

# Exposure to violence and birth outcomes among participants in the Florida Maternal, Infant and Early Childhood Home Visiting Initiative

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# Learning Objectives

- Explain how the Florida Maternal, Infant, and Early Childhood Home Visiting (FL-MIECHV) program assesses and addresses family violence
- Assess the relationship between current and past exposure to violence and perinatal outcomes
- Describe how home visiting can improve perinatal outcomes
- Discuss challenges and opportunities in data collection, linkage, and analysis for community-engaged evaluation

# Exposure to Intimate Partner Violence



- Health Implications for women
  - Physical Harm
  - Mental Health
  - Substance Abuse
  - Poor birth outcomes
    - Low birth weight (LBW), pre-term birth (PTB) & small for gestational age
    - Chronic stress & maternal depression
    - Lack of autonomy from partner

Figure 1. Chart representation of the rate of IPV [Photo]. *National Organization for Women- Greater Grand Rapids Chapter*. Retrieved September 20, 2016 from <https://nowgr.org/wp-content/uploads/2014/10/1in4Women.jpg>

# Adverse Childhood Experiences

- Long term health outcomes
- Child abuse is common within situations where violence is already present
- Increase risk of violent relationships later in life
- Impacts women's perinatal health later in life
  - Increased risk of LBW and PTB
  - Persistent traumatic stress

