Translating Data to an Evidence-Based Action Plan to Improve Breastfeeding Outcomes in California

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Acknowledgements

• Center for Family Health and MCAH Leadership
  – Renato Littaua, DVM, Title V Coordinator
  – Suzanne Haydu, MPH, Nutrition and Physical Activity Coordinator
• Maternal and Infant Health Assessment (MIHA) Team
• CDPH, Genetic Disease Screening Program
• CDPH, California WIC Program
• California WIC Association
• Centers for Disease Control and Prevention (CDC)
• California Breastfeeding Coalition
Overview

• Discuss data sources used by MCAH in conducting State and local Title V Needs Assessments

• Highlight areas of success as well as opportunities for improvement

• Review State Action Plan to improve breastfeeding outcomes

• Discuss how to access publically available state and local breastfeeding data
Data Leads to Action!

- MCAH has a rich history of systematically gathering data for decision-making and accountability

- No data, no problem!

- What gets measured gets changed
The MCAH Program compiles data from a variety of data sources to guide programs and to monitor progress toward achieving Healthy People 2020 objectives for breastfeeding initiation, duration and exclusivity, and hospital and worksite support for breastfeeding mothers and infants.

- Maternal and Infant Health Assessment (MIHA)
- In-hospital Breastfeeding Initiation, Genetic Disease Screening Program (GDSP) - Newborn Screening Database
- Centers for Disease Control and Prevention (CDC) – Maternity Practices in Infant Nutrition and Care Survey (mPINC)
# California Breastfeeding Indicators and Data Sources

<table>
<thead>
<tr>
<th>PRENATAL</th>
<th>DELIVERY</th>
<th>POSTPARTUM</th>
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</thead>
</table>
| **Maternal and Infant Health Assessment (MIHA)**  
- Infant feeding intentions prior to delivery | **Maternal and Infant Health Assessment (MIHA)**  
- Any and Exclusive Breastfeeding at 2 days postpartum  
- Mothers self-report of hospital experiences that support breastfeeding | **Maternal and Infant Health Assessment (MIHA)**  
- Any and Exclusive Breastfeeding at 1 week postpartum  
- Any and Exclusive Breastfeeding at 1 month postpartum  
- Any and Exclusive Breastfeeding at 2 months postpartum  
- Any and Exclusive Breastfeeding at 3 months postpartum  
- Mothers self-report of worksite accommodations (place and time to pump)  
- Maternity leave and barriers – Coming soon! |
| **Birth Statistical Master File (BSMF)**  
- Proportion of births occurring in Baby-Friendly hospitals | **Genetic Disease Screening Program, Newborn Screening Data**  
- In-hospital any/exclusive breastfeeding initiation  
- Formula supplementation of breastfed infants within first 2 days of life (new HP2020)  
- Hospitals with high number of Medi-Cal/WIC births and low exclusive breastfeeding rates  
- Hospitals with high number of African American births and low exclusive breastfeeding rates | **WIC Participant Database (WIC-MIS)**  
- Breastfed Infants (Full, Combo) at various time periods |
| **Genetic Disease Screening Program, Newborn Screening Data**  
- In-hospital any/exclusive breastfeeding initiation  
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- Perinatal Care Measure on Exclusive Breast Milk Feeding | **WIC Peer Counseling Database**  
- WIC participants receiving peer counseling services  
- Breastfeeding outcomes |
| **Maternity Practices in Infant Nutrition and Care Survey (mPINC)**  
**Dimensions of Care**  
- Labor and Delivery Care  
  *Skin-to-skin contact after vaginal birth (CDC BF Report Card)*  
- Feeding of Breastfed Infants  
- Breastfeeding Assistance  
- Contact between Mother and Infant  
  *Rooming-in (CDC BF Report Card)*  
- Facility Discharge Care  
- Staff Training  
- Structural & Organizational Aspects of Care Delivery | **HANDOUT** |
Title V MCAH Needs Assessment Process: Data to Action!

- Data Analysis and Reporting
- Assess Capacity
- Identify Needs, Gaps, Disparities

Select Priorities
Select Performance Measures
Create Action Plan

Stakeholder Engagement
Title V Performance Measure Framework
Action Plan to Improve Breastfeeding Outcomes

National Outcome Measures → National Performance Measures → Evidence-based/informed Strategy Measures

Reduction in:
- Infant Mortality
- Postneonatal Mortality
- Sleep-related SUID

Breastfeeding
- % infants ever breastfed
- % infants exclusively breastfed through 6 months

State Identified Evidence-based Strategies to meet unique needs
Maternal and Infant Health Assessment (MIHA)
What is the MIHA survey?

