor Rick Perry in late 2009. In 2010, the Council was awarded a three-year grant from the federal government to achieve a series of goals towards improving school readiness in Texas through targeted strategies stemming from the Council's four priority areas:

- Parental Outreach and Communications
- Early Childhood Workforce and Professional Development
- Collaborations and Standards
- Data Systems and Quality Rating and Improvement Systems

The members of this council represent:

- The Director of the Texas Head Start State Collaboration Office
- Representative from the Office of the Governor
- Representatives of the Department of Family and Protective Services
- Representatives of the Texas Education Agency
- Representatives of state school districts
- Representatives of state higher education institutions
- Representatives of Head Start agencies
- Representatives of Early Childhood Intervention
- Representative of the Department of Aging and Rehabilitative Services

Appendix B: Mothers' Milk Bank Reports



The following reports represent efforts by the Mothers' Milk Bank at Austin and the Mothers' Milk Bank of Fort Worth to support expanded breastfeeding in the Texas community, and to improve access to human milk:

Exhibit 1 – Hospitals served by Texan non-profit milk banks in 2012 – by location in US, and southern locations only

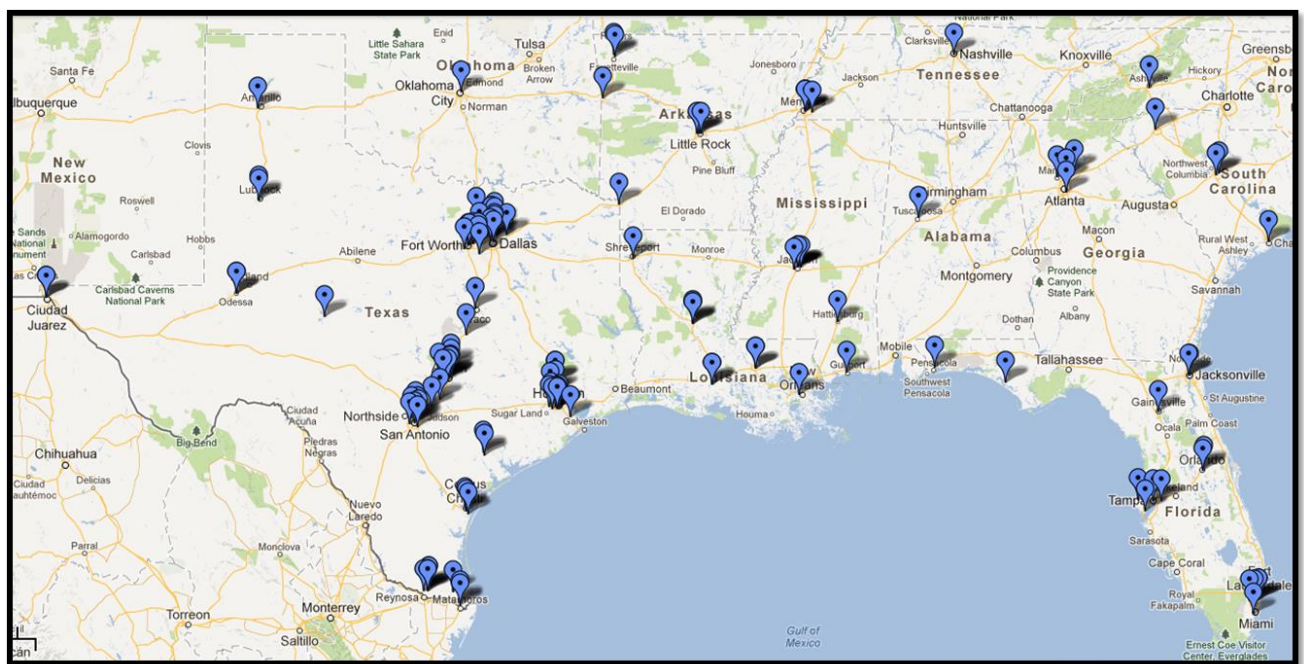
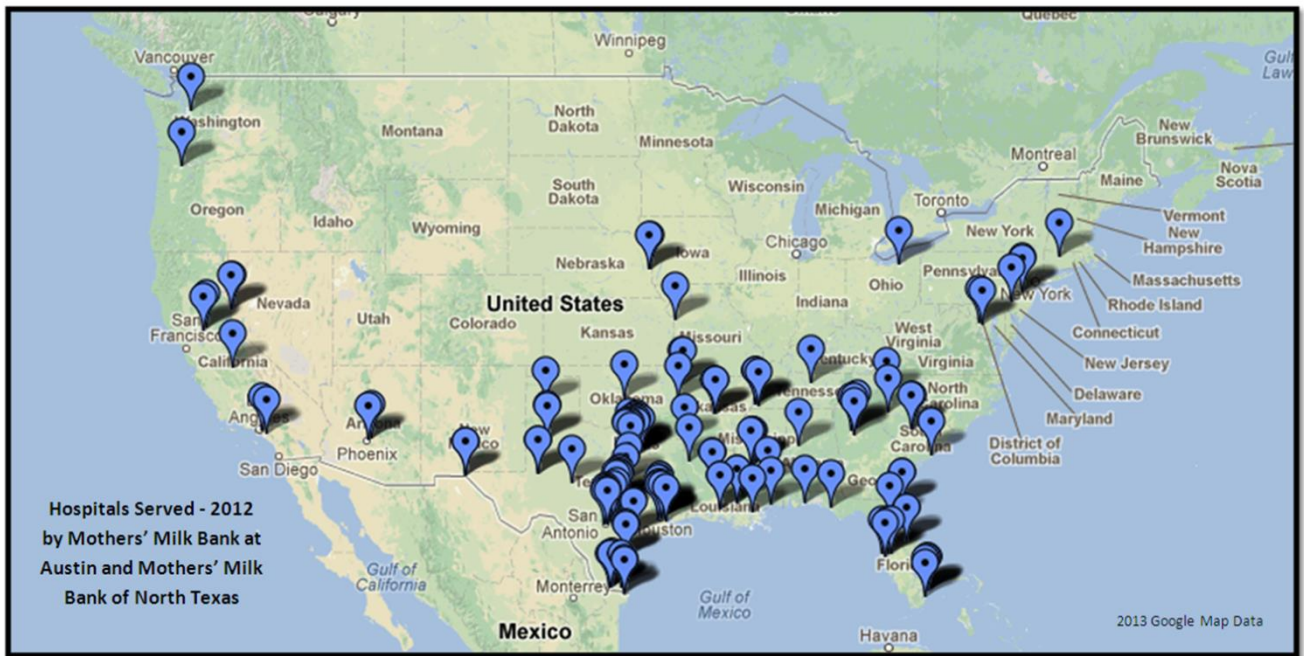


