

MAKING THE MOST OF CDC'S BREASTFEEDING DATA AND RESOURCES

Erica H. Anstey, PhD, MA, CLC
McKing Consulting Corporation



Centers for Disease Control and Prevention

National Center for Chronic Disease Prevention and Health Promotion

Division of Nutrition, Physical Activity, and Obesity



DISCLOSURES: NONE

- I have no financial relationships with commercial interests that pertain to the content presented in this program.
- The information in this presentation is that of the authors and does not necessarily represent the official position of the Centers for Disease Control and Prevention

OVERVIEW

- Describe CDC's primary breastfeeding surveillance activities and the latest breastfeeding rates
- Explain the National Immunization Survey and breastfeeding rates
- Demonstrate how to use CDC breastfeeding data to examine breastfeeding rates in your states over time
- Describe the Maternity Practices in Infant Nutrition and Care (mPINC) survey and reports
- Share CDC breastfeeding resources
- Q&A

DNPAO STRATEGIC PRIORITIES

Reaching All Americans Across the Lifespan by Supporting

A Healthy Start for Infants



- Breastfeeding
- Maternal, Infant & Toddler Nutrition
- Vitamins & Minerals

Children & Youth Growing Up Strong & Healthy



- Good Nutrition & Healthy Food Environments
- Physical Activity & Access to Environments Designed for Physical Activity
- Healthy Weight Management & Obesity Prevention

Adults & Older Adults Maintaining a Healthy Lifestyle



BREASTFEEDING

The Problem

1 in **4**

Only **1 in 4** infants is exclusively breastfed as recommended by the time they are 6 months old



Low rates of breastfeeding add more than **\$3 billion** a year to medical costs for the mother and child in the United States



Black infants are **15%** less likely to have ever been breastfed than white infants

Bartick, M. C., Schwarz, E. B., Green, B. D., et al. (2016), Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs, Maternal & Child Nutrition.

https://www.cdc.gov/breastfeeding/data/nis_data/results.html

CDC'S STRATEGIES TO SUPPORT BREASTFEEDING

1

**Improve Hospital
Support for
Breastfeeding**

2

**Improve Support for
Employed Women**

3

**Improve Community
Support for
Breastfeeding**



Our Goal



We want to ensure that if a mom wants to breastfeed, she has the supports in place to start and continue to do so

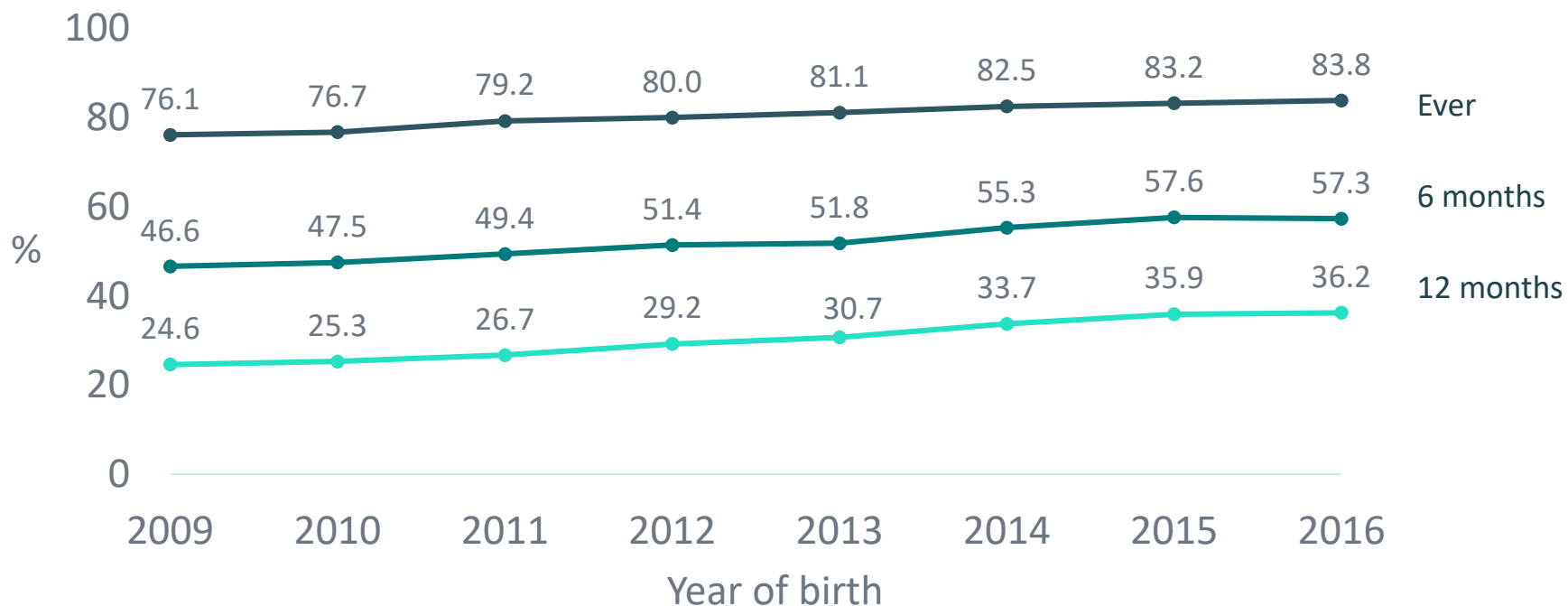
THE STATE OF BREASTFEEDING

NATIONAL OBJECTIVES AND BREASTFEEDING RATES IN THE U.S.

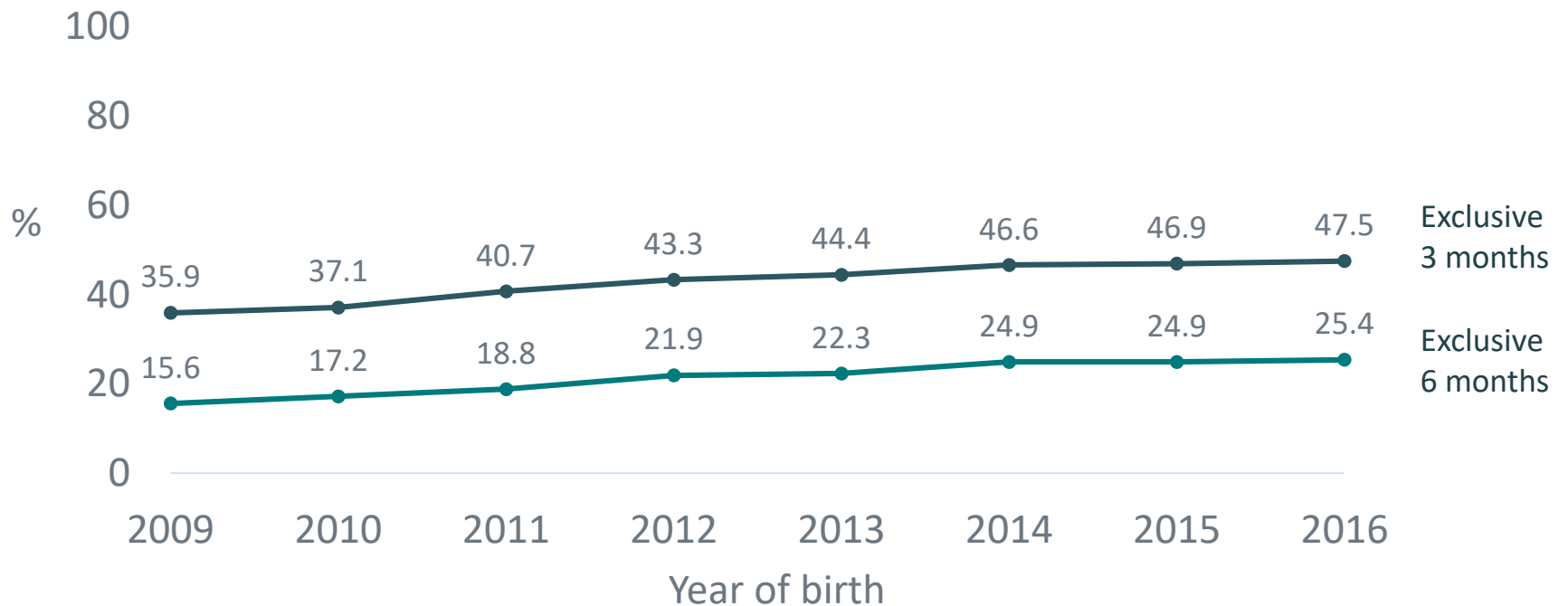


Healthy People 2020 Objectives		Target
MICH**-21.1	Increase the proportion of infants who are breastfed: Ever	81.9%
MICH-21.2	Increase the proportion of infants who are breastfed: At 6 months	60.6%
MICH-21.3	Increase the proportion of infants who are breastfed: At 1 year	34.1%
MICH-21.4	Increase the proportion of infants who are breastfed: Exclusively through 3 months	46.2%
MICH-21.5	Increase the proportion of infants who are breastfed: Exclusively through 6 months	25.5%
MICH-22	Increase the proportion of employers that have worksite lactation support programs.	38.0%
MICH-23	Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life.	14.2%
MICH-24	Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies.	8.1%