- Annual population-based survey of women with recent live birth
- Addresses maternal and infant social and economic conditions, health behaviors, health status and access to care before, during and after a recent pregnancy
- Provides information not available from other sources to develop, target and evaluate public health efforts
- Modeled after the Pregnancy Risk Assessment Monitoring System (PRAMS) conducted by the Centers for Disease Control and Prevention in 40 states
Sampled Counties, MIHA 2013-2015

Top Delivery Counties
- 35 counties with largest number of births
- 98% of California births

Remaining 23 counties included in MIHA regions
## California Breastfeeding Indicators – **MIHA Data**

<table>
<thead>
<tr>
<th>Prenatal</th>
<th>Delivery</th>
<th>Postpartum</th>
</tr>
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<tbody>
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**WIC Participant Database (WIC-MIS)**

- Breastfed Infants (Full, Combo) at various time periods
• Infant feeding plans prior to giving birth
• Breastfeeding initiation, duration and exclusivity through 3 months
• Hospital experiences that support breastfeeding
  – Rooming-in, Skin-to-skin contact, and early initiation of breastfeeding
  – Formula supplementation or pacifier use while in the hospital
  – Receipt of gift pack with formula or contact information for post-discharge support
• Workplace breastfeeding support (time and space to pump)
• New 2016! Maternity leave
  – Amount of time taken and barriers to longer leave
Many women are not able to fulfill their personal goals to exclusively breastfeed their infant, MIHA 2013-14

Most women plan to breastfeed prior to giving birth

- 64% Breastfeed Only
- 28% Breastfeed & Formula
- 8% Formula Only/Not Sure

Only 2 out of 3 women planning to exclusively breastfeed are still exclusively breastfeeding at 1 week postpartum.
Breastfeeding rates quickly decline during the early postpartum period, MIHA 2013-14

Source: California Maternal and Infant Health Assessment Survey, 2013-14
Note: Three-month indicator limited to women whose infant was at least 3 months old at the time of survey completion.
Using MIHA to Advocate for Evidence-based Maternity Care:

Mothers experiencing hospital practices that support breastfeeding were more likely to exclusively breastfeed their infant at three months postpartum.
Using MIHA to Advocate for Workplace Breastfeeding Support

Not all working moms have equal access to workplace breastfeeding support

Only half of moms have workplace breastfeeding support.

Moms with lower household income are less likely to have workplace breastfeeding support than moms with higher household income.

Moms with support are \(2x\) more likely to exclusively breastfeed at 3 months.

Source: Maternal and Infant Health Assessment (MIHA), 2011
What does MIHA data tell us?

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Areas for Improvement</th>
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</thead>
<tbody>
<tr>
<td>• Most women plan to breastfeed prior to giving birth</td>
<td>• Few women are able to meet personal breastfeeding goals</td>
</tr>
<tr>
<td>• Most women initiate breastfeeding</td>
<td>• Breastfeeding rates quickly decline in the early postpartum period</td>
</tr>
<tr>
<td>• Knowledge that mothers experiencing hospital practices that support breastfeeding are more likely to breastfeed exclusively</td>
<td>• Not all women have access to hospital practices that support breastfeeding</td>
</tr>
<tr>
<td>• Knowledge that working moms with workplace support for breastfeeding are more likely to exclusively breastfeed through 3 months</td>
<td>• Not all working moms have access to workplace breastfeeding support, especially those with lower household income</td>
</tr>
</tbody>
</table>
How do I download MIHA products?

