FIMR
Project Impact Update

Tracy Claveau, RN, BAN
FIMR Project Coordinator
What is Infant Mortality?

The death of a baby before his or her first birthday.

The **infant mortality rate** is often used as an indicator to measure the health and well-being of a population.
Infant Mortality Rates
Per 1000 Live Births

Source: Florida CHARTS, Division of Public Health Statistics and Performance Management, Florida Department of Health
www.floridacharts.com
Infant Mortality Rate by Race
Disparities on a local and state level

Source: Florida CHARTS, Division of Public Health Statistics and Performance Management, Florida Department of Health
www.floridacharts.com
Causes of Infant Death, Northeast Florida

Source: Florida CHARTS, Division of Public Health Statistics and Performance Management, Florida Department of Health

www.floridacharts.com
Low Birthweight (%) by Race (<2500 grams)
per 1000 live births

Source: Florida CHARTS, Division of Public Health Statistics and Performance Management, Florida Department of Health
www.floridacharts.com
Infant Age at Death

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt; 28 days</th>
<th>28-365 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>2014</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>2015</td>
<td>67%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Source: Florida CHARTS, Division of Public Health Statistics and Performance Management, Florida Department of Health
www.floridacharts.com
Most SUID are reported as 1 of 3 types of infant deaths

- **Sudden Infant Death Syndrome** cannot be explained after a thorough investigation is conducted, including a complete autopsy, examination of the death scene, and a review of the clinical history.

- **Unknown Cause** The sudden death of an infant that cannot be explained because a thorough investigation was not conducted and cause of death could not be determined.

- **Accidental Suffocation and Strangulation in Bed**
  - Suffocation by soft bedding
  - Overlay.
  - Wedging
  - Strangulation
Number of SUIDs Deaths
Northeast Florida

SUIDs Death Rate
Per 1000 live births

Source: Florida CHARTS, Division of Public Health Statistics and Performance Management, Florida Department of Health
www.floridacharts.com
SUIDs
Sudden Unexpected Infant Deaths

Includes:

• Accidental suffocation or strangulation in bed

• Other suffocation and strangulation (i.e. choking)

• SIDS

• Many sources include “undetermined” in this category, however it is not included in this data.

SUIDs
n=24

Bedsharing
Unsafe Sleep Environment
Positional
SUIDs
A Closer Look at SUIDs (2012-2015)

- 98 days Average Age at time of death
- 84% of mothers did not have Healthy Start (2014-2015)
- 76% Mothers Had at least a High School Education
- 80% of babies did not have Healthy Start (2014-2015)
- Black and other non whites are 2 times more likely to die of SUIDs than whites
- *69% Fathers Had at least a High School Education
- 70% WIC
- 80% Medicaid

- 80% Medicaid
Fetal Deaths by Race

Source: Florida CHARTS, Division of Public Health Statistics and Performance Management, Florida Department of Health
www.floridacharts.com
A condition experienced by newborns exposed to opioid prescription or illicit drugs during pregnancy.

Northeastern Florida has been identified as an area of very high concern.

Source: Florida Department of Health Neonatal Abstinence Syndrome Data Summary, March 2015
NAS Rates per 10,000 Live Births

Source: Florida Department of Health Neonatal Abstinence Syndrome Data Summary, March 2015
Infant Mortality Rate

**Baker County**

11.9*

---

**Low Birthweight Infants**

**Baker**

<table>
<thead>
<tr>
<th>Year</th>
<th>Black/Other</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8.3</td>
<td>9.8</td>
</tr>
<tr>
<td>2014</td>
<td>8.2</td>
<td>12.8</td>
</tr>
<tr>
<td>2013</td>
<td>11.3</td>
<td>18.8</td>
</tr>
</tbody>
</table>

---

**Causes of Infant Death**

**Baker n=4**

- **SUIDs**: 25%
- **Other Perinatal Conditions**: 50%
- **Congenital**: 25%
### Infant Mortality Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>White</th>
<th>Black/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>6.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>8.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>9.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Low Birthweight Infants

<table>
<thead>
<tr>
<th>Year</th>
<th>Black/Other</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8.1</td>
<td>11.2</td>
</tr>
<tr>
<td>2014</td>
<td>7.7</td>
<td>14.2</td>
</tr>
<tr>
<td>2013</td>
<td>6.8</td>
<td>9.5</td>
</tr>
</tbody>
</table>