Exhibit 2 – Key communication statements regarding benefits of breastfeeding

The following simple and educational statements related to breastfeeding, prematurity, and donor milk are used by the Mothers' Milk Bank at Austin to lend consistency to communication and messaging.

- There is demand for donor human milk because **1 in 8** babies are born premature and more hospitals are prescribing it to feed these premature babies.
- Breast milk is **best** for most babies, and it is **life-saving** for preterm infants—the very infants who are least likely to have milk from their own mothers.
- There are **options** for sharing breast milk, but sharing milk with a nonprofit milk bank is a decision to care for the most fragile of the next generation.
- **Demand** for human milk outpaces our supply—life-saving milk is needed today
- A **mathematical model** shows that 9 million ounces of milk is needed per year in order to feed and protect the most fragile babies – preterm infants weighing approximately 3 pounds each, and less.
- Donor human milk saves lives of preterm and medically fragile infants.
- The Mothers' Milk Bank at Austin is a nonprofit milk bank in its 15th year of pasteurizing and dispensing donor human milk for medically fragile infants
- In the past fifteen years, the Mothers' Milk Bank at Austin has dispensed more than 3 million ounces of human donor milk, helping to save the lives of more than 18,000 babies. While more than half our milk is donated by Central Texas moms, 80% of pasteurized milk goes to Neonatal ICUs in Texas, and 20 other states.
- All medically needy babies with a prescription for donor milk will receive it from MMBA—regardless of insurance or financial resources
- The 41 nonprofit milk banks in the US dispensed more than 3 million ounces of milk in 2013 – far below the target
- All healthy, lactating mothers with a baby under one year of age should consider becoming a donor to a milk bank
- Becoming a donor is an easy 4-day process, with all expenses covered by the milk bank
- The Mothers' Milk Bank at Austin is a nonprofit milk bank in its 15th year of pasteurizing and dispensing donor human milk for medically fragile infants.
- A mothers' own milk is superior nutrition for premature infants but when a mother cannot provide her own milk donor human milk is the next best thing. Premature infants who are fed with human milk decrease their risks of a serious and life-threatening intestinal infection known as necrotizing enterocolitis, or NEC, and have greater survival rates and fewer complications overall.