1. Go to the www.cdph.ca.gov/MIHA

2. Click a green tab to select product type

3. Make a selection from each drop down menu

4. Click on a link to view document
Fall 2016 release of MIHA statistical products

- Statewide Data Snapshots 2013-2014 (grouped years)
  - Race/ethnicity, income, age, prenatal health insurance, education
  - New: Total live births, level of neighborhood poverty, geographic area (urban, rural/frontier)

- County and MIHA Region Data Snapshots, 2013-2014
  - Includes 35 counties
### MIHA Data Snapshot, California by Race/Ethnicity, 2013-2014

**Maternal and Infant Health Assessment (MIHA) Survey**

**Handout**

<table>
<thead>
<tr>
<th></th>
<th>California</th>
<th>Hispanic</th>
<th>Black</th>
<th>White</th>
<th>Asian/Pacific Islander</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Status before Pregnancy</td>
<td>%</td>
<td>95% CI</td>
<td>%</td>
<td>95% CI</td>
<td>%</td>
</tr>
<tr>
<td>In good to excellent health</td>
<td>92.4</td>
<td>91.6 - 93.1</td>
<td>45.2</td>
<td>47.7 - 50.7</td>
<td>29.3</td>
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<tr>
<td>Chronic conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes†</td>
<td>2.3</td>
<td>1.8 - 2.8</td>
<td>2.0</td>
<td>1.9 - 3.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Hypertension†</td>
<td>2.5</td>
<td>2.0 - 2.9</td>
<td>1.7</td>
<td>1.3 - 2.2</td>
<td>7.2</td>
</tr>
<tr>
<td>Asthma</td>
<td>7.8</td>
<td>7.0 - 8.6</td>
<td>6.1</td>
<td>5.0 - 7.2</td>
<td>16.1</td>
</tr>
<tr>
<td>Nutrition and Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily folic acid use, month before pregnancy</td>
<td>32.7</td>
<td>31.1 - 34.3</td>
<td>24.8</td>
<td>22.7 - 27.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Overweight before pregnancy</td>
<td>24.7</td>
<td>23.2 - 26.2</td>
<td>25.4</td>
<td>24.7 - 31.6</td>
<td>63.2</td>
</tr>
<tr>
<td>Obese before pregnancy</td>
<td>20.3</td>
<td>18.9 - 21.7</td>
<td>26.8</td>
<td>24.4 - 29.2</td>
<td>57.9</td>
</tr>
<tr>
<td>Inadequate weight gain during pregnancy</td>
<td>17.7</td>
<td>16.2 - 19.2</td>
<td>21.2</td>
<td>18.7 - 23.8</td>
<td>35.9</td>
</tr>
<tr>
<td>Excessive weight gain during pregnancy</td>
<td>41.4</td>
<td>39.5 - 43.3</td>
<td>38.2</td>
<td>35.3 - 41.0</td>
<td>61.4</td>
</tr>
<tr>
<td>Food insecurity during pregnancy</td>
<td>166.4</td>
<td>154.3 - 178.5</td>
<td>223.2</td>
<td>210.4 - 236.0</td>
<td>31.5</td>
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<tr>
<td>Intimate Partner Violence (IPV) and Depressive Symptoms</td>
<td></td>
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<tr>
<td>Physical or psychological IPV during pregnancy</td>
<td>7.1</td>
<td>6.2 - 7.9</td>
<td>9.1</td>
<td>8.6 - 10.6</td>
<td>11.1</td>
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<tr>
<td>Prenatal depressive symptoms</td>
<td>14.1</td>
<td>12.9 - 15.3</td>
<td>17.9</td>
<td>16.0 - 19.5</td>
<td>41.2</td>
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<tr>
<td>Postpartum depressive symptoms</td>
<td>13.0</td>
<td>11.8 - 14.3</td>
<td>15.1</td>
<td>13.9 - 16.9</td>
<td>39.5</td>
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<tr>
<td>Hardships and Support during Pregnancy</td>
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<tr>
<td>Experienced two or more hardships during childhood</td>
<td>25.8</td>
<td>23.8 - 27.8</td>
<td>30.3</td>
<td>27.9 - 32.7</td>
<td>70.3</td>
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<tr>
<td>Homeless or did not have a regular place to sleep</td>
<td>2.5</td>
<td>1.9 - 3.2</td>
<td>2.1</td>
<td>1.7 - 2.7</td>
<td>9.7</td>
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<tr>
<td>Moved due to problems paying rent or mortgage</td>
<td>6.9</td>
<td>6.0 - 7.7</td>
<td>8.4</td>
<td>6.9 - 9.7</td>
<td>13.4</td>
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<tr>
<td>Woman or partner lost job</td>
<td>14.6</td>
<td>12.6 - 16.6</td>
<td>18.2</td>
<td>16.2 - 20.2</td>
<td>45.0</td>
</tr>
<tr>