U.S. BREASTFEEDING RATES AMONG CHILDREN BORN IN 2009–2016

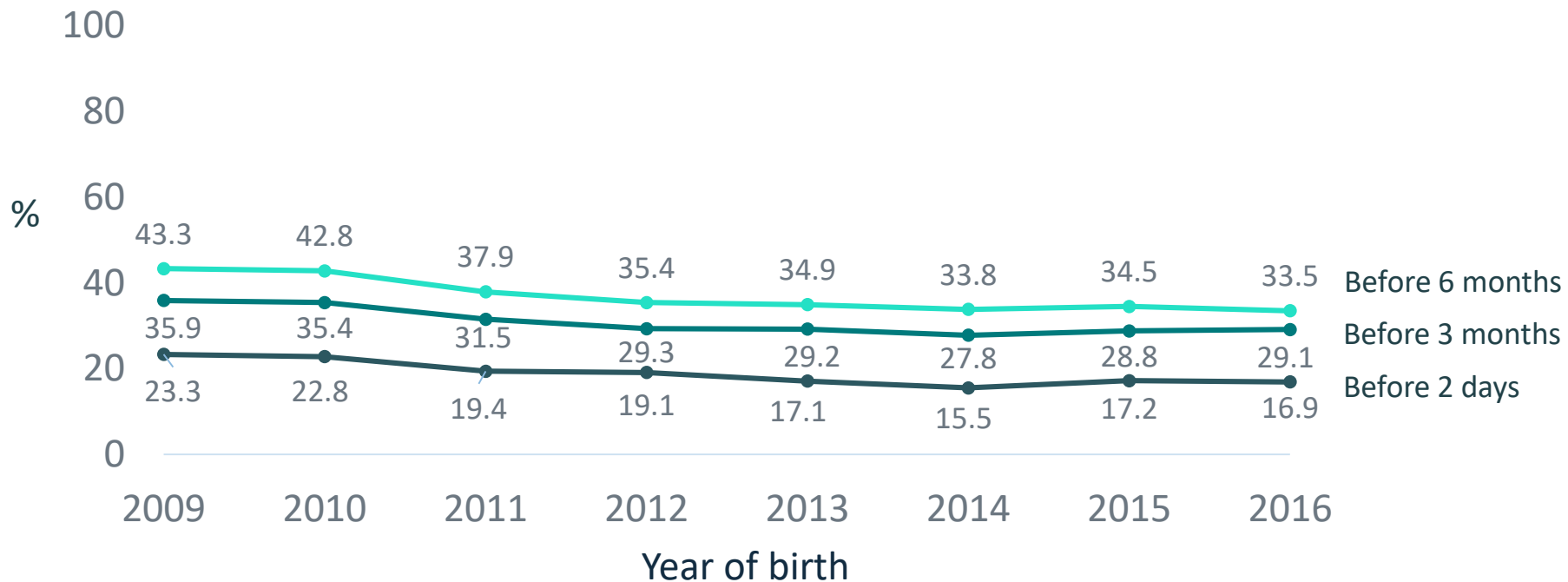


U.S. EXCLUSIVE BREASTFEEDING RATES AMONG CHILDREN BORN IN 2009–2016



https://www.cdc.gov/breastfeeding/data/nis_data/results.html

U.S. BREASTFED INFANTS WHO WERE SUPPLEMENTED WITH INFANT FORMULA

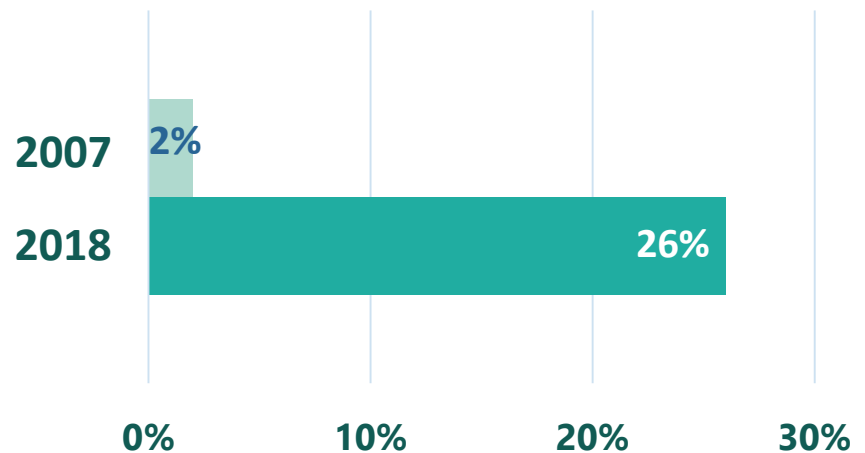


MORE BIRTHS ARE OCCURRING IN HOSPITALS THAT SUPPORT BREASTFEEDING

2018 Milestone: One Million Babies born in Baby-Friendly Facilities each Year!



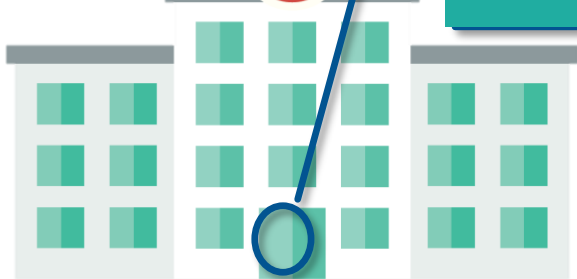
Percentage of Babies born in Baby-Friendly facilities in the US, 2007-2018






500+



Baby-Friendly Facilities in the United States!



Healthy People 2020 Objectives

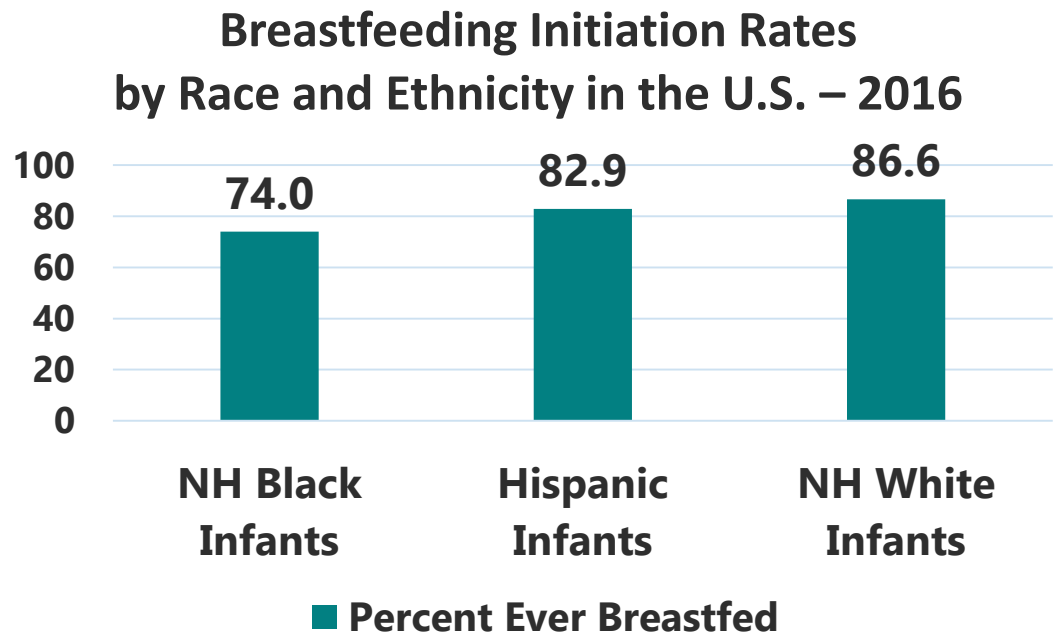
		Target	Current [†]
MICH**-21.1	Increase the proportion of infants who are breastfed: Ever	81.9%	83.8% 
MICH-21.2	Increase the proportion of infants who are breastfed: At 6 months	60.6%	57.3%
MICH-21.3	Increase the proportion of infants who are breastfed: At 1 year	34.1%	36.2% 
MICH-21.4	Increase the proportion of infants who are breastfed: Exclusively through 3 months	46.2%	47.5% 
MICH-21.5	Increase the proportion of infants who are breastfed: Exclusively through 6 months	25.5%	25.4%
MICH-22	Increase the proportion of employers that have worksite lactation support programs.	38.0%	51.0% 
MICH-23	Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life.	14.2%	16.9%
MICH-24	Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies.	8.1%	26.1% 

MICH: Maternal, Infant, and Child Health

[†]Source: https://www.cdc.gov/breastfeeding/data/nis_data/results.html

DISPARITIES EXIST IN BREASTFEEDING RATES BY RACE AND ETHNICITY

Breastfeeding rates are rising overall, but disparities remain:

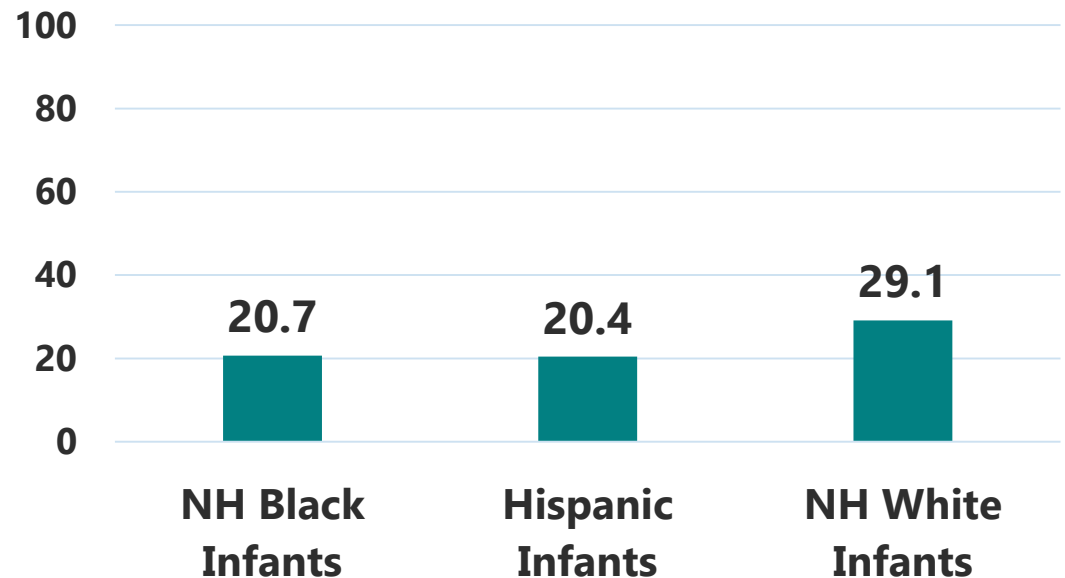


https://www.cdc.gov/breastfeeding/data/nis_data/results.html

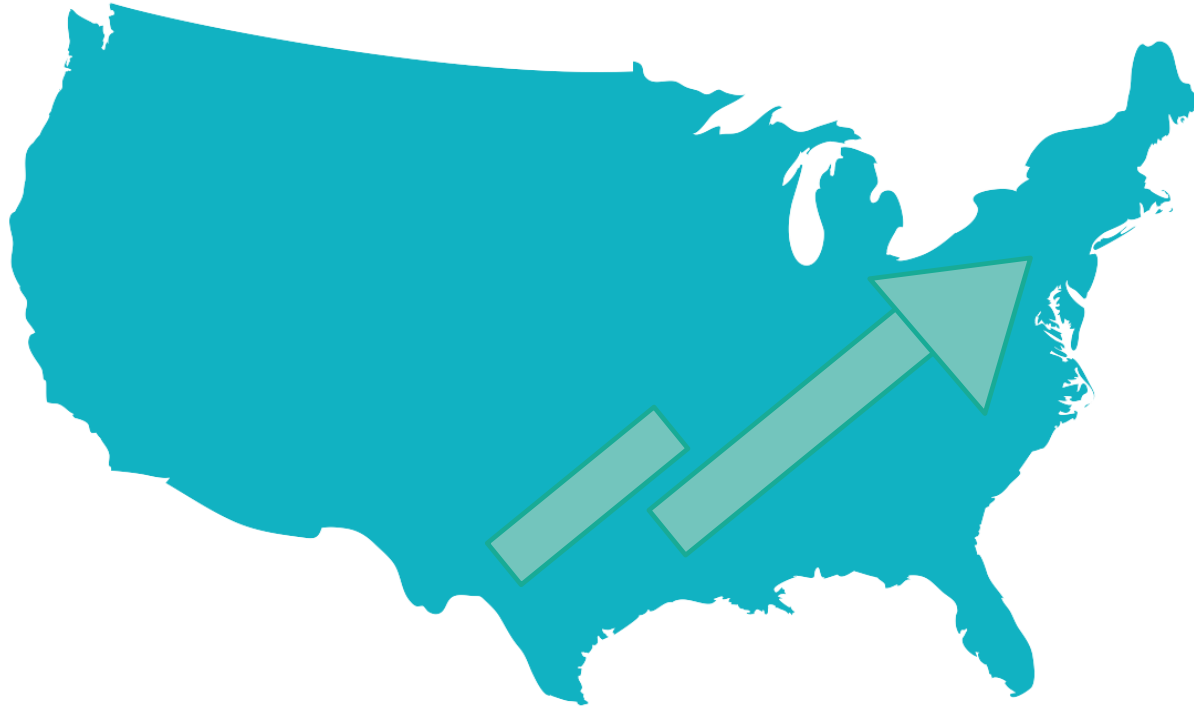
DISPARITIES EXIST IN BREASTFEEDING RATES BY RACE AND ETHNICITY

Breastfeeding rates are rising overall, but disparities remain:

Exclusive Breastfeeding Through 6 mo., by Race and Ethnicity in the U.S. – 2016



https://www.cdc.gov/breastfeeding/data/nis_data/results.html



BREASTFEEDING RATES

USING NATIONAL AND STATE LEVEL BREASTFEEDING DATA



NATIONAL IMMUNIZATION SURVEY (NIS)

- Household, population-based estimates of vaccination coverage among children & teens
- Breastfeeding questions added in 2001
- Telephone interviews with parents or guardians in 50 states, D.C., and some U.S. territories
- Breastfeeding data are obtained by maternal recall when children are between 19 to 35 months of age
- From 2002-2008 - landline sampling frame
- Starting in 2009 - dual-frame sample (landline or cellular)
- National and state estimates
- Initiation, duration, exclusivity
- Demographic characteristics



NIS BREASTFEEDING QUESTIONS



1. Was [child] ever breastfed or fed breast milk?
2. How old was [child's name] when [child's name] completely stopped breastfeeding or being fed breast milk?
3. How old was [child's name] when (he/she) was first fed formula?
4. This next question is about the first thing that [child] was given other than breast milk or formula. Please include juice, cow's milk, sugar water, baby food, or anything else that [child] may have been given, even water. How old was [child's name] when (he/she) was first fed anything other than breast milk or formula?

WHAT IS THE DENOMINATOR FOR THE BREASTFEEDING RATES?

NIS breastfeeding rates are among all infants born in the year specified **EXCEPT** for % of breastfed infants introduced to formula, which is among only breastfed infants



NATIONAL IMMUNIZATION SURVEY (NIS)

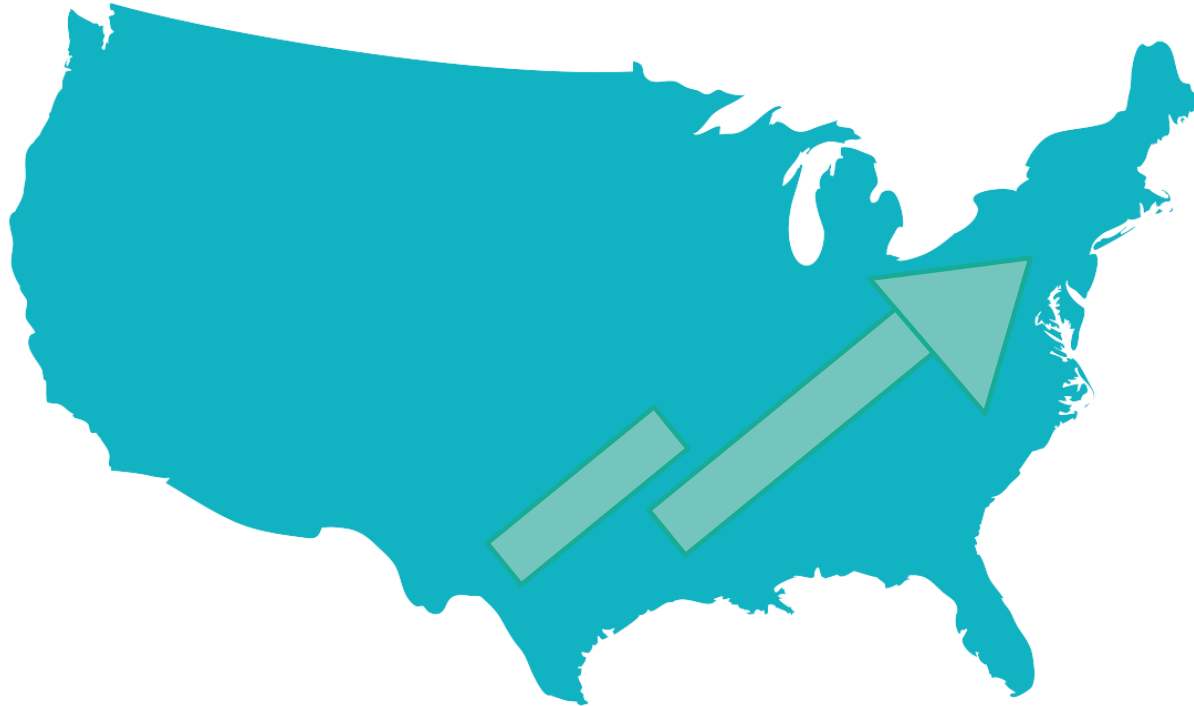


- **Why are there differences in breastfeeding rates by state from year to year?**
 - Sample sizes are relatively small, so there is a wide margin of error around state-level estimates
 - Statistical tests of change show the differences by state from one year to the next – these are generally not significant
 - States should look at trends in rates over several years

NATIONAL IMMUNIZATION SURVEY (NIS)

- **Why does the NIS data seem so behind and out-of-date?**
 - 2019 rates are among children born in 2016, which includes data from the 2017 and 2018 survey years
 - To capture breastfeeding duration, the data are obtained by maternal recall when children are between 19 to 35 months of age
 - We analyze the data by birth year rather than survey year, which has more public health relevance






BREASTFEEDING RATES

USING NATIONAL AND STATE LEVEL BREASTFEEDING DATA




BREASTFEEDING REPORT CARD

- Provides state-by-state data
 - breastfeeding initiation, duration, & exclusivity
 - formula before 2 days of age
 - births at Baby-Friendly hospitals
- Annually from 2007-2014
- Every other year starting in 2014
- Annual data is available online for some indicators
- Helps public health practitioners, policy makers, health professionals, and community members



Breastfeeding Report Card
United States, 2018

Overview
Breastfeeding, with its many known health benefits for infants, children, and mothers, is a key strategy to improve public health. The American Academy of Pediatrics recommends that infants be exclusively breastfed for about the first 6 months with continued breastfeeding alongside introduction of complementary foods for at least 1 year. To track our nation's progress on achieving the Healthy People 2020 goals, CDC's 2018 Breastfeeding Report Card provides a compilation of data on breastfeeding practices and supports in all states, the District of Columbia (DC), Puerto Rico, Guam, and the US Virgin Islands.

 Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Division of Nutrition, Physical Activity, and Obesity
www.cdc.gov/breastfeeding

PUTTING THE BREASTFEEDING REPORT CARD TO USE



Call to Action

Use your state's data to:

- help tell the story of breastfeeding practices and support
- monitor progress and celebrate state successes
- begin building more comprehensive state profiles that capture the landscape of breastfeeding support
- identify opportunities for growth and improvement in maternity care practices

BREASTFEEDING DATA, TRENDS, AND MAPS

- DNPAO provides interactive state-by-state and national data via clickable maps, charts, and tables
- Provides the most recent health and behavior data, including breastfeeding
 - Rates
 - mPINC scores
 - Births at Baby-Friendly facilities
- Export data & save visualizations
- **NOTE: 2016 data will be available soon**

Select a topic to see nationwide maps, charts, and tables

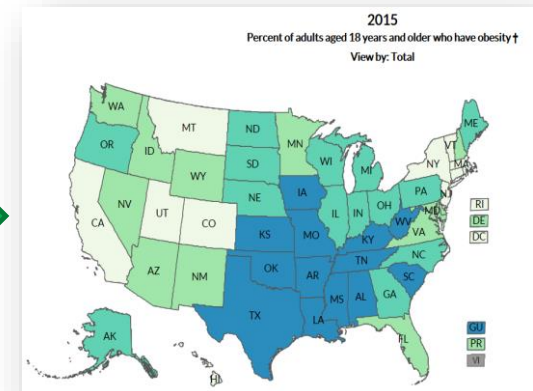
Explore by Topic / View one topic for all locations

View data for a specific health topic across the United States in a convenient map, chart, or table format. To learn more about a topic, first select a topic category—such as BREASTFEEDING, and then select whether you want to see data on behavior or policy/environmental supports related to the topic.