Exhibit 3 – HMBANA's expanded support of breastfeeding in its goals

In August, 2012, the Human Milk Banking Association of North America's Board of Directors met to establish strategic goals for the non-profit milk banks. In recognition of the great need to improve breastfeeding rates in the US, and in support of the Health People 2020 Goals for the Nation, HMBANA adopted the following revision to the mission:

The Human Milk Banking Association of North America promotes the health of babies and mothers through the provision of safe pasteurized donor milk and support of breastfeeding.
(Revised 8/22/12) Accomplishment of this is partially dependent on independent milk banks, but

also through the hiring of a marketing and public relations firm that is currently researching how best to spread this message.

Exhibit 4 - MMBA's Lactation Station Program

Beginning in spring 2012, the Mothers' Milk Bank at Austin has been providing this unique service at a handful of community events and it has proven to be a big hit amongst the breastfeeding Moms! A private tent equipped with rocking chairs, multiple diaper changing pads, and bottled water provides mom with a clean, quiet, and comfortable place to breastfeed or change her infant, express her milk, or rock her baby to sleep. Of course, moms are welcome to nurse their baby ANYWHERE, but a Lactation and Changing Station offers a calm, comfortable place to get out of the sun and the hustle and bustle of the event.

Last year, at the March for Babies walk, to support the March of Dimes, we heard this: "Wow, thank you so much for providing this for us! Last time I was at an event like this I actually ended up nursing in the bathroom. This is awesome!"

The Lactation and Changing Stations are important for nursing mothers, but they also provide a great outreach opportunity for the milk bank. Any chance for us to spread the word and educate the breastfeeding community about the option to donate their milk is a win.





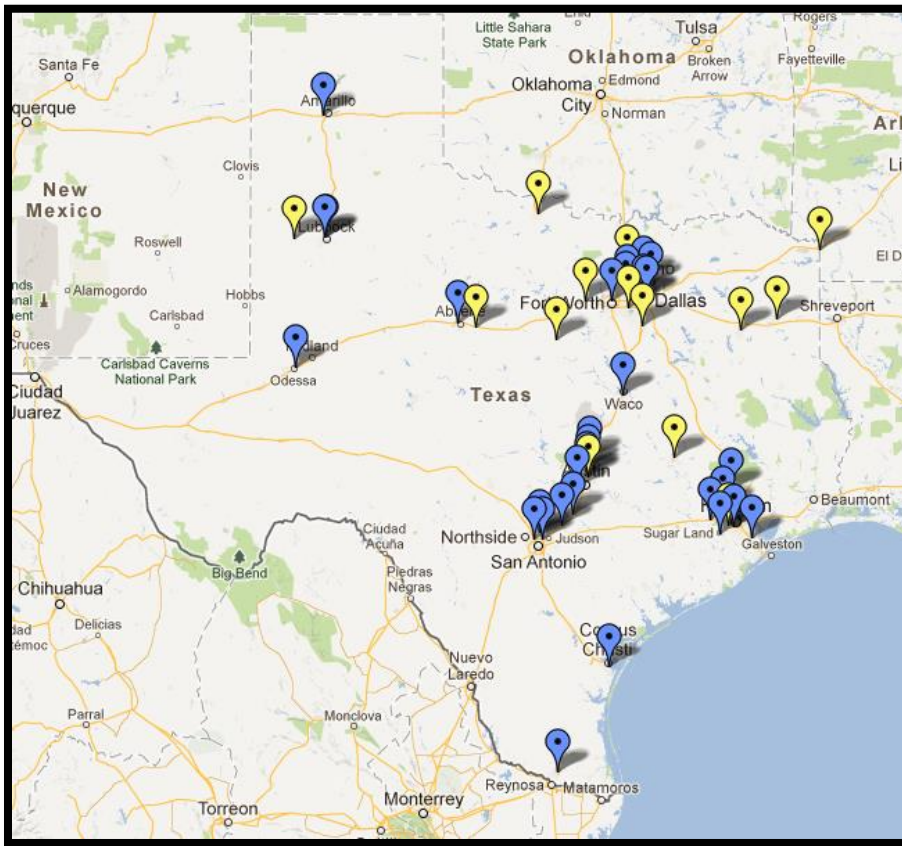
MMBA has held lactation stations at the March of Dimes' March for Babies and the Ronald McDonald House' Lights of Love events annually beginning in 2012.