<td>Woman or partner had pay or hours cut back</td>
<td>11.8</td>
<td>10.7 - 13.0</td>
<td>13.8</td>
<td>11.8 - 15.8</td>
<td>32.5</td>
</tr>
<tr>
<td>Became separated or divorced</td>
<td>7.6</td>
<td>6.7 - 8.5</td>
<td>10.5</td>
<td>9.8 - 11.2</td>
<td>24.7</td>
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<tr>
<td>Had no practical or emotional support</td>
<td>4.4</td>
<td>3.7 - 5.2</td>
<td>6.7</td>
<td>5.4 - 8.0</td>
<td>3.5</td>
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<tr>
<td>Substance Use</td>
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<tr>
<td>Any smoking, 3 months before pregnancy</td>
<td>11.6</td>
<td>10.5 - 12.7</td>
<td>8.9</td>
<td>7.4 - 10.5</td>
<td>11.1</td>
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<tr>
<td>Any smoking, 3rd trimester†</td>
<td>2.9</td>
<td>2.3 - 3.4</td>
<td>1.6</td>
<td>0.9 - 2.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Any smoking, postpartum</td>
<td>5.0</td>
<td>4.6 - 5.5</td>
<td>3.4</td>
<td>2.5 - 4.3</td>
<td>6.0</td>
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<tr>
<td>Any binge drinking, 3 months before pregnancy</td>
<td>15.1</td>
<td>13.8 - 16.4</td>
<td>14.3</td>
<td>12.5 - 16.1</td>
<td>33.5</td>
</tr>
<tr>
<td>Any alcohol use, 3rd trimester†</td>
<td>7.6</td>
<td>6.8 - 8.6</td>
<td>3.9</td>
<td>2.8 - 5.0</td>
<td>9.2</td>
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<tr>
<td>Pregnancy Intention and Family Planning</td>
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<tr>
<td>Mistimed or unwanted pregnancy</td>
<td>31.2</td>
<td>29.6 - 32.8</td>
<td>38.4</td>
<td>35.9 - 40.9</td>
<td>90.0</td>
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<tr>
<td>Unsure of pregnancy intentions</td>
<td>12.9</td>
<td>11.6 - 14.2</td>
<td>14.5</td>
<td>13.7 - 18.3</td>
<td>34.0</td>
</tr>
<tr>
<td>Postpartum birth control use†</td>
<td>81.6</td>
<td>80.3 - 83.0</td>
<td>85.5</td>
<td>83.8 - 87.2</td>
<td>197.0</td>
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<tr>
<td>Infant Sleep and Breastfeeding</td>
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<tr>
<td>Placed infant on back to sleep</td>
<td>79.7</td>
<td>78.1 - 81.1</td>
<td>80.2</td>
<td>78.1 - 82.3</td>
<td>195.6</td>
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<tr>
<td>Infant always or often shared bed</td>
<td>34.1</td>
<td>32.5 - 35.7</td>
<td>35.4</td>
<td>34.0 - 37.8</td>
<td>81.9</td>
</tr>
<tr>
<td>Intended to breastfeed, before birth</td>
<td>92.4</td>
<td>91.5 - 93.4</td>
<td>91.7</td>
<td>90.3 - 93.1</td>
<td>213.0</td>
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<tr>
<td>Intended to breastfeed exclusively, before birth</td>
<td>64.2</td>
<td>62.6 - 65.9</td>
<td>57.2</td>
<td>54.7 - 59.7</td>
<td>132.2</td>
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<tr>
<td>Breastfeeding practices</td>
<td></td>
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<tr>
<td>Any breastfeeding, 1 month after delivery</td>
<td>83.5</td>
<td>82.3 - 84.8</td>
<td>82.0</td>
<td>80.4 - 83.6</td>
<td>186.8</td>
</tr>
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<td>Exclusive breastfeeding, 1 month after delivery</td>
<td>42.7</td>
<td>41.0 - 44.4</td>
<td>35.0</td>
<td>33.5 - 36.5</td>
<td>88.3</td>
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<td>Any breastfeeding, 3 months after delivery</td>
<td>66.2</td>
<td>64.3 - 68.2</td>
<td>60.8</td>
<td>58.0 - 63.7</td>
<td>112.7</td>
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<td>31.0</td>
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**Notes:**
- † Percentages may not sum to 100 due to rounding.
- MIHA is a collaborative effort of the Maternal, Child Adolescent Health Division and the Women, Infant and Children Division in the California Department of Public Health with the Center on Social Disparities in Health at the University of California San Francisco.
Racial/ethnic disparities in exclusive breastfeeding rates at 3 months postpartum persist, MIHA 2013-2014

