



# Physical Abuse Before and During Pregnancy: MI PRAMS 2012 - 2014

PETE HAAK, BS

MARCH 31, 2017

MATERNAL AND CHILD HEALTH EPIDEMIOLOGY SECTION

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES

# Outline

- ▶ BACKGROUND
  - ▶ How Common is Physical Abuse / Assault?
  - ▶ Impact of Physical Violence on Pregnancy
- ▶ METHODS
  - ▶ PRAMS Survey
- ▶ RESULTS
  - ▶ Abuse before and during pregnancy
    - ▶ Demographics
  - ▶ Services to Reduce Violence
  - ▶ Discussions about Abuse with Care Providers
- ▶ CONCLUSIONS

# BACKGROUND I: How Common is Physical Abuse / Assault?

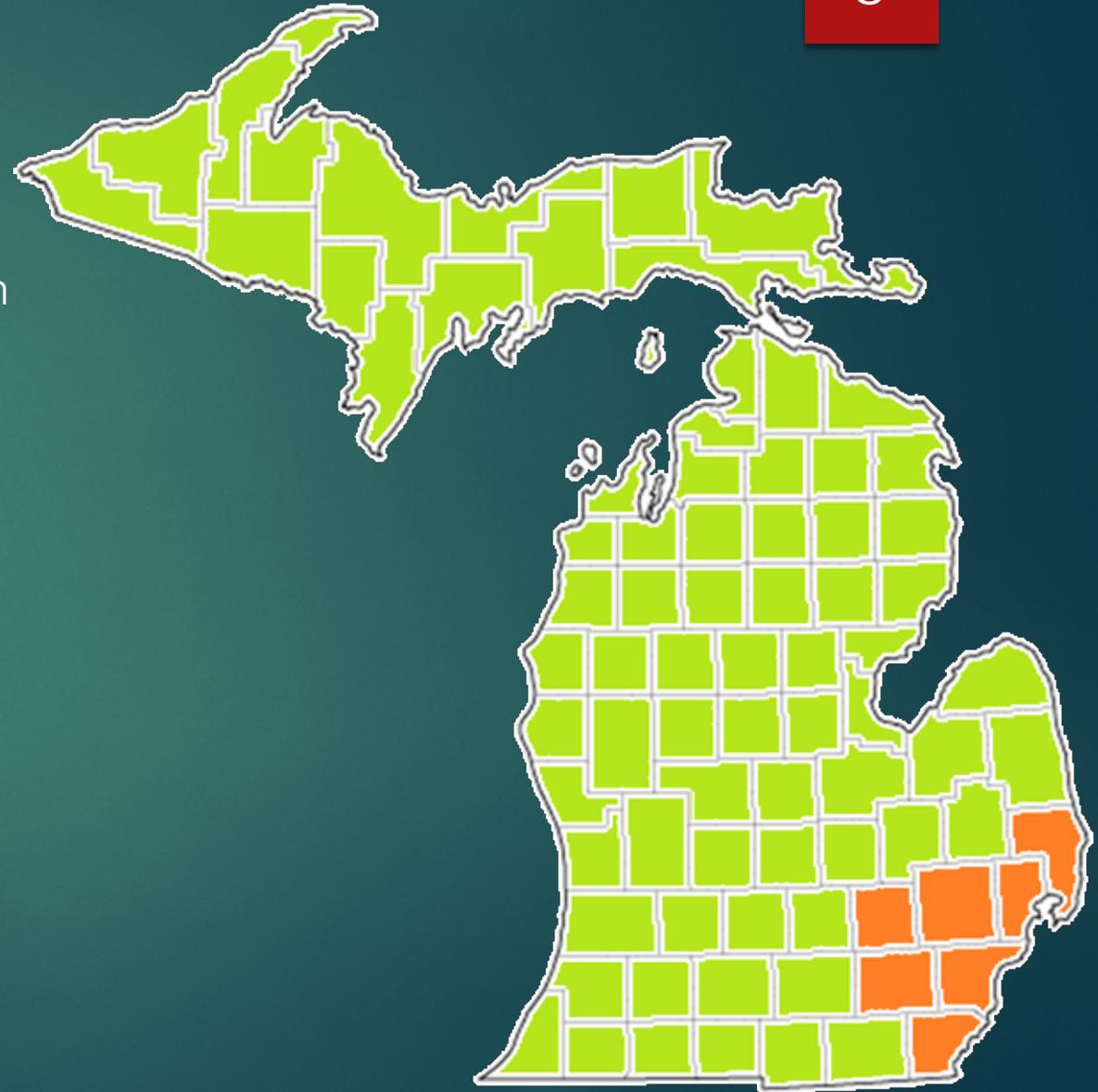
- ▶ 2000 National Violence Against Women Survey<sup>1</sup>
  - ▶ Violence by any perpetrator
  - ▶ Lifetime prevalence among American women: 51.9%
    - ▶ Abuse or assault as a child or adult
  - ▶ 1.9% report abuse or assault in last 12 months
    - ▶ 3.1 assaults per year
- ▶ 2010 National Intimate Partner and Sexual Violence Survey<sup>2</sup>
  - ▶ Lifetime prevalence of slap, push, shove: 30.3%
    - ▶ 3.6% in the year before survey
  - ▶ Lifetime prevalence of more severe physical violence: 24.3%
    - ▶ Slammed against something, hit with fist, beaten
    - ▶ 2.7% in the year before survey

# BACKGROUND II: Impact of Physical Violence on Pregnancy

- ▶ Women experiencing physical abuse around pregnancy have higher risk of:
  - ▶ Preterm labor (adjusted Odds Ratio [aOR] 1.35-1.58)
  - ▶ Vaginal bleeding (aOR 1.54-1.90)
  - ▶ Severe nausea (aOR 1.48 - 1.63)
  - ▶ Kidney Infection / UTI (aOR 1.43-1.64)
  - ▶ Low birth weight infant (aOR 1.17-1.21)
  - ▶ Infant needing NICU (aOR 1.31-1.33)
- ▶ 2006 Silverman et.al. AJOG<sup>3</sup>
- ▶ Mothers of preterm infants