Exhibit 5 – Milk collection site locations in total, and WIC-specific

Milk depots serve as local drop-off sites in which approved milk donors deposit their milk. Volunteers at these depots then ship the milk to the milk bank, or a courier from the milk bank picks up the milk and brings it back to the bank for processing. Hospitals, health care provider offices, and clinics house these depots, and use the public relations opportunity to speak about the importance of human milk for human babies.

Outreach within depot communities introduces the concept of milk donation and reminds a community about the importance of breast milk. MMBA works with all new depots to host a grand opening event and/or media event. The Milk Bank provides depots with brochures (English and Spanish), general information fliers, posters, badge clips, window decals, pens and reusable bags. The Milk Bank expects all depots and hospitals being served to support outreach initiatives and continue to assist by referring potential donors.

Locations of Milk Collection Sites, or Depots in Texas



Yellow drops depict depots associated with the Mothers 'Milk Bank of North Texas, blue dots are those associated with MMBA

Specific locations of depots:

1. Tinyblessing Maternity Care
598 Westwood Dr Abilene, TX 79603
2. Northwest Texas Hospital Nursery
1501 S Coulter St Amarillo, TX 79106
3. Tarrant County Public Health Green Oaks - WIC
2001 SE Green Oaks Blvd Arlington, TX 76018
4. Mom's Place Breastfeeding Center - WIC
8701 Research Blvd Austin, TX 78758
5. Seton Northwest Hospital
11113 Research Blvd Austin, TX 78759
6. South Oaks Family Medicine
7900 Farm to Market 1826 Austin, TX 78736
7. Harris Hospital HEB Breastfeeding Center
1600 Hospital Pkwy Bedford, TX 76022
8. BVCAA - WIC
3408 S Texas Ave Bryan, TX 77802
9. Outreach Health Services
113 Fay Circle Clyde, TX 79510
10. Driscoll Children's Hospital

- 3533 S Alameda St Corpus Christi, TX 78411
11. Baylor University Medical Center
3500 Gaston Ave Dallas, TX 75246
 12. Lactation Care Center Dallas
2600 N Stemmons Fwy Dallas, TX 75207
 13. Denton County Health Department - WIC
S Loop 288 Denton, TX 76205
 14. The Women's Hospital at Renaissance
5502 S McColl Rd Edinburg, TX 78504
 15. The Mothers' Milk Bank of North Texas
1300 W Lancaster Ave Fort Worth, TX 76102
 16. St. David's Georgetown
2000 Scenic Dr Georgetown, TX 78626
 17. Baylor Regional Medical Center
1650 W College St Grapevine, TX 76051
 18. The Woman's Hospital Of Texas
7600 Fannin St Houston, TX 77054
 19. Southwest WIC
6400 High Star Dr Houston, TX 77074
 20. Cypress Fairbanks Medical Center
10655 Steepletop Dr Houston, TX 77065
 21. Memorial Hermann - Katy
23900 Katy Fwy Katy, TX 77494
 22. Wellness Pointe - WIC
1107 E Marshall Ave Longview, TX 75601
 23. Lubbock Children's Health Clinic
302 N University Ave Lubbock, TX 79415
 24. University Medical Center
602 Indiana Ave Lubbock, TX 79415
 25. South Plains Community Action - WIC
411 Austin St Levelland, TX 79336
 26. Christus Santa Rosa Hospital
600 N Union Ave New Braunfels, TX 78130
 27. Lactation Services of the Permian Basin
850 Tower Dr Odessa, TX 79761
 28. Presbyterian Hospital of Plano NICU
6200 W Parker Rd Plano, TX 75093
 29. Richardsom Regional Medical Center NICU
401 W Campbell Rd Richardson, TX 75080
 30. St. David's Round Rock Medical Center
2400 Round Rock Ave Round Rock, TX 78681
 31. North Central Baptist Hospital
502 Madison Oak Dr San Antonio, TX 78258
 32. Northeast Baptist Hospital
8811 Village Dr San Antonio, TX 78217