Source: California Maternal and Infant Health Assessment Survey, 2013-14
Note: Three-month indicator limited to women whose infant was at least 3 months old at the time of survey completion.
Snapshots available for Top 35 Counties and MIHA Regions

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<th>Geographic Areas: County or region with California comparison</th>
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<table>
<thead>
<tr>
<th>Statistical Information: Percent (%) Confidence Interval (95% CI) Population Estimate (N)</th>
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<tr>
<th>MIHA Data Snapshot, Orange County, 2013-2014</th>
<th>Maternal and Infant Health Assessment (MIHA) Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="handout.png" alt="Handout Image" /></td>
<td><img src="handout.png" alt="Handout Image" /></td>
</tr>
</tbody>
</table>

Symbols indicate statistically better or worse than rest of state
Exclusive Breastfeeding rates at 3 months postpartum varies greatly across California Counties, MIHA 2013-2014

% women exclusively breastfeeding at 3 months

Source: California Maternal and Infant Health Assessment Survey, 2013-14
Note: Three-month indicator limited to women whose infant was at least 3 months old at the time of survey completion.
Data to inform hospital breastfeeding support policies and practices

• Target hospital breastfeeding quality improvement efforts
<table>
<thead>
<tr>
<th>PRENATAL</th>
<th>DELIVERY</th>
<th>POSTPARTUM</th>
</tr>
</thead>
</table>

**Maternal and Infant Health Assessment (MIHA)**
- Infant feeding intentions prior to delivery

**Genetic Disease Screening Program, Newborn Screening Data**
- Any and Exclusive Breastfeeding at 2 days postpartum
- Mothers self-report of hospital experiences that support breastfeeding

**The Joint Commission Health Care Quality Data**
- Perinatal Care Measure on Exclusive Breast Milk Feeding

**Birth Statistical Master File (BSMF)**
- Proportion of births occurring in Baby-Friendly hospitals

**Maternity Practices in Infant Nutrition and Care Survey (mPINC)**
- Labor and Delivery Care
  - Skin-to-skin contact after vaginal birth (CDC BF Report Card)
- Feeding of Breastfed Infants
- Breastfeeding Assistance
- Contact between Mother and Infant
  - Rooming-in (CDC BF Report Card)
- Facility Discharge Care
- Staff Training
- Structural & Organizational Aspects of Care Delivery

**Maternal and Infant Health Assessment (MIHA)**
- Any and Exclusive Breastfeeding at 1 week postpartum
- Any and Exclusive Breastfeeding at 1 month postpartum
- Any and Exclusive Breastfeeding at 2 months postpartum
- Any and Exclusive Breastfeeding at 3 months postpartum
- Mothers self-report of worksite accommodations (place and time to pump)

**WIC Participant Database (WIC-MIS)**
- Breastfed Infants (Full, Combo) at various time periods

**WIC Peer Counseling Database**
- WIC participants receiving peer counseling services
- Breastfeeding outcomes
• California in-hospital infant feeding practices are monitored using data collected by the Newborn Screening (NBS) Program.

• All non-military hospitals providing maternity services are required to complete the Newborn Screening Test Form.

• In addition to tracking genetic diseases and metabolic disorders, the NBS program gathers data on all infant feedings from birth to time of specimen collection, usually 24 to 48 hours since birth.

• Rates are published for hospitals with 50 or more records, as well as the County and State rates by race/ethnicity of the population.
Trends in In-Hospital Breastfeeding Initiation
Newborn Screening Data, 2010-2015

Data Source: California Department of Public Health, Genetic Disease Screening Branch, Newborn Screening Database, 2010-2015
Excludes data for infants that were in a Neonatal Intensive Care Unit (NICU) nursery, or receiving TPN, at the time of specimen collection.
Prepared by: Maternal, Child and Adolescent Health Program
Highlight Racial/Ethnic Disparities in In-Hospital Exclusive Breastfeeding Initiation, 2015

Data Source: California Department of Public Health, Genetic Disease Screening Branch, Newborn Screening Database, 2015
Excludes data for infants that were in a Neonatal Intensive Care Unit (NICU) nursery, or receiving TPN, at the time of specimen collection.
*Pacific Islander (PI) includes: Hawaiian, Guamanian, Samoan and Other PI
Prepared by: Maternal, Child and Adolescent Health Program
The Joint Commission defines exclusive breast milk feeding as:
“a newborn receiving only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines.”