### Causes of Infant Death

Clay n=11

- **SUIDs**: 27%
- **Congenital**: 27%
- **Other Perinatal Cond**: 28%
- **Other**: 9%
- **Injury**: 9%

**Other**: 9%
Nassau County
Infant Mortality Rate
5.0

Low Birthweight Infants
Nassau

<table>
<thead>
<tr>
<th>Year</th>
<th>Black/Other</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>5.6</td>
<td>8.2</td>
<td>20.8</td>
</tr>
<tr>
<td>2014</td>
<td>6.5</td>
<td>11.3</td>
<td>18.7</td>
</tr>
<tr>
<td>2015</td>
<td>8.2</td>
<td>11.3</td>
<td>20.8</td>
</tr>
</tbody>
</table>

Infant Mortality Rate
Nassau County

Causes of Infant Death
Nassau n= 4

- SUIDs 25%
- Other Perinatal Cond 50%
- Congenital 25%
Infant Mortality Rate

St. Johns County

Infant Mortality Rate
4.6

Low Birthweight Infants

St. Johns

<table>
<thead>
<tr>
<th>Year</th>
<th>Black/Other</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5.9</td>
<td>10.8</td>
<td>10.8</td>
</tr>
<tr>
<td>2014</td>
<td>6.4</td>
<td>14.2</td>
<td>14.2</td>
</tr>
<tr>
<td>2013</td>
<td>6.7</td>
<td>13.7</td>
<td>13.7</td>
</tr>
</tbody>
</table>

Causes of Infant Death

St. Johns n= 10

- Prematurity: 20%
- Other Perinatal Cond: 30%
- Congenital: 30%
- SUIDs: 10%
- Other: 10%
Fetal and Infant Mortality Review

“to determine specific medical, social, financial and other issues that may have impacted the poor birth outcome”

“It’s not about finding fault, it’s about figuring out where the system failed”
THE FIMR PROCESS

THE CYCLE OF IMPROVEMENT

Data Gathering

Changes in Community Systems

Community Action

Case Review

Source: FIMR Overview for new CRT and/or CAT members, Publication of the National Fetal and Infant Mortality Review Program, ACOG, 2014.
Contributing Factors

- Poverty: 46%
- Pre-Existing Conditions: 68%
  - Asthma
  - HTN
  - Diabetes
- Substance Use (Except Tobacco): 36%
- Pre-Term Labor: 46%
- Obesity: 39%
Parental Knowledge and Behavior

- 32% Late entry into care
- 54% Inconsistent prenatal care
- 29% Inadequate Birth Spacing
- 36% Substance Use
- 46% Kept postpartum appointments
### Sleeping Infant Deaths  (n=9)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>78%</td>
<td>7</td>
</tr>
<tr>
<td>Sitter</td>
<td>22%</td>
<td>2</td>
</tr>
<tr>
<td><strong>Sleeping Situation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alone</td>
<td>44%</td>
<td>4</td>
</tr>
<tr>
<td>With Others</td>
<td>55%</td>
<td>5</td>
</tr>
<tr>
<td><strong>Sleeping Surface</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Bed</td>
<td>44%</td>
<td>4</td>
</tr>
<tr>
<td>Couch or Chair</td>
<td>22%</td>
<td>2</td>
</tr>
<tr>
<td>Infant Bed</td>
<td>22%</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Bedding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft</td>
<td>89%</td>
<td>8</td>
</tr>
<tr>
<td>Firm</td>
<td>11%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Items in Bed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsafe Items</td>
<td>89%</td>
<td>8</td>
</tr>
<tr>
<td>Bottle</td>
<td>11%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Caregiver + for substance at time of death (except tobacco)</strong></td>
<td>56%</td>
<td></td>
</tr>
</tbody>
</table>
Without Strength Change Cannot Occur

- Grief Support: 82%
- Dad Involved: 82%
- Family Support: 96%
- Healthy Start screen: 54%
- Referrals to needed resources: 61%
- Insurance: 79%
Why do parents/caregivers bedshare?

Breastfeeding: 33%
No other place for baby to sleep: 6%

Feeling close to baby: 29%
Family, friends or I say it’s ok: 4%

Feel safer: 24%
Only room with A/C or fan: 3%

Tired: 9%
Too cold/no heat: 2%
Recommendations

Centralized location for Prenatal Information/Resources

Safe Sleep

Address late entry into care
There is no foot too small that it cannot leave an imprint on this world.