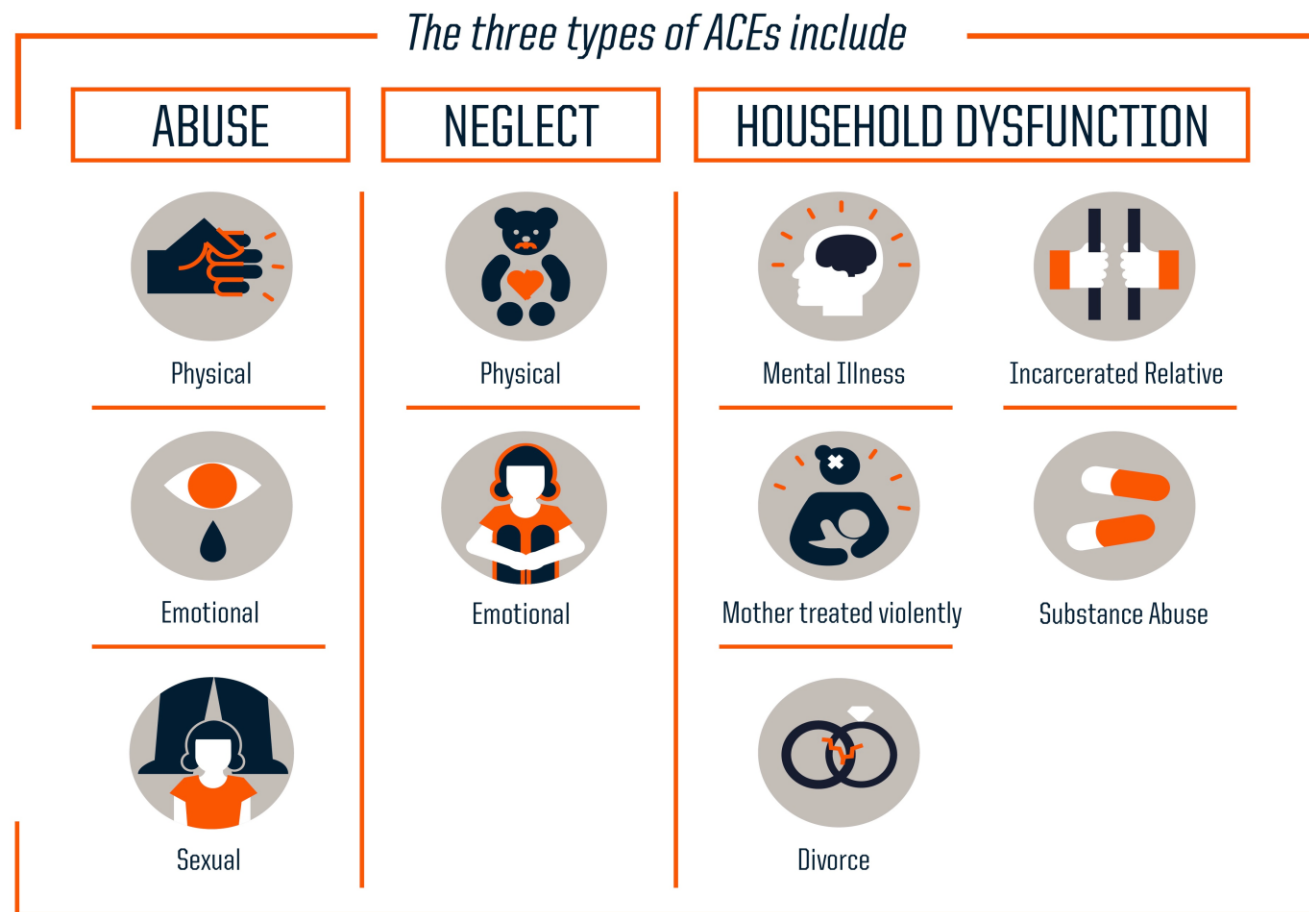


Figure 2. Types of adverse childhood experiences [Photo] Robert Wood Johnson Foundation. Retrieved from <http://www.rwjf.org/en/library/infographics/the-truth-about-aces.html>

# Maternal, Infant, and Early Childhood Home Visiting Initiative

- The Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program is a voluntary program that specifically supports pregnant women and at risk parents of children from birth to age 5
- Florida MIECHV
  - Nurse- Family Partnership (NFP)
  - Parents as Teachers (PAT)
  - Healthy Families Florida (HFF)
- 6 focus areas
  - **Maternal and Child Health**
  - **injuries, abuse, and neglect**
  - School readiness
  - **Domestic violence**
  - Family economic self-sufficiency
  - Coordination of services