The Joint Commission Perinatal Care Core Measure on Exclusive Breast Milk Feeding

# of exclusively breast milk-fed non-NICU term infants
(including those supplemented with human milk)

# of non-NICU term infants with certain exceptions*

*The measure will exclude from the denominator the following infants: discharge from hospital while in the NICU, ICD-10-CM diagnosis code for galactosemia or ICD-10-PCS procedure code for parenteral nutrition, experienced death, length of stay >120 days, transferred to another hospital or preterm (<37 weeks gestation completed).

For more information visit: https://manual.jointcommission.org/releases/TJC2016B1/PerinatalCare.html
How to Access Hospital-level Data on Exclusive Breastmilk Performance Measure

The Joint Commission Quality Check Data Download Portal website:
http://www.healthcarequalitydata.org/
Select which State to include:

Select which Measure Sets to include:

Select which Measures to include:

Perinatal Care
- Exclusive Breast Milk Feeding
- Antenatal Steroids

April 2015 - March 2016 Reporting Period

Select Yearly and/or Quarterly Data
- Yearly
- Quarterly

Choose Download Format
- Excel (See Sample Output)
- Tab Delimited (See Sample Output)
- Preformatted Report (See Sample Output)

Requires Adobe Reader

Back  Go
Percent of births occurring at facilities designated as “baby friendly” by the Baby Friendly Hospital Initiative (BFHI), California 2007-2015

Place Matters:
Not all women giving birth have equal access to quality maternity health care that supports breastfeeding.

Maternity Practices in Infant Nutrition and Care Survey (mPINC)
Centers for Disease Control and Prevention (CDC)

- Track progress in policies and practices related to Baby-Friendly Hospital Initiative specifically the Ten Steps to Successful Breastfeeding
The Maternity Practices in Infant Nutrition and Care (mPINC) is a national survey of maternity care practices and policies that is conducted by the Centers for Disease Control and Prevention (CDC) every 2 years:

• Approximately 80% of all birthing facilities in California participate each year

• CDC provides state-level mPINC reports to state health departments to facilitate their work with hospitals in improving breastfeeding care

• MCAH obtains California mPINC data to provide regional and county-level mPINC data to local stakeholders
For more information on mPINC:
www.cdc.gov/mpinc
<table>
<thead>
<tr>
<th>Dimension of Care (mPINC subscale)</th>
<th>Key informant reports on: (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor and Delivery Care</td>
<td>Early skin-to-skin contact</td>
</tr>
<tr>
<td></td>
<td>Breastfeeding initiation</td>
</tr>
<tr>
<td>Feeding of Breastfed infants</td>
<td>Supplementation</td>
</tr>
<tr>
<td>Breastfeeding Assistance</td>
<td>Whether staff assess breastfeeding</td>
</tr>
<tr>
<td></td>
<td>Whether staff advise on breastfeeding</td>
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<tr>
<td>Mother-Infant Contact</td>
<td>Mother-infant separation</td>
</tr>
<tr>
<td></td>
<td>Rooming-in</td>
</tr>
<tr>
<td>Facility Discharge Care</td>
<td>Post-discharge breastfeeding support</td>
</tr>
<tr>
<td></td>
<td>Distribution of “gift packs”</td>
</tr>
<tr>
<td>Staff Training</td>
<td>Staff education</td>
</tr>
<tr>
<td></td>
<td>Staff competency assessment</td>
</tr>
<tr>
<td>Structural and Organizational</td>
<td>Breastfeeding policies</td>
</tr>
</tbody>
</table>
Benchmarking: mPINC Scores
California compared to Nation, 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>California</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total mPINC</td>
<td>85</td>
<td>79</td>
</tr>
<tr>
<td>Labor &amp; Delivery Care</td>
<td>90</td>
<td>85</td>
</tr>
<tr>
<td>Feeding of Breastfed Infants</td>
<td>89</td>
<td>86</td>
</tr>
<tr>
<td>Breastfeeding Assistance</td>
<td>93</td>
<td>89</td>
</tr>
<tr>
<td>Mother-Infant Contact</td>
<td>92</td>
<td>83</td>
</tr>
<tr>
<td>Discharge Care</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>Staff Training</td>
<td>72</td>
<td>64</td>
</tr>
<tr>
<td>Structural</td>
<td>85</td>
<td>77</td>
</tr>
</tbody>
</table>