Category

Select one

- Obesity / Weight Status
- Breastfeeding
- Fruits and Vegetables
- Physical Activity
- Sugar Drinks
- Television Viewing



<https://www.cdc.gov/nccdphp/dnpao/data-trends-maps>

PUTTING DATA, TRENDS, AND MAPS TO USE

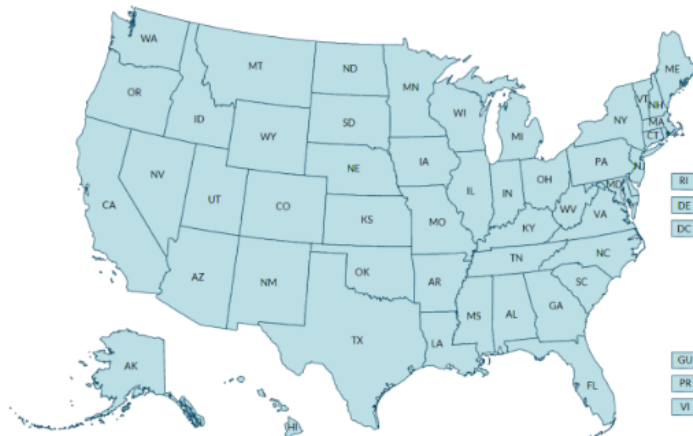
Explore by Location / View all topics for one location

To learn more about the health status and behaviors of residents of a particular state or for the nation, you can either click on a state in the map or use the drop-down menu. You can explore different topics by demographics and year.

Location

National

GO



View One Indicator for All Locations

View indicators for all locations which have data available. To choose an indicator, first select a Category, then select a Topic.

Category Breastfeeding

Topic Breastfeeding - Behavior

GO

Use the Data Portal

Need to work with Data, Trends, and Maps data directly?

Go to the Nutrition, Physical Activity, and Obesity: Data, Trends, and Maps Data Portal to create your own filtered dataset, customize visualizations, and download data.

[Nutrition, Physical Activity, and Obesity Data Portal >](#)

Site Resources

- [About the Data](#)
- [Contact Us](#)

Explore by Topic



Category

Breastfeeding

Topic

Breastfeeding - Behavior

GO

Category: Breastfeeding

Topic: Breastfeeding - Behavior

Indicator

Breastfed infants supplemented with formula before 3 months

Hide Footnotes

About the Data

Breastfed infants supplemented with formula before 3 months



View by

Total

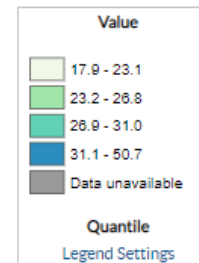
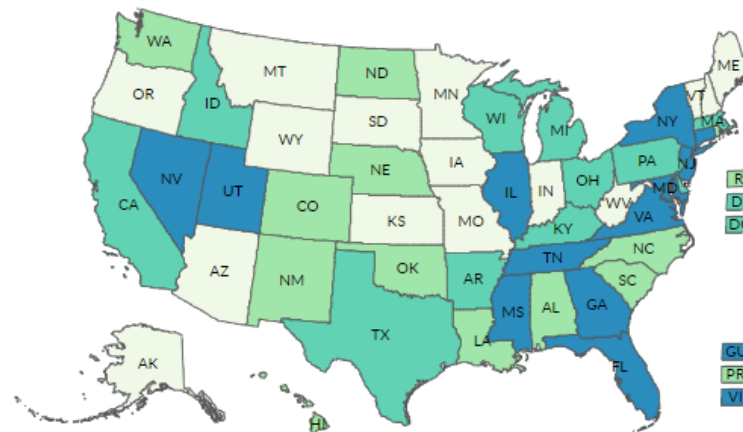
Year

2015

2015

Percent of breastfed infants who were supplemented with infant formula before 3 months †‡

View by: Total



† Formula supplementation is defined as supplementation of breast milk with formula (with or without other supplementary liquids or solids) among infants breastfed at 3 months.

‡ Breastfeeding rates through 2008 births are based on the National Immunization Survey's landline sampling frame. Starting with 2009 births, rates are based on the National Immunization Survey's dual-frame sample that includes respondents surveyed on landline or cellular telephones. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm.

§ Only breastfeeding rates based on a dual-frame sample that includes respondents surveyed on landline or cellular telephones are included in trend graphics. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm

Data Source: National Immunization Survey

Explore by Topic



Category

Breastfeeding

Topic

Breastfeeding - Behavior

GO

Category: Breastfeeding

Topic: Breastfeeding - Behavior

Indicator: Breastfed infants supplemented with formula before 3 months

Hide Footnotes About the Data

Breastfed infants supplemented with formula before 3 months



View by: Education

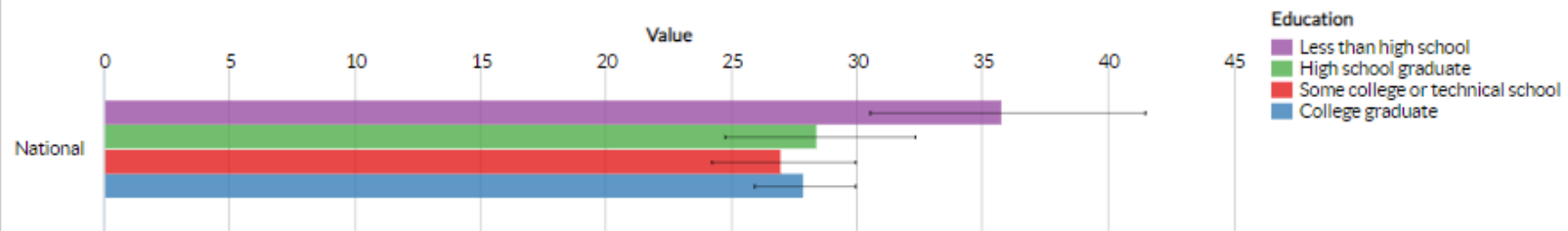
Year

2015

2015

Percent of breastfed infants who were supplemented with infant formula before 3 months †‡

View by: Education



† Formula supplementation is defined as supplementation of breast milk with formula (with or without other supplementary liquids or solids) among infants breastfed at 3 months.

‡ Breastfeeding rates through 2008 births are based on the National Immunization Survey's landline sampling frame. Starting with 2009 births, rates are based on the National Immunization Survey's dual-frame sample that includes respondents surveyed on landline or cellular telephones. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm.

§ Only breastfeeding rates based on a dual-frame sample that includes respondents surveyed on landline or cellular telephones are included in trend graphics. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm

Data Source: National Immunization Survey

Location

National

Category

Breastfeeding

Topic

Breastfeeding - Behavior

Year

Most recent

GO



National

Category: Breastfeeding

Topic: Breastfeeding - Behavior

Select indicators to view (8 of 8 selected)

Hide Footnotes

About the Data

Save as PDF

View all locations



Save as PDF or export CSV file

Infants ever breastfed

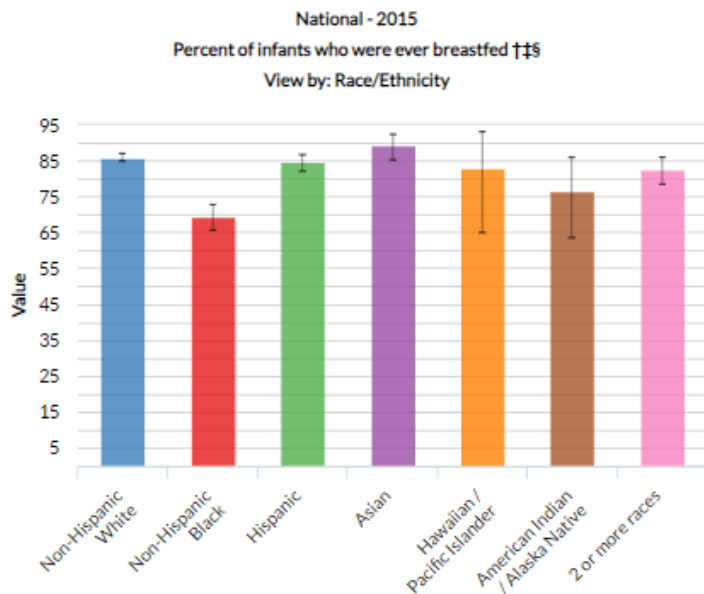
National

Year

All Available Years 2015

View by

Race/Ethnicity All



Footnotes

† Ever breastfeeding is defined by the question "was [child] ever breastfed or fed breast milk?"

‡ Breastfeeding rates through 2008 births are based on the National Immunization Survey's

Infants breastfed at 6 months

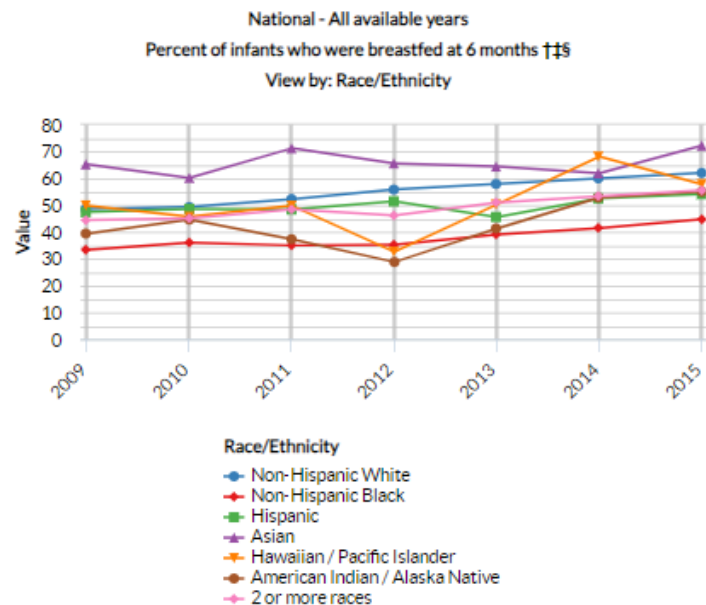
National

Year

All Available Years 2015

View by

Race/Ethnicity All



Footnotes

† Breastfed at 6 months is defined as breastfeeding to any extent with or without the addition of complementary liquids or solids.

Location: North Carolina

Category: Breastfeeding Topic: Breastfeeding - Behavior Year: 2015 GO

North Carolina
 Category: Breastfeeding
 Topic: Breastfeeding - Behavior
 Select indicators to view (8 of 8 selected)

Hide Footnotes About the Data
 Save as PDF View all locations

Select Indicators to View

Category: Breastfeeding
 Location: North Carolina, Year: 2015
 Select up to 8 indicators to view (8 of 8 selected) Clear All

- Infants ever breastfed
- Infants breastfed at 6 months
- Infants breastfed at 12 months
- Infants exclusively breastfed through 3 months
- Infants exclusively breastfed through 6 months
- Breastfed infants supplemented with formula within 2 days
- Breastfed infants supplemented with formula before 3 months
- Breastfed infants supplemented with formula before 6 months

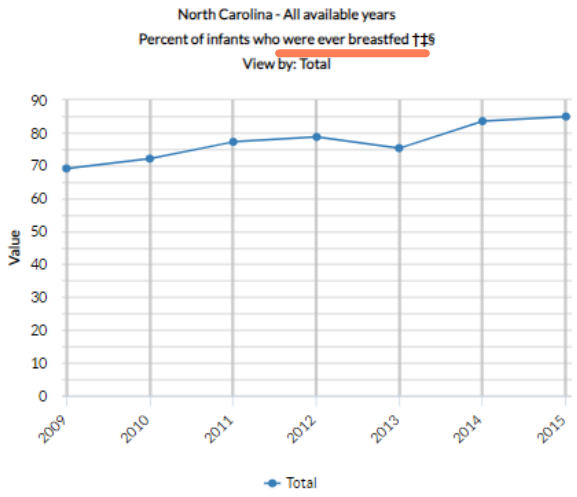
OK Cancel

Infants ever breastfed

North Carolina

Year: All Available Years 2015

View by: Total



Footnotes

† Ever breastfeeding is defined by the question "was [child] ever breastfed or fed breast milk?"

‡ Breastfeeding rates through 2008 births are based on the National Immunization Survey's landline sampling frame. Starting with 2009 births, rates are based on the National Immunization Survey's dual-frame sample that includes respondents surveyed on landline or cellular telephones. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm.

§ Only breastfeeding rates based on a dual-frame sample that includes respondents surveyed on landline or cellular telephones are included in trend graphics. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm

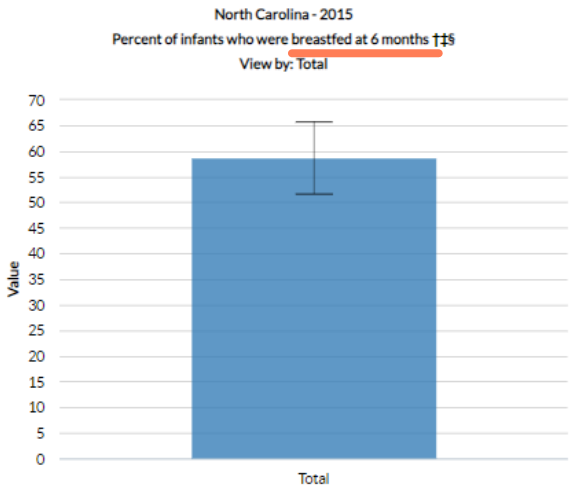
Data Source: National Immunization Survey

Infants breastfed at 6 months

North Carolina

Year: All Available Years 2015

View by: Total



Footnotes

† Breastfed at 6 months is defined as breastfeeding to any extent with or without the addition of complementary liquids or solids.

‡ Breastfeeding rates through 2008 births are based on the National Immunization Survey's landline sampling frame. Starting with 2009 births, rates are based on the National Immunization Survey's dual-frame sample that includes respondents surveyed on landline or cellular telephones. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm.

§ Only breastfeeding rates based on a dual-frame sample that includes respondents surveyed on landline or cellular telephones are included in trend graphics. If you would like more information about the sampling methodology and the impact of adding a sample of cellular telephone respondents to the National Immunization Survey, you can visit https://www.cdc.gov/breastfeeding/data/nis_data/survey_methods.htm

Data Source: National Immunization Survey



North Carolina

Category: Breastfeeding

Topic: Breastfeeding - Environmental or Policy Supports

Select indicators to view (4 of 4 selected)

Select Indicators to View

Category: Breastfeeding

Location: North Carolina, Year: 2015

Select up to 8 indicators to view

(4 of 4 selected)

Clear All

- Maternal Practice in Infant Nutrition and Care score
- Births occurring at designated "baby friendly" hospitals
- IBCLC per 1,000 live births
- Number of La Leche leaders per 1,000 live births

OK

Cancel

Hide Footnotes

About the Data

Save as PDF

View all locations

Maternal Practice in Infant Nutrition and Care score

North Carolina

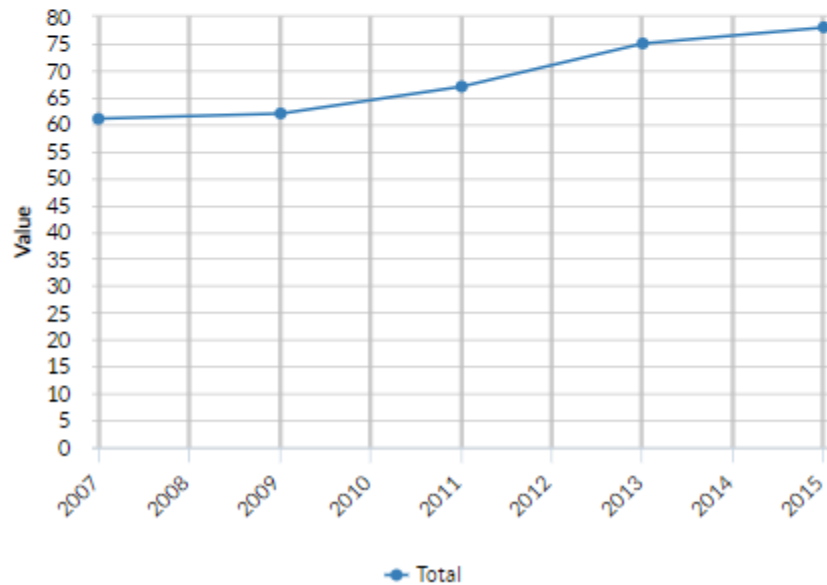
Year All Available Years 2015

View by Total

North Carolina - All available years

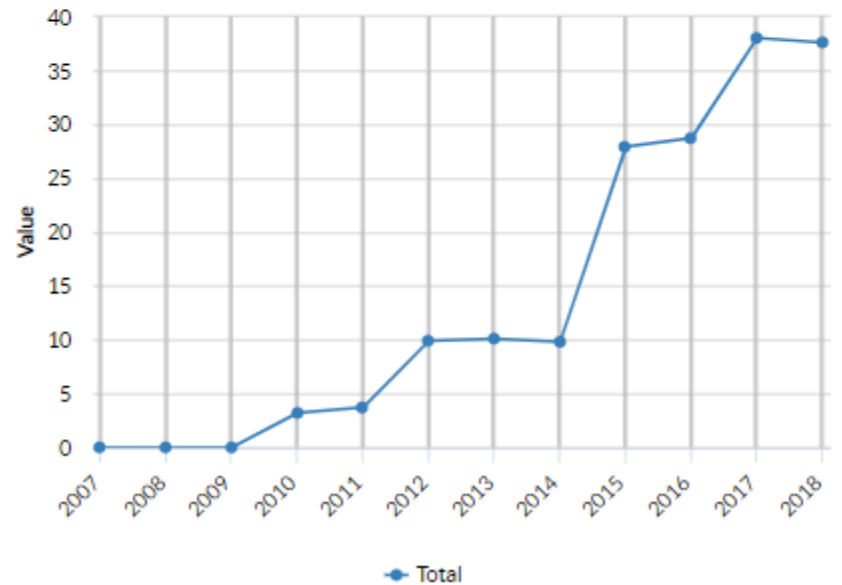
Average Maternity Practice in Infant Nutrition and Care (mPINC) score among hospitals and birthing facilities †

View by: Total



Percent of live births occurring at facilities designated as "baby friendly" by the Baby Friendly Hospital Initiative (BFHI) †

View by: Total





North Carolina

Category: Breastfeeding

Topic: Breastfeeding - Environmental or Policy Supports

Select indicators to view (4 of 4 selected)

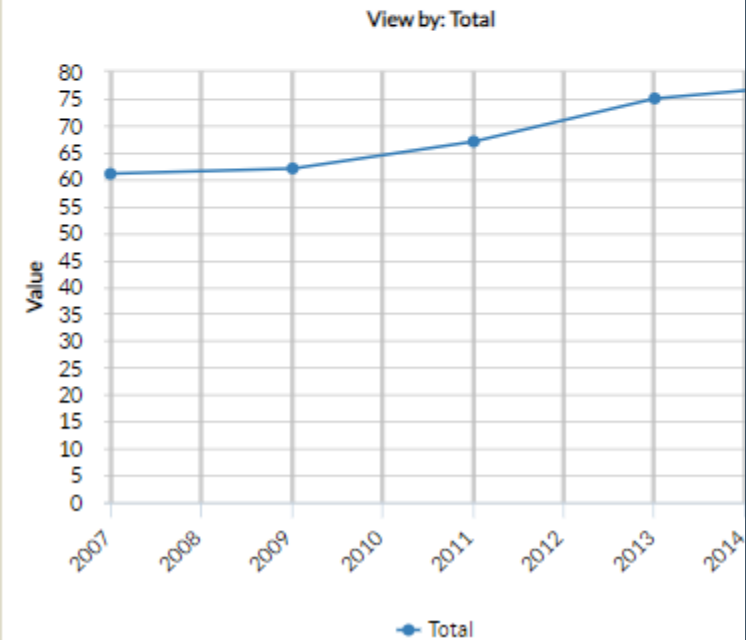
Maternal Practice in Infant Nutrition and Care score

North Carolina

Year All Available Years 2015 ▼

View by Total

North Carolina - All available years
Average Maternity Practice in Infant Nutrition and Care (mPINC) score among birthing facilities †



Births occurring at designated "baby friendly" hospitals

North Carolina

Year All Available Years 2015 ▼

View by Total

North Carolina - All available years
Percent of live births occurring at facilities designated as "baby friendly" by the Baby Friendly Hospital Initiative (BFHI) †

Year	Value
2018	37.6
2017	38.0
2016	28.7
2015	27.9
2014	9.8
2013	10.1
2012	9.9
2011	3.7
2010	3.2
2009	0.0
2008	0.0
2007	0.0

Footnotes

† Numerator: Number of live births at hospitals designated as "baby friendly". Denominator: Number of live births.

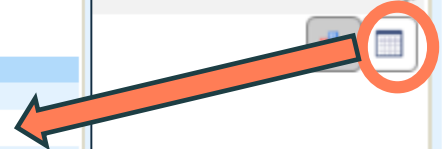
Data Source: Breastfeeding Surveillance Sources

Footnotes

About the Data

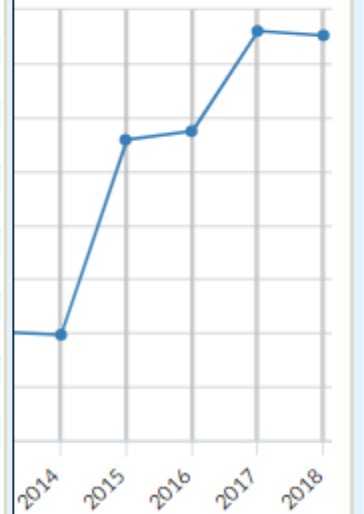
PDF

View all locations



Five years

Percent of live births occurring at facilities designated as "baby friendly" by the Baby Friendly Hospital Initiative (BFHI) †





MATERNITY CARE PRACTICES

USING MPINC STATE REPORTS

MPINC SURVEY OVERVIEW

- Assessment of maternity care practices in the usual care of healthy, term infants and their healthy mothers.
- Biennial census (from 2007-2015) of all hospitals and birth centers that provide maternity care services.
- Redesigned in 2018
 - Hospitals only
 - Online only
 - Data are currently being analyzed



MPINC SURVEY – TOPICS INCLUDED

- Hospital demographic information
- Skin-to-skin
- Rooming-in
- Feeding Practices
- Feeding Education
- Staff Competency
- Management procedures
- Policies
- Emerging topics (e.g., Neonatal Abstinence Syndrome)



MPINC BENCHMARK REPORTS



- **Benchmark Reports**
 - Customized report for each participating hospital
 - Compares hospital practice to other hospitals in U.S., state, of similar size
 - Stimulates improved practice
 - Hard copies mailed to administrators and managers

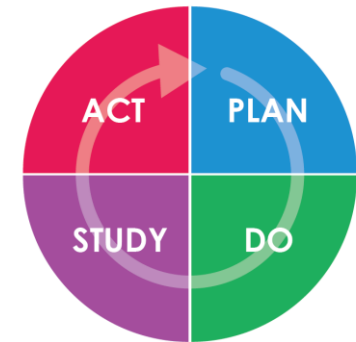
MPINC STATE REPORTS

- **State Reports**
 - Summarize strengths & areas in need of improvement.
 - Comprehensive frequency tables by state & facility type
 - Emailed to state-level organizations & others



MAKING USE OF MPINC DATA

- Use the mPINC survey to guide quality improvement work
 - Set benchmarks
 - Define data collection processes (review and analyze frequently)
 - Get leadership and administration buy-in
 - Identify opportunities for improvement
 - Aim to improve equitable care
 - Use Plan-Do-Study-Act, or PDSA models, to make incremental changes
 - Help hospitals meet Joint Commission Perinatal Care Core Measure breastfeeding requirements



MPINC TOTAL SCORES – 2007-2015*



CDC Survey of
Maternity Practices in Infant Nutrition and Care



***Please Note:**
2018 mPINC
scores will not be
comparable to
previous scores.

SUMMARY: PUT CDC BREASTFEEDING DATA TO USE

- Examine differences in breastfeeding rates by various socio-demographic factors
- Examine trends in breastfeeding rates over time
- Use the data to make comparisons you haven't seen before and find your story
- Compare to the peer state your legislators talk about by name
- Encourage hospitals to integrate maternity care into related quality improvement efforts & track quality measures to drive improvement
- Identify low-hanging fruit and make small, incremental changes
- Establish programs that recognize hospital and community efforts that improve breastfeeding rates
- Celebrate successes!



BREASTFEEDING WEB RESOURCES





BREASTFEEDING WEB RESOURCES

Breastfeeding

[CDC](#) > [Breastfeeding](#)



Breastfeeding

[About Breastfeeding](#) +

[Data & Statistics](#) +

[Guidelines & Recommendations](#) +

[Breastfeeding and Special Circumstances](#) -

[Contraindications](#)

[Diet and Micronutrients](#) +

[Maternal or Infant Illnesses or Conditions](#) +

Breastfeeding and Special Circumstances

Visit the following pages to learn more about breastfeeding and special circumstances. This information is for healthcare providers and public health practitioners. If you are a patient, we strongly advise that you consult with your physician to interpret the information provided as it may not apply to you.

[Contraindications to Breastfeeding](#)

[Environmental Exposures/Toxicants](#)

[Diet and Micronutrients](#)

[Vaccinations, Medications, & Drugs](#)

[Maternal or Infant Illnesses or Conditions](#)

[Travel Recommendations](#)

BREASTFEEDING WEB RESOURCES

Breastfeeding

[CDC](#) > [Breastfeeding](#)

Breastfeeding

[About Breastfeeding](#) +

[Data & Statistics](#) +

[Guidelines & Recommendations](#) +

Breastfeeding and Special Circumstances -

[Contraindications](#)

[Diet and Micronutrients](#) +

[Maternal or Infant Illnesses or Conditions](#) +

Breastfeeding and Special Circumstances

Visit the following pages to learn more about breastfeeding and special circumstances. If you are a provider or public health practitioner, you may want to interpret the information provided as it may not be intended for you.

[Contraindications to Breastfeeding](#)

[Diet and Micronutrients](#)

[Maternal or Infant Illnesses or Conditions](#)

Maternal or Infant Illnesses or Conditions

Learn more about breastfeeding and certain maternal and infant illnesses and conditions.

[Birth Defects](#)

[Breast Surgery](#)

[Ebola Virus Disease](#)

[Food-borne and Waterborne Illness](#)

[Hepatitis B or C Infections](#)

[Herpes Simplex Virus \(HSV\)](#)

[Human Immunodeficiency Virus \(HIV\)](#)

[Jaundice](#)

[Influenza \(Flu\)](#)

[Lyme Disease](#)

[Malaria](#)

[Methicillin-resistant Staphylococcus aureus \(MRSA\)](#)

[Postpartum Depression](#)

[Shingles](#)

[Toxoplasmosis](#)

[West Nile Virus](#)

BREASTFEEDING WEB RESOURCES

Alcohol

Not drinking alcohol is the safest option for breastfeeding mothers. However, moderate alcohol consumption (up to 1 drink/day) is not known to be harmful to the infant.

Is it safe for mothers to breastfeed their infant if they have consumed alcohol?

Not drinking alcohol is the safest option for breastfeeding mothers. Generally, moderate alcohol consumption by a breastfeeding mother (up to 1 standard drink per day) is not known to be harmful to the infant, especially if the mother waits at least 2 hours after a single drink before nursing. However, exposure to alcohol above moderate levels through breast milk could be damaging to an infant's development, growth, and sleep patterns. Alcohol consumption above moderate levels may also impair a mother's judgment and ability to safely care for her child.

Drinking alcoholic beverages is not an indication to stop breastfeeding; however, consuming more than one drink per day is not recommended.

Can alcohol be found in breast milk?

Yes. Alcohol levels are usually highest in breast milk 30-60 minutes after an alcoholic beverage is consumed, and can be generally detected in breast milk for about 2-3 hours per drink after it is consumed. However, the length of time alcohol can be detected in breast milk will increase the more alcohol a mother consumes. For example, alcohol from 1 drink can be detected in breast milk for about 2-3 hours, alcohol from 2 drinks can be detected for about 4-5 hours, and alcohol from 3 drinks can be detected for about 6-8 hours, and so on. However, blood alcohol levels and the length of time alcohol can

What is "moderate consumption"?
The Dietary Guidelines for Americans defines moderate alcohol consumption for women of legal drinking age as up to 1 standard drink per day.

What is a "drink"?

The Dietary Guidelines for Americans defines a standard "drink" as 12 ounces of 5% beer; 8 ounces of 7% malt liquor; 5 ounces of 12% wine; or 1.5 ounces of 40% (80 proof) liquor. All of these drinks contain the same amount (i.e., 14 grams, or 0.6 ounces) of pure alcohol. However, many common drinks contain much more alcohol than this. For example, 12 ounces of 9% beer contains nearly the same amount of alcohol as two (1.8) standard drinks. Consuming one of these drinks would be the equivalent of two standard drinks.



The screenshot shows a search bar at the top right with a magnifying glass icon and a link to 'A-Z Index'. Below the search bar are social media icons for Facebook, Twitter, Email, and RSS. A large orange arrow points from the 'Alcohol' section of the main page to the 'Alcohol' button in the 'Vaccinations, Medications, & Drugs' menu. The 'Vaccinations, Medications, & Drugs' menu is highlighted with an orange border and contains buttons for 'Vaccinations', 'Prescription Medication Use', 'Tobacco and E-Cigarettes', 'Marijuana', and 'Alcohol'. The 'Alcohol' button is circled in red. Below this menu is a section for 'Environmental Exposures/Toxins' and a section for 'Travel Recommendations'.

DISASTER PLANNING

- Parents/Caregivers
 - Breastfeeding
 - Formula Feeding
- Emergency Relief Workers
- Healthcare Providers
- CDC Resources
- Other Resources

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

Search

CDC Features

CDC > CDC Features > Emergency Preparedness & Response

Disaster Planning: Infant and Child Feeding

Natural disasters, such as hurricanes, floods, wildfires, earthquakes, and tornados, can make it hard for parents and caregivers to feed their infants and young children safely. Follow these tips to feed your child safely when disaster strikes.

For Healthcare Providers

In addition to your basic emergency preparedness training, explore other resources, including:

- The American Academy of Pediatrics' (AAP's) [Pediatric Preparedness Resource Kit](#)
- [AAP's Infant Feeding in Disasters and Emergencies](#) [239 KB]
- [For Pediatricians: Breastfeeding Programs in Disaster Situations \(AAP\), \(Module 8, Section V\)](#)

CDC Resources

- [Preparedness for Expectant and New Parents](#)
- [Food and Water Safety After a Disaster or Emergency](#)
- [Caring for Children in a Disaster](#)
- [Travel Recommendations for the Nursing Mother](#)
- [Another Woman's Expressed Breast Milk](#)
- [Proper Storage and Preparation of Breast Milk](#)
- [Infant and Toddler Nutrition](#)
- [How to Clean, Sanitize, and Store Infant Feeding Items](#)
- [U.S. Breastfeeding Rates](#)

Other Resources

- [Infant Feeding in Disasters and Emergencies \(AAP\)](#) [239 KB]
- [Disaster Preparedness and Response Information for Families \(AAP\)](#)
- [ACF Infant Feeding During Disasters](#)
- [ACF Infant Feeding During Disasters Infographic](#)
- [ILCA Facts about Breastfeeding in an Emergency: Especially for Health Workers](#)
- [ILCA Facts about Breastfeeding in an Emergency: Especially for Relief Workers](#)
- [Operational Guidance on Infant Feeding in Emergencies \(OG-IFE\) Version 1.0](#)

For Emergency Relief Workers

First responders, community health workers, and other volunteers should consider [training](#) to understand the feeding needs of infants and young children. If you are an emergency relief worker, keep this [Breastfeeding Support Checklist for Relief Workers \(p.3-4\)](#) [1.3 MB] on hand and consider the following:

Create a Safe Space for Breastfeeding Families

- Keep families together.
- Create safe, private areas for breastfeeding women to nurse their infants.
- Reassure mothers that they can and should continue to breastfeed and should offer the breast as much as their infants want.

It's All About Access

- Make pregnant and lactating women one priority group for access to food and water.
- Be ready to connect mothers and caregivers to lactation support providers if they need help.

Cleanliness Is Key

- Make disposable cups available, since bottles and nipples can be hard to clean effectively when there is limited access to clean water.
- If there is clean water, ensure access to items like a washbasin, dish soap, cleaning brushes, and a mesh bag to hang dry infant feeding items.
- Educate families about [how to clean infant feeding items](#).

Things To Avoid

- Do not donate breast pumps. Without power, mothers cannot use an electric breast pump or safely refrigerate their expressed milk. Furthermore, keeping pump parts clean is an additional challenge when the water is unsafe.
- Do not donate powdered infant formula or other breast milk substitutes. Relief organizations should only provide [ready-to-use infant formula](#) to infants who are already formula feeding or have had breastfeeding interrupted in certain situations.

<https://www.cdc.gov/features/disasters-infant-feeding/index.html>

FACT SHEETS AND REPORTS



Breastfeeding Report Card United States, 2018

Overview
Breastfeeding, with its many known health benefits for infants, children, and mothers, is a key strategy to improve public health. The American Academy of Pediatrics recommends that infants be exclusively breastfed for about the first 6 months with continued breastfeeding alongside introduction of complementary foods for at least 1 year. To track our nation's progress on achieving the Healthy People 2020 goals, CDC's 2018 Breastfeeding Report Card provides a compilation of data on breastfeeding practices and supports in all states, the District of Columbia (DC), Puerto Rico, Guam, and the US Virgin Islands.



Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Division of Nutrition, Physical Activity, and Obesity
www.cdc.gov/breastfeeding


CDC'S WORK TO SUPPORT & PROMOTE BREASTFEEDING IN HOSPITALS, WORKSITES, & COMMUNITIES

THE PROBLEM

1 IN 4
Only 1 in 4 infants is exclusively breastfed as recommended by the time they are 6 months old.

Low rates of breastfeeding add more than **\$3 billion** a year to medical costs for the mother and child in the United States.

Black infants are **21%** less likely to have ever been breastfed than white infants.




BREASTFEEDING IS AN INVESTMENT IN HEALTH. NOT JUST A LIFESTYLE DECISION

BENEFITS FOR INFANTS

Infants who are breastfed have reduced risks of:


- Asthma
- Obesity
- Type 2 diabetes
- Ear and respiratory infections
- Sudden infant death syndrome (SIDS)



BENEFITS FOR MOTHERS

Breastfeeding can help lower a mother's risk of:

- Heart disease
- Type 2 diabetes
- Ovarian cancer
- Breast cancer



Breastfeeding provides unmatched health benefits for babies and mothers. It is the critical gold standard for infant feeding and nutrition, with breast milk uniquely tailored to meet the health needs of a growing baby. We must do more to create supportive and safe environments for mothers who choose to breastfeed.



Dr. Ruth Peterson, Director of CDC's Division of Nutrition, Physical Activity, and Obesity

MOTHERS NEED SUPPORT THROUGHOUT THEIR BREASTFEEDING JOURNEY

60% of mothers stop breastfeeding sooner than they planned.

Certain factors make the difference in whether and how long babies are breastfed:

- Hospital practices
- Education and encouragement
- Policies or supports in the workplace
- Access to community supports

<https://www.cdc.gov/breastfeeding/resources/index.htm>

MAKE BREASTFEEDING RESOURCES WIDELY AVAILABLE

Strategies to Prevent Obesity and Other Chronic Diseases

The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies



National Center for Chronic Disease Prevention and Health Promotion
Division of Nutrition, Physical Activity, and Obesity



Breastfeeding and Early Care and Education (ECE)

Help ECE centers and homes make an impact by supporting breastfeeding moms

The American Academy of Pediatrics (AAP) recommends that infants be exclusively breastfed for the first 6 months but, only about 25% of infants are. 60% of mothers stop breastfeeding earlier than they want to. Several factors affect breastfeeding duration including support women receive from family members, health care providers, their workplace, and ECE facilities.



Did you know?
The more breastfeeding support a mother receives from her ECE provider the more likely she will continue to breastfeed her child.

To meet national standards for supporting breastfeeding, ECE centers and family homes alike can:

- Provide a private space for mothers to breastfeed or express milk
- Allow and encourage mothers to breastfeed at the facility
- Train all staff to prepare, feed, and store breast milk properly
- Develop a breastfeeding-friendly feeding plan with each family
- Make sure breastfed infants are fed expressed breast milk at appropriate intervals
- Teach families to properly store and label their breast milk for use in an ECE facility

For a comprehensive list of national standards to support breastfeeding in ECE refer to Caring for Our Children: National Health and Safety Performance Standards (CFOC), 3rd ed. <http://nrcsids.org/CFOC>

The Centers for Disease Control and Prevention's (CDC) Spectrum of Opportunities framework lists several ways that states and communities can embed and support these standards in their ECE systems. Examples include licensing regulations, the Child and Adult Care Food Program (CACFP), Quality Rating and Improvement Systems (QRIS), and pre-service and professional development opportunities. For a full description of CDC's Spectrum of Opportunities visit: https://www.cdc.gov/obesity/strategies/early-care-education/pdf/TheSpectrumofOpportunitiesFramework_May2018_508.pdf

What Have States and Communities Done?

The Nevada legislature passed a bill (A.B. 152) (2015) that directs the State Board of Health to adopt regulations for licensed child care facilities that, among other things, requires the provision of an appropriate, private space where mothers may breastfeed. http://www.state.nv.us/Session/75th/2015/Bills/AB/AB152_234.pdf

The city of Boise (Idaho) adopted an ordinance (2014) by which the city will monitor and disclose to the public each child care facility's compliance with a set of standards, two of which are related to breastfeeding: 1) whether the facility has a private, designated location other than a restroom for breastfeeding, and 2) whether the location for breastfeeding is maintained in a sanitary condition, with access to an outlet, chair, and nearby running water. <http://cityclerk.cityofboise.org/media/223551/0933.pdf>

*QRIS is one opportunity in the Spectrum of Opportunities and is a systematic approach to assess, communicate, and improve the level of quality in ECE programs. Through QRIS, states define what constitutes a higher quality of care based on designated criteria and use a rating system with a recognizable and understandable symbol to communicate to the public how well participating ECE facilities meet these criteria.

National Center for Chronic Disease Prevention and Health Promotion
Division of Nutrition, Physical Activity, and Obesity



The Surgeon General's Call to Action to Support Breastfeeding

2011



U.S. Department of Health and Human Services

Hospital Actions Affect Breastfeeding

OCTOBER 2015

Vital signs

Hospital practices in the first hours and days after birth make the difference in whether and how long babies are breastfed. The WHO/UNICEF Baby Friendly Hospital Initiative is the global standard for hospital care to support breastfeeding with the Ten Steps to Successful Breastfeeding at its core. The percentage of US hospitals implementing a majority of the Ten Steps increased from about 29% in 2007 to nearly 54% in 2013. However, of approximately 3,300 maternity hospitals in the US, only 209 are designated Baby Friendly Hospitals. Hospitals influence how the nearly 4 million US babies born each year are fed. Further improvement in hospital practices could increase breastfeeding rates and contribute to better child health.

- Hospitals can:**
- Implement the Ten Steps to Successful Breastfeeding and work towards achieving Baby Friendly designation
 - Use CDC's Maternity Practices in Infant Nutrition and Care (MPEC) survey customized reports to improve maternity care practices that support breastfeeding
 - Work with doctors, nurses, lactation care providers, and organizations to create networks that provide direct, based at home, or community breastfeeding support for mothers.



Want to learn more? www.cdc.gov/vitalsigns/breastfeeding2015



Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion



Storage and Preparation of Breast Milk handout



Human Milk Storage Guidelines Magnet



Human Milk Storage Guidelines

	Countertop or table	Refrigerator	Freezer with separate door
Storage Temperatures	77 F or colder (25 C)	40 F or colder (4 C)	0 F or colder (-18 C)
Freshly Pumped/Expressed Human Milk	Up to 4 hours	Up to 4 days	Within 6 months is best, up to 12 months is acceptable
Thawed Human Milk	1-2 hours	Up to 1 day (24 hours)	Never refreeze human milk after it has been thawed

These guidelines are for healthy full-term babies and may vary for premature or sick babies. Check with your health care provider. Guidelines are for home use only and not for hospital use.

Find more breastfeeding resources at: [wic.gov/breastfeeding](https://www.wic.gov/breastfeeding), [usda.gov/breastfeeding/](https://www.usda.gov/breastfeeding/)

STORAGE AND PREPARATION OF BREAST MILK

BEFORE EXPRESSING/PUMPING MILK

ALMACENAMIENTO Y PREPARACIÓN DE LA LECHE MATERNA

ANTES DE EXTRAER LA LECHE

- Lávase bien las manos con agua y jabón.
- Revise el extractor y sus tubos para asegurarse de que están limpios. Reemplácelos inmediatamente los tubos que tengan moho.
- Limpie los diales del extractor y el mesón.

CÓMO ALMACENAR LA LECHE

- Use bolsas para almacenar leche materna o envases limpios, de calidad apta para guardar alimentos y con tapas que se ajustan bien.
- Evite los plásticos que contengan bisfenol A (BPA) (símbolo de reciclaje #7).

GUÍA PARA ALMACENAR LA LECHE MATERNA*

TIPO DE LECHE	LUGARES Y TEMPERATURAS DE ALMACENAMIENTO		
	Mesón 77°F (25°C) o más frío (temperatura ambiente)	Refrigerador 40°F (4°C)	Congelador 0°F (-18°C) o más frío
Leche extraída	Hasta 4 horas	Hasta 4 días	Dentro de los 6 meses es mejor. Hasta 12 meses es aceptable.
Descongelada, previamente	1 a 2 horas	Hasta 1 día (24 horas)	NUNCA vuelva a congelar la leche materna que ya fue descongelada.
Leche que sobra después de alimentar al bebé (el bebé no tomó todo el biberón)	Se debe usar dentro de las 2 horas después de que el bebé paró de tomar el biberón.		

STORAGE AND PREPARATION OF BREAST MILK

BEFORE EXPRESSING/PUMPING MILK

STORE

- Label milk with the date it was expressed and the child's name if delivering to childcare.
- Store milk in the back of the freezer or refrigerator, not the door.
- Freeze milk in small amounts of 2 to 4 ounces to avoid wasting any.
- When freezing leave an inch of space at the top of the container; breast milk expands as it freezes.
- Milk can be stored in an insulated cooler bag with frozen ice packs for up to 24 hours when you are traveling.
- If you don't plan to use freshly expressed milk within 4 days, freeze it right away.

THAW

- Always thaw the oldest milk first.
- Thaw milk under lukewarm running water, in a container of lukewarm water, or overnight in the refrigerator.
- Never thaw or heat milk in a microwave. Microwaving destroys nutrients and creates hot spots, which can burn a baby's mouth.
- Use milk within 24 hours of thawing in the refrigerator (from the time it is completely thawed, not from the time when you took it out of the freezer).
- Use thawed milk within 2 hours of bringing to room temperature or warming.
- Never refreeze thawed milk.

FEED

- Milk can be served cold, room temperature, or warm.
- To heat milk, place the sealed container into a bowl of warm water or hold under warm running water.
- Do not heat milk directly on the stove or in the microwave.
- Test the temperature before feeding it to your baby by putting a few drops on your wrist. It should feel warm, not hot.
- Swirl the milk to mix the fat, which may have separated.
- If your baby did not finish the bottle, leftover milk should be used within 2 hours.

CLEAN

- Wash disassembled pump and feeding parts in a clean basin with soap and water. Do not wash directly in the sink because the germs in the sink could contaminate items.
- Rinse thoroughly under running water. Air-dry items on a clean dish towel or paper towel.
- Using clean hands, store dry items in a clean, protected area.
- For extra germ removal, sanitize feeding items daily using one of these methods:
 - clean in the dishwasher using hot water and heated drying cycle (or sanitize setting) (after cleaning)
 - boil in water for 5 minutes
 - steam in a microwave or plug-in steam system according to the manufacturer's directions (after cleaning)

Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion

FOR MORE INFORMATION, VISIT: <https://bit.ly/2dVYLU>

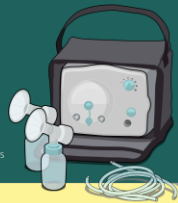


HOW TO CLEAN, SANITIZE, AND STORE INFANT FEEDING ITEMS

Accessible version: www.cdc.gov/healthywater/hygiene/healthchildcare/infantfeeding/breastpump.html

How to Keep Your Breast Pump Kit Clean

Providing breast milk is one of the best things you can do for your baby's health and development. Pumping your milk is one way to provide breast milk to your baby. Keeping the parts of your pump clean is critical, because germs can grow quickly in breast milk or breast milk residue that remains on pump parts. Following these steps can help prevent contamination and protect your baby from infection. If your baby was born prematurely or has other health concerns, your baby's health care providers may have more recommendations for pumping breast milk safely.



BEFORE EVERY USE

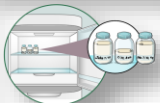


Wash hands with soap and water.

Inspect and assemble clean pump kit. If your tubing is moldy, discard and replace immediately.

Clean pump dials, power switch, and countertop with disinfectant wipes, especially if using a shared pump.

AFTER EVERY USE



Store milk safely. Cap milk collection bottle or seal milk collection bag, label with date and time, and immediately place in a refrigerator, freezer, or cooler bag with ice packs.

Clean pumping area, especially if using a shared pump. Clean the dials, power switch, and countertop with disinfectant wipes.

Take apart breast pump tubing and separate all parts that come in contact with breast/breast milk.

Rinse breast pump parts that come into contact with breast/breast milk by holding under running water to remove remaining milk. Do not place parts in sink to rinse.

Clean pump parts that come into contact with breast/breast milk as soon as possible after pumping. You can clean your pump parts **in a dishwasher** or **by hand** in a wash basin used only for cleaning the pump kit and infant feeding items.

Follow the cleaning steps given on the next page.



Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases

Clean Pump Kit

CLEAN BY HAND



Place pump parts in a **clean wash basin** used only for infant feeding items. **Do not place pump parts directly in the sink.**

Add soap and hot water to basin.

Scrub items using a clean brush used only for infant feeding items.

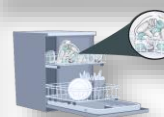
Rinse by holding items under running water, or by submerging in fresh water in a separate basin.

Air-dry thoroughly. Place pump parts, wash basin, and bottle brush on a clean, unused dish towel or paper towel in an area protected from dirt and dust. Do not use a dish towel to rub or pat items dry!

Clean wash basin and bottle brush. Rinse them well and allow them to air-dry after each use. Wash them by hand or in a dishwasher at least every few days.



OR CLEAN IN DISHWASHER



Clean pump parts in a dishwasher, if they are dishwasher-safe. Be sure to place small items into a closed-top basket or mesh laundry bag. Add soap and, if possible, **run the dishwasher using hot water and a heated drying cycle (or sanitizing setting).**

Remove from dishwasher with clean hands. If items are not completely dry, place items on a clean, unused dish towel or paper towel to air-dry thoroughly before storing. Do not use a dish towel to rub or pat items dry!

After Cleaning

FOR EXTRA PROTECTION, SANITIZE



For extra germ removal, sanitize pump parts, wash basin, and bottle brush **at least once daily** after they have been cleaned. Items can be sanitized using steam, boiling water, or a dishwasher with a sanitize setting. Sanitizing is especially important if your baby is less than 3 months old, was born prematurely, or has a weakened immune system due to illness or medical treatment.

For detailed instructions on sanitizing your pump parts, visit www.cdc.gov/healthywater/hygiene/healthchildcare/infantfeeding.html

STORE SAFELY



Store dry items safely until needed. Ensure the clean pump parts, bottle brushes, and wash basins have air-dried thoroughly before storing. Items must be completely dry to help prevent germs and mold from growing. Store dry items in a clean, protected area.

Learn more about safe and healthy diapering and infant feeding habits at www.cdc.gov/healthywater/hygiene/healthchildcare.

<https://www.cdc.gov/healthywater/hygiene/healthchildcare/infantfeeding/cleansanitize.html>

RESOURCES TO SHARE WITH MOTHERS



CDC > Nutrition > Infant and Toddler Nutrition > Breastfeeding

Navigation icons: Facebook, Twitter, Email, Print

- Home Nutrition
- About Nutrition +
- Data & Statistics +
- Infant and Toddler Nutrition -
 - Breastfeeding -
 - Recommendations and Benefits
 - What to Expect While Breastfeeding**
 - How Much and How Often to Breastfeed
 - Pumping Breast Milk

What to Expect While Breastfeeding

Every mother's experience with breastfeeding is different. Whether this is your first baby or you are an experienced mom, each baby is unique. Breastfeeding will be a learning process.

Your baby is learning how to:

- Latch.
- Suck.
- Swallow.

You are learning how to:

- Position your baby to feed.
- Observe and follow his or her hunger cues.
- Manage your breast milk supply and breast health.

Breastfeeding support is available. Visit our [resources page](#) to find the right kind of help for you.

A photograph of a woman with dark hair, wearing a light green hospital gown, sitting in a hospital bed. She is breastfeeding her newborn baby, who is lying on her chest. The room is brightly lit, and the bed has white linens.

<https://www.cdc.gov/nutrition/infantandtoddlernutrition/breastfeeding/index.html>

SYNDICATION

- CDC offers a free Web Content Syndication service that gives public health partners the opportunity to syndicate CDC content directly to their sites without having to monitor or copy updates. Below is a list of breastfeeding content available for syndication.
 - Is It Safe for Mothers Who Use Marijuana to Breastfeed?
 - Breastfeeding Report Card
 - Maternity Practices in Infant Nutrition and Care (mPINC) Survey
 - How to Keep Your Breast Pump Kit Clean
 - How to Clean, Sanitize, and Store Infant Feeding Items
 - Proper Storage and Preparation of Breast Milk
 - Infant and Toddler Nutrition Microsite

<https://www.cdc.gov/breastfeeding/resources/syndicated-content.html>

DNPAO ONLINE RESOURCES



Data Trends and Maps

<https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html>



State Community Health Media Center

Collection of free and low-cost, audience-tested advertising and support materials

<https://nccd.cdc.gov/schmc/apps/overview.aspx>



DNPAO Facebook Page

[Facebook.com/CDCEatWellBeActive](https://www.facebook.com/CDCEatWellBeActive)



DNPAO Twitter

[@CDCObesity](https://twitter.com/CDCObesity)

[@CDCMakeHealthEZ](https://twitter.com/CDCMakeHealthEZ)

QUESTIONS? THANK YOU!

EANSTEY@CDC.GOV



Centers for Disease Control and Prevention

National Center for Chronic Disease Prevention and Health Promotion

Division of Nutrition, Physical Activity, and Obesity (DNPAO)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