**Florida  
Maternal Infant & Early Childhood  
Home Visiting Initiative**

# Florida Counties With MIECHV

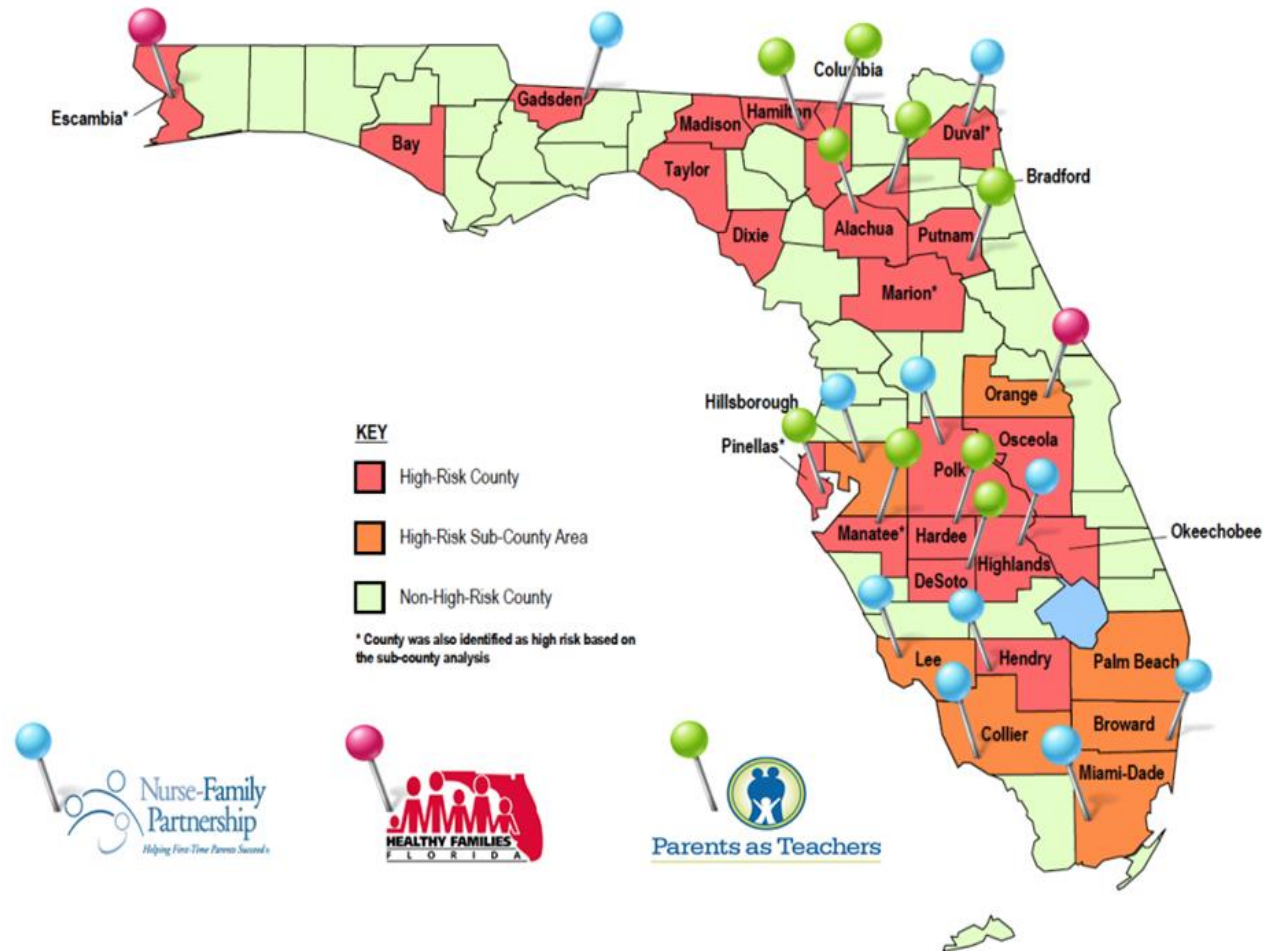


Figure 3. Florida MIECHV sties[Photo]. Florida Maternal Infant and Early Childhood Home Visiting Program. Retrieved from <http://flmiechv.com/sites/>



# Study Purpose

- Identify demographic factors associated with FL MIECHV participant's exposure to violence
- Assess the relationship between a history of exposure to violence (IPV, or abuse as a child) and adverse birth outcomes
- Understand which behaviors known to be associated with poor birth outcomes can be predicted from a history of violent exposures

# 2013-2015 Florida MIECHV Program Data

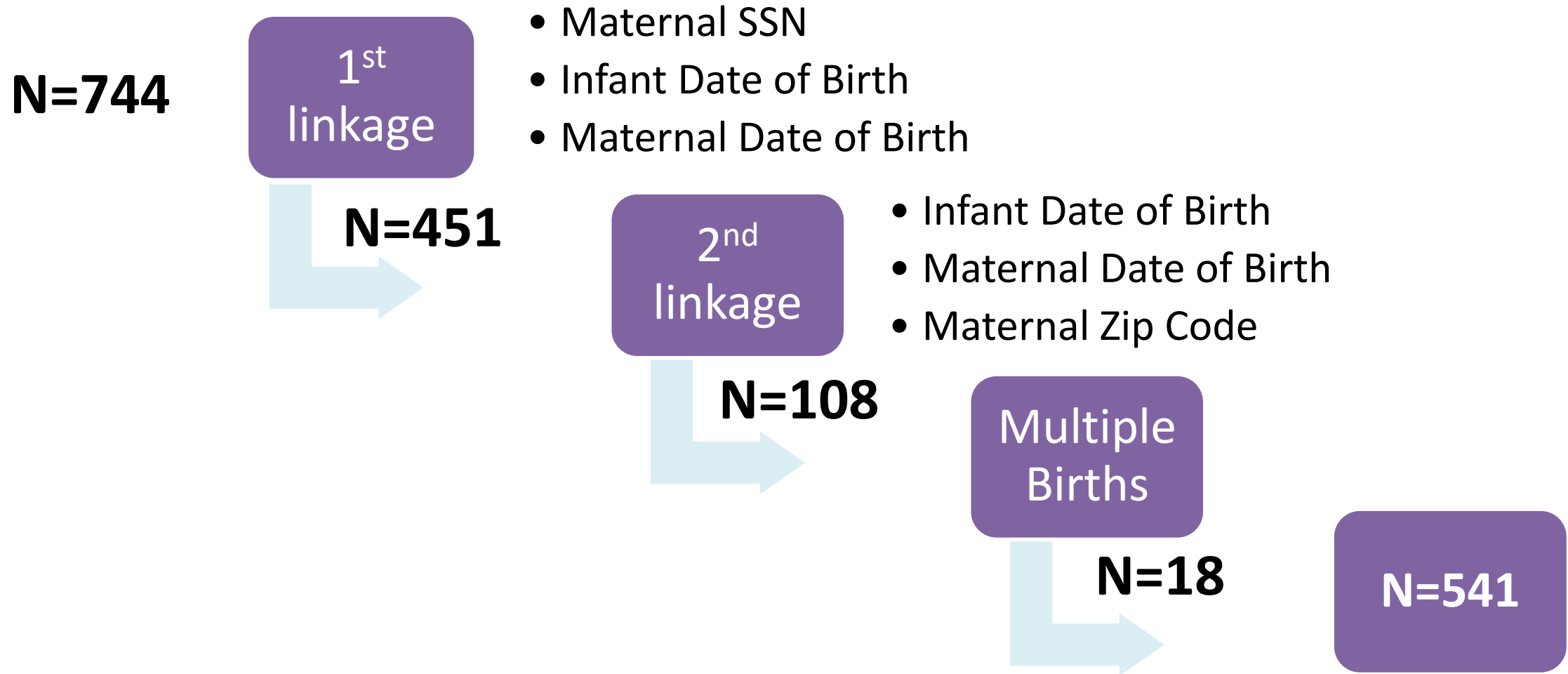
- Questionnaires completed at enrollment into the program, 2 months, 6 months and 12 months post- enrollment
  - Limited to baseline responses of biologic mothers enrolled during pregnancy
  - 744 participants
- Child abuse/neglect
  - Self Reported during initial household assessment
- Intimate partner violence (IPV)
  - Results of Relationship Assessment Tool or Humiliation Afraid Rape Kick Survey



# Florida Vital Statistics Birth Certificate Data

- Poor Birth outcome
  - LBW (<2500 grams)
  - PTB (< 37 weeks gestation)
- Other factors considered
  - Birth spacing
  - Access to adequate prenatal care
  - Tobacco and alcohol use during pregnancy
  - Maternal education, race, and ethnicity
  - Gestational hypertension and infant gender

# Data Linkage to Vital Statistics Data



# Descriptive Statistics

- Participants with Poor Birth Outcomes
  - 19% of the 541 Participants
  - 1/3 received adequate prenatal care
  - Most had high school education (46% finished; 33% higher education)
  - 67% non-white; 90% non-Hispanic
  - 4% alcohol use

# Descriptive Statistics

- Participants with Poor Birth Outcomes

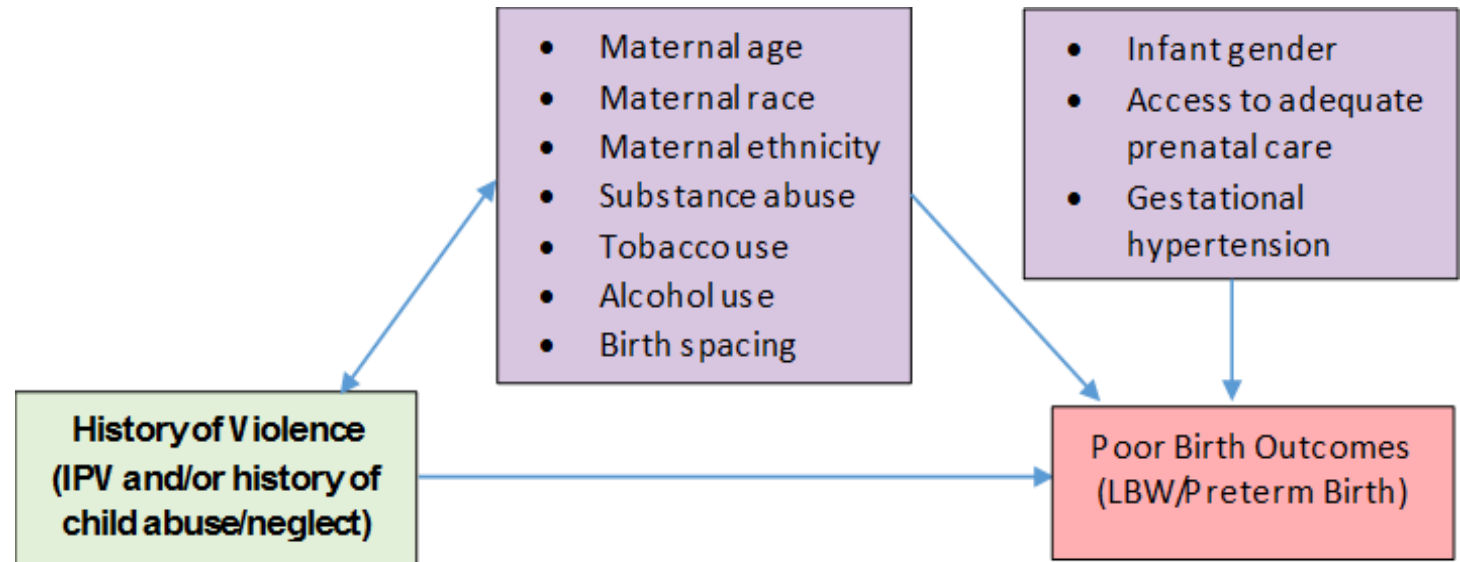
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- Participants with History of Violence

- 16% history child abuse; 3% at risk of IPV of 537 screened
- 67% white
- Most 20 to <30 years old (57%)
- 56% substance abuse
- 33% smoked tobacco
- 4% alcohol use

# Logistic Regression Analysis

- Multivariate Analysis
  - Model 1: History of violence
  - Model 2: Child Abuse/neglect & IPV
    - Account for any interaction



# Multivariate Regression Results

	Crude OR	95% CI	Adjusted OR	95% CI
History of violence	1.47	0.89, 2.44	1.15	0.49, 2.70
Alcohol use during pregnancy	<b>5.74</b>	<b>1.27, 26.07</b>	<b>8.92</b>	<b>1.45, 54.88</b>
Gestational hypertension	<b>3.74</b>	<b>1.86, 7.50</b>	<b>4.70</b>	<b>1.9, 11.64</b>



# Discussion

- Multivariate analysis
  - There was not enough evidence for an association between exposure to violence and adverse birth outcomes to be found for MIECHV sample
  - Relationship between risk factors for IPV and poor birth outcomes
    - Alcohol use
  - Race, ethnicity, education level not significant

# Limitations of MIECHV Program Data

- IPV assessment tool
  - Identifies current risk
  - Required within the first 6 months of enrollment
- Underreporting
- Differing opinions on what defines abuse
- Limited sample size
- Varying collection points
- Analysis did not categorize by program

# Conclusion

- History of violence was not significantly associated with poor birth outcomes
- There was an association with factors linked with both exposure to violence and poor birth outcomes.
- Linking data can give a better picture of participant risk behaviors

# Florida MIECHV IPV Multi-site Learning Collaborative CQI Project

- Eight Florida MIECHV sites conducted a statewide learning collaborative and several CQI projects to increase IPV screening, referral, and safety planning.
- To learn more, visit the Family Violence Prevention Caucus Poster Session #4076.0 Tuesday, Nov 1<sup>st</sup> at 10:30-11:30 AM

*Examining a comprehensive approach to intimate partner violence in the Florida Maternal, Infant, and Early Childhood Home Visiting program*

# Thank you

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