Data Source: National and California mPINC Data, 2015 [www.cdc.gov/mpinc](http://www.cdc.gov/mpinc)
Tracking Progress in Maternity Practices in Infant Nutrition and Care (mPINC) Scores from 2007 to 2015, California

- Total mPINC: 85, Improvement (2015) 69, California (Baseline - 2007) 66
- Labor & Delivery Care: 90, Improvement (2015) 63, California (Baseline - 2007) 67
- Feeding of Breastfed Infants: 89, Improvement (2015) 77, California (Baseline - 2007) 72
- Breastfeeding Assistance: 93, Improvement (2015) 82, California (Baseline - 2007) 71
- Mother-Infant Contact: 92, Improvement (2015) 78, California (Baseline - 2007) 64
- Discharge Care: 74, Improvement (2015) 49, California (Baseline - 2007) 25
- Staff Training: 72, Improvement (2015) 61, California (Baseline - 2007) 11
- Structural: 85, Improvement (2015) 70, California (Baseline - 2007) 15

Data Source: California mPINC Data, 2007 and 2015 [www.cdc.gov/mpinc](http://www.cdc.gov/mpinc)
A model breastfeeding policy includes all of the following elements:
- in-service training,
- prenatal breastfeeding classes,
- asking about mothers’ feeding plans,
- initiating breastfeeding within 1 hour of vaginal birth,
- initiating breastfeeding after uncomplicated c-section and/or showing mothers how to express milk and maintain lactation,
- giving only breast milk to breastfed infants,
- rooming-in 24 hours/day,
- breastfeeding on demand,
- no pacifier use by breastfed infants, and
- referral for breastfeeding support in hospital or at discharge.

The mPINC Indicator shows the percent of California hospitals that track the implementation of model breastfeeding policies. The percentages from 2007 to 2015 are as follows:
- 2007: 18%
- 2009: 22%
- 2011: 30%
- 2013: 43%
- 2015: 44%

The graph indicates a trend of improvement, but it is noted that more hospitals need improvement in their breastfeeding policies.
A Closer Look - Elements of a Model Breastfeeding Policy mPINC, California 2007 vs. 2015

- Early BF Initiation: 86% (2007) vs. 98% (2015)
- Breastfeeding on-demand: 79% (2007) vs. 95% (2015)
- Mother’s Feeding Plans: 79% (2007) vs. 94% (2015)
- Rooming-in: 81% (2007) vs. 92% (2015)
- Referral to appropriate BF resources: 79% (2007) vs. 93% (2015)
- No Supplementation of BF Infants: 58% (2007) vs. 85% (2015)
- In-Service Training: 52% (2007) vs. 83% (2015)
- Pacifier Use: 48% (2007) vs. 78% (2015)
Post-discharge Breastfeeding Support

mPINC Indicator

Hospital routinely provides three modes of post-discharge support to breastfeeding mothers:

1. physical contact=home-visit, or hospital postpartum follow-up visit;

2. active reaching out = follow-up telephone call to patients;

3. referrals = hospital phone number to call, support groups, lactation consultant, or outpatient clinic

Percent of California Hospitals

2007: 23%
2009: 31%
2011: 28%
2013: 30%
2015: 28%

Needs Improvement!
Most California hospitals provide referrals, but the most effective discharge care is the least common.

- Home visit
- Return visit to center
- Telephone call
- Telephone # given
- Center support group
- Referral to support group
- Lactation consultant referral
- WIC referral
- Outpatient clinic referral
- List of resources
- Breastfeeding assessment...

Percent of facilities reporting each practice.