33. Methodist Healthcare Women's Center
8109 Fredericksburg Rd San Antonio, TX 78229
34. Central Texas Medical Center
1301 Wonder World Dr San Marcos, TX 78666
35. Memorial Hermann - The Woodlands
9250 Pinecroft Dr Shenandoah, TX 77380
36. Outreach Health Services - WIC
125 W Oak St Stephenville, TX 76401
37. The Woman's Place
16552 A Southwest Parkway Sugar Land, TX 77479
38. Texarkana Bowie County Family - WIC
902 W 12th St Texarkana, TX 75501
39. Net Health - WIC
112 E Line St Tyler, TX 75702
40. Hillcrest Medical Blvd
Waco, TX 76712
41. Outreach Health Services - WIC
110 Amanda Ln Waxahachie, TX 75165
42. Outreach Health Services - WIC
1508 Fort Worth Hwy Weatherford, TX 76086
43. Wichita Falls County Public Health - WIC
1700 3rd St Wichita Falls, TX 76301
44. Clear Lake Regional Medical Center
500 W Medical Center Blvd Webster, TX 77598

Exhibit 6 – Student mentorship programs

Milk banks dedicate time and energy to mentoring students in undergraduate and graduate studies in order to increase the numbers of professionals with knowledge about the importance of breastfeeding. It is believed that health care providers are a significant influence on women's choice of infant feeding, and therefore, they play a critical role in the promotion of breastfeeding.

2012-14 students mentored by the Texas milk banks:

19 Dietetic interns	Texas State University
24 Nursing students	Texas Tech University
20 Nursing students	UT Austin
2 Business students	UT Austin
1 Communication intern	Louisiana State University
3 Nursing students	University of North Texas
2 Dietetic interns	Texas Christian University
1 Dietetic Intern	California Polytechnic State University
1 Early Child Development Intern	Washington University

Appendix C: Child and Nutrition Online Courses Completed in Years 2012 and 2013
Texas A&M Extension Service

Title	2012 Total Course Completions	2013 Total Course Completions
Family Dinner: It's more than meat & potatoes	263	315
Feeding Young Children with Special Food Needs in Child Care Settings	39	68
Healthy Eaters: Infant and toddler nutrition in child care settings	10,487	13,468
Healthy Habits: Encouraging healthy eating and physical activity in young children	518	462
Mini Talks about Mini Folks: Frequently asked questions on child nutrition	1,248	623
Snacks and the preschool child: Why, what & how	146	405
Supporting breastfeeding in the child care setting	220	159
Ten Behaviors that promote a healthy weight in preschool children	39	295
Why play? Understanding the role of play in early childhood	99	161
An introduction to family nutrition #2: Baby's first year	0	135
An introduction to family nutrition #3: Toddlers, preschoolers and children	0	146
TOTAL	13,059	16,237

Appendix D: Lunch is in the Bag

Published in final edited form as:

Am J Health Educ. 2012; 43(3): 135-142.

“Lunch is in the Bag” research project

Unbundling outcomes of a multilevel intervention to increase fruit, vegetables, and whole grains parents pack for their preschool children in sack lunches

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University of Texas School of Public Health Austin Regional Campus

Deanna M. Hoelscher,

University of Texas School of Public Health Austin Regional Campus

Sara J. Sweitzer,

The University of Texas at Austin

Fawaz Almansour,

The University of Texas at Austin

Cynthia Roberts-Gray

Third Coast R&D, Inc.

Abstract

Background—Packing fruit, vegetables, and whole grains in preschool children’s sack lunches is a powerful way for parents to teach their children eating habits and food preferences to support a lifetime of good health. A multilevel intervention pilot-tested in childcare settings increased servings of vegetables and whole grains, but the lunches still fell short of the intervention goals.

Purpose—Secondary analyses were conducted to identify specific behavior changes underlying achieved increases in servings of vegetables and whole grains.

Methods—Food records from direct observation of 769 parent-packed lunches were investigated to unbundle and measure multiple aspects of lunch packing behavior. Changes from baseline to six week follow-up for the intervention (N=81) and comparison (N=51) parent-child dyads were evaluated in multilevel modeling.

Results—the increase for whole grains was explained by more parents packing whole grain items whereas increase for vegetables was explained by parents packing vegetables on more days.

Discussion—tailored options were identified for further strategies to increase vegetables and whole grains in parent-packed sack lunches.

Title: Effect of ‘*Lunch is in the Bag*’ program on communication between parents, children and the children’s early care and education centers (ECEC) around fruits, vegetables and whole grains

Authors: Shreela V. Sharma, Tasnuva Rashid, Ru-Jye Chuang, Sara Sweitzer, Courtney Byrd-Williams, Nalini Ranjit, Cindy Roberts-Gray, Margaret Briley and Deanna M. Hoelscher

Purpose: To evaluate the effects of a behaviorally-based parent education program on communication between parent-child, and parent- early care education centers (ECEC) about fruits, vegetables and whole grains (FVWG).

Methods: A group-randomized controlled trial (n=30 ECEC, 577 parent/child dyads) evaluating the effects of *Lunch is in the Bag*, a 5-week ECEC-based program to educate parents on how to pack healthy lunches for their preschoolers ages 3 to 5 years . Parent self-report surveys on parent-child and parent-ECEC communication about FVWG were conducted at baseline and post-intervention. Six summative scales, one each for FVWG, were developed for the parent-child and parent-ECEC communication (Range per scale – 0 to 16; Cronbach’s alpha = 0.74 to 0.87). Multilevel linear regression analysis adjusting for center-level variance and covariates was used to determine program effects on the communication scales.

Results: Overall, communication scores were low at baseline, especially for parent-ECEC scales. For the parent-ECEC, there was a significant increase post-intervention in the mean scores for communication around vegetables (Adjusted $\beta = 0.78$, 95%CI: 0.13, 1.43, $p=0.002$), and communication around fruit (Adjusted $\beta = 0.62$, 95%CI: 0.04, 0.20, $p=0.04$). Univariate analysis showed significant increase in scores for whole grains (Unadjusted $\beta = 0.73$, 95%CI: 0.14, 1.33, $p=0.016$); however multivariate analysis rendered these not significant. While there was a trend towards improved scores for parent-child communication, these results were not statistically significant.

Conclusion: *Lunch is in the Bag* strategies were successful in improving communication between parent-ECEC about FVWG which is critical to establish healthy eating habits in early childhood.

An abstract from our *Lunch is in the Bag* parent (original) study. The last data collections for this project has been completed, and collected data from 741 parents in 30 child care centers in Houston (n = 332 parents), Austin (n = 217 parents) and San Antonio (n = 192 parents). We are currently entering data and have begun data analysis.

Abstract

No. 0711

Title Efficacy trial of Lunch is in the Bag to Positively Change Preschool Parents' Lunch Packing Behaviors

Abstract

Purpose: Data from the efficacy trial for the *Lunch is in the Bag* behavior change intervention implemented in Early Childhood Education Centers (ECECs) were examined to evaluate changes in servings of fruit, vegetables and whole grains parents packed in sack lunches for their preschool child.

Methods: 30 Texas ECECs requiring parents of preschoolers to pack lunch were randomly assigned to intervention and control. Packed food items were observed and recorded on 2 nonconsecutive days at baseline and at 6 weeks, following the implementation of 5 weeks of *Lunch is in the Bag* at intervention centers. Changes in servings of vegetables, whole grain, and fruit packed were modeled using hierarchical linear regressions that included a random effect at the ECEC level, and adjusted for age and sex.

Results: 607 children (47% female; 55% in intervention centers) provided a total of 2440 lunch observations (1265 at baseline, 1175 at follow up). Results showed significant increases in the intervention group relative to the control group in both whole grain servings ($\Delta = .25$ (SE=0.12); $p=0.0317$), and vegetable servings packed ($\Delta = 0.17$ (SE=0.04); $p=.0001$). Average servings at follow-up at intervention centers were 1.61 fruit, 0.99 whole grain, and 0.54 vegetables.

Conclusion: *Lunch is in the Bag* was effective in increasing parent packing of whole grains and vegetables, but more ways to increase vegetables servings in young children's lunches need to be identified.

Abstract from our *Lunch is in the Bag* supplement project, which was added to our *Lunch is in the Bag* study, is sited in the appendix. Dr. Courtney Byrd-Williams is leading this study, and it involves 12 child care centers in Austin.

What guidance do childcare centers give parents about packing lunch for their preschoolers? A content analysis of documentation given to parents.

Courtney Byrd-Williams, Janis Valmond, Naomi Chen, Sara Sweitzer, Shreela Sharma, Deanna Hoelscher

Purpose: Preschool children consume up to two-thirds of their daily intake in childcare.

Increasingly, centers are asking parents to pack their children's lunches, and little is known about the guidance childcare centers give to parents about packing lunch. This study analyzes the content of the documentation centers give to parents about packed lunches.

Methods: We collected documentation (e.g., parent handbooks) from 36 Texas childcare centers that require parents to pack lunches for their preschoolers. In our quantitative content analysis, conducted by two independent coders, we iteratively identified nine coding schemes related to the guidance centers gave to parents about packing lunch.

Results: Over 90% (n=33) of centers provided some lunch packing guidance; the strength of the language used ranged from suggestions to prohibitions. Four centers (11%) encouraged parents to send nutritious lunches, without discouraging or forbidding any foods. Twenty-seven centers (75%) forbade specific foods or food types (e.g., salty snacks). Gum, candy, and soda were the most frequently forbidden items. Twenty-three centers (64%) provided suggestions of what to pack, and suggestions varied greatly. Examples ranged from suggesting specific foods (e.g., sandwiches, 100% fruit juice, etc.) to centers specifying that lunches should include one food from the four food groups (n=6). Other coding schemes included wording related to food allergies, religious restrictions, and choking hazards.

Conclusions: Lunch-packing guidance varies greatly across centers that require parents to pack lunch. Future research should investigate how such guidance is enforced and whether it influences what parents pack in preschoolers' lunches.

Appendix E: Draft Survey Child Care Centers/Homes Physical Activity Self-Assessment

Child Care Centers/Homes Physical Activity Self-Assessment Survey

Check one box for each statement

- 1. The amount of time provided to preschool children for indoor and outdoor physical activity each day is:**
(Examples include: walking, running, climbing, jumping, and dancing)
 - ☐ Less than 60 minutes
 - ☐ 60 – 89 minutes
 - ☐ 90 – 119 minutes
 - ☐ 120 minutes or more

- 2. The amount of time provided to toddlers for indoor and outdoor physical activity each day is:**
(Examples include: walking, running, climbing, jumping, and dancing)
 - ☐ Less than 60 minutes
 - ☐ 60 – 74 minutes
 - ☐ 75 – 89 minutes
 - ☐ 90 minutes or more

- 3. During children's physically active playtime, teachers or caregivers:**
 - ☐ Rarely or never join children in active play (mostly sit or stand)
 - ☐ Sometimes join children in active play
 - ☐ Often or always join children in active play
 - ☐ Often or always join children in active play and make positive statements about the activity

- 4. The amount of time structured (adult-led) physical activity is provided to preschool children is:**
(Examples include: walking, running, climbing, jumping, and dancing)
 - ☐ 1 – 5 times per year
 - ☐ At least 6 times per year
 - ☐ At least monthly
 - ☐ At least weekly
 - ☐ 2 – 4 times per week

- 5. Outdoor active play is provided for all children**
 - ☐ 1 time each day
 - ☐ 2 or more times each day
 - ☐ 1 time per week or less
 - ☐ 2 -4 times per week

6. Outdoor/indoor play spaces includes:

(Check all that apply)

- ☐ Space for all activates: jumping, running, rolling
- ☐ Throwing, catching, and striking toys: balls, bean bags, noodles, rackets
- ☐ Push-pull toys: wagons, push ride cars, big dump trucks
- ☐ Outdoor climbing equipment: swing sets, see-saws, or play sets
- ☐ Twirling toys: ribbons, scarves, batons, hula hoops, parachute
- ☐ Full access for children with special needs
- ☐ Other (Please Specify)

7. When weather is not suitable to go outdoors, indoor play space is available:

- ☐ For quiet play
- ☐ For very limited movement (stretching , moving in place)
- ☐ For some active play (jumping, dancing)
- ☐ For all activities, including running

8. Active play time is restricted for children who misbehave:

- ☐ Often
- ☐ Sometimes
- ☐ Never
- ☐ Never and provide more active play time for good behavior

9. At the center or day care home, television (including educational programs and videos) is viewed by each child (ages 2 to 6 years), on average:

- ☐ Daily, 2 hours or more
- ☐ Daily, less than 2 hours
- ☐ Weekly, but not each day
- ☐ Monthly, but not each week
- ☐ Never

10. At the center or day care home, television (including educational programs and videos) is viewed by each child (2 years and younger), on average:

- ☐ Daily, 2 hours or more
- ☐ Daily, less than 2 hours
- ☐ Weekly, but not each day
- ☐ Monthly, but not each week
- ☐ Never

11. Outside of nap and meal times, children are seated more than 30 minutes at a time:

- ☐ 1 or more times per day
- ☐ 3-4 times per week
- ☐ 1-2 times per week
- ☐ Less than once a week or never

Questions for infants (birth to 12 months) of age (skip to question #14 if not applicable):

12. Outside of nap and meal times, the longest that infants spend in seats, swings, or ExcerSaucers at any one time is:

- ☐ Less than 15 minutes
- ☐ 15 – 30 minutes
- ☐ More than 30 minutes
- ☐ More than 60 minutes

13. “Tummy time” is offered to non-crawling infants:

- ☐ 1 time per day or less
- ☐ 2 times per day
- ☐ 3 times per day
- ☐ 4 times per day
- ☐ Never

14. Physical activity training is provided to staff by a qualified professional (PE teacher, athletic trainer, exercise physiologist):

- ☐ Never
- ☐ Once every two or more years
- ☐ 1 time per year
- ☐ 2 times or more per year

15. Physical activity education for children (motor-skill development) is provided through a standardized curriculum:

- ☐ Never
- ☐ 1 time per month
- ☐ 2-3 times per month
- ☐ 1 time or more per week

16. The center/home shows visible support for physical activity by:

- ☐ No Posters, pictures, or books about physical activity are displayed
- ☐ Posters, pictures, or books about physical activity displayed in a few rooms
- ☐ Posters, pictures, or books about physical activity are displayed in most rooms
- ☐ Posters, pictures, or books about physical activity are displayed in all rooms
- ☐ Posters pictures or books about physical activity are displayed in the day care home

17. Does the center/home have a written policy or guidelines on physical activity?

- ☐ Yes
- ☐ No (If no, skip to question 19)

18. Which of the following topics are addressed by the written policy or guidelines?

(Check all that apply)

- ☐ Structured (adult-led active play) physical active play
- ☐ Unstructured (active free play) physical active play
- ☐ Amount of time provided each day for indoor and outdoor physical activity
- ☐ Limiting long periods of seated time for children
- ☐ Not withholding physical activity as punishment
- ☐ Shoes and clothes that allow children and caregivers to actively participate in physical activity
- ☐ Physical activity education for:

- Teachers/caregivers
- Children
- Parents
- Limits for children's time viewing television according to age (including educational programs and videos)
- Supporting physical activity (e.g. staff involved during active play time, visible display in classrooms and common areas)
- Other (Please Specify): _____

19. Are any of the following barriers to promoting physical activity practices in your child care center/home?

(Check all that apply)

- Lack of support from administration
- Lack of support from teachers
- Lack of support from parents/families
- Lack of staff training and education in the area of physical activity
- Lack of space or equipment
- Lack of established policies on physical activity
- Insufficient funds
- Lack of physical education resources
- Other (Please Specify): _____

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Nemours

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