- Home visit: 2007
- Return visit to center: 2007
- Telephone call: 2007
- Telephone # given: 2007
- Center support group: 2007
- Referral to support group: 2007
- Lactation consultant referral: 2007
- WIC referral: 2007
- Outpatient clinic referral: 2007
- List of resources: 2007
Track hospital staff training and competency in breastfeeding management and support

Staff training and skills assessment

mPINC Indicator

Nurses/birth attendants are assessed for competency in basic breastfeeding management and support at least once per year

Percent of California Hospitals

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>54%</td>
</tr>
<tr>
<td>2009</td>
<td>60%</td>
</tr>
<tr>
<td>2011</td>
<td>66%</td>
</tr>
<tr>
<td>2013</td>
<td>71%</td>
</tr>
<tr>
<td>2015</td>
<td>67%</td>
</tr>
</tbody>
</table>
More work is needed to ensure hospital staff across California are trained in infant feeding care.

- **New staff receive appropriate breastfeeding education (>18 hours)**
  - 2007: 12.0%
  - 2015: 48.0%

- **Current staff receive appropriate breastfeeding education (≥5 hours)**
  - 2007: 39.0%
  - 2015: 34.0%

- **Staff received breastfeeding education in the past year**
  - 2007: 47.0%
  - 2015: 63.0%
What does hospital-level data tell us?

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In-hospital exclusive breastfeeding rates continue to rise</td>
<td>• Significant race/ethnic and geographical disparities persist</td>
</tr>
<tr>
<td>• The number of baby friendly hospitals has increased tremendously – currently 88!</td>
<td>• Not all women have access to baby friendly hospitals in their communities</td>
</tr>
<tr>
<td>• California is a national leader in maternity policies and practices that support breastfeeding</td>
<td>• Not all hospital have a model breastfeeding policy as required</td>
</tr>
<tr>
<td></td>
<td>• Need to ensure continuity of care</td>
</tr>
<tr>
<td></td>
<td>• Staff training and competency assessment lacking</td>
</tr>
</tbody>
</table>
Use of Data to Target Hospitals for Breastfeeding Quality Improvement Efforts

Hospital Breastfeeding Outcome Measures
• GDSP - In-hospital exclusive breastfeeding Initiation
• Joint Commission – NQF Measure on Exclusive Breast Milk Feeding

Hospital Performance Measure
• CDC - mPINC Score

Hospital Characteristics
• Geographic location
• Annual number of births
• Patient demographics (proportion high-risk population)
• Proportion Medi-Cal births
How to Access Hospital-Level Breastfeeding Data

CDPH Breastfeeding Statistics Web-site at:
http://www.cdph.ca.gov/breastfeedingdata

• In-hospital Breastfeeding Initiation Data
  http://www.cdph.ca.gov/data/statistics/Pages/InHospitalBreastfeedingInitiationData.aspx

• California Maternity Practices in Infant Nutrition and Care (mPINC)
  http://cdph.ca.gov/mpincdata


The Joint Commission Quality Check Data Download Portal website:
http://www.healthcarequalitydata.org/
Data Collection & Dissemination
(# data product downloads)

Provision of Resources/Guidance
to promote adoption of Baby Friendly Hospitals and Clinics
(# hits to breastfeeding website)

Collaborations & Partnerships
to promote MCAH program referrals, Baby Friendly Initiatives, Breastfeeding Support Services (ACA), Workplace Accommodations and other initiatives
(# meetings held/attended)

Title V Performance Measure Framework
Action Plan to Improve Breastfeeding Outcomes

National Outcome Measures

National Performance Measures

Evidence-based/informed Strategy and Measures

Reduction in:
- Infant Mortality
- Postneonatal Mortality
- Sleep-related SUID

Breastfeeding
- % infants ever breastfed
- % infants exclusively breastfed through 6 months

Evidence-based/informed Strategy and Measures

Evidence-based/informed Strategy and Measures

Evidence-based/informed Strategy and Measures
Expand and Strengthen Partnerships to Explore Additional Source of local MCAH Program Data

- Local WIC Agencies
- Black Infant Health (BIH) Program
- California Home Visiting Program (CHVP)
- Local First 5 Initiatives
- Community Clinics
- Other partner organizations?
Resource Listing

CDPH Breastfeeding Statistics Web-site at: http://www.cdph.ca.gov/breastfeedingdata

Maternal and Infant Health Assessment (MIHA) Survey web-site at: www.cdph.ca.gov/MIHA

CDC’s Maternity Practices in Infant Nutrition and Care Survey (mPINC) web-site at: www.cdc.gov/mpinc

The Joint Commission’s Quality Check: www.healthcarequalitydata.org

Thank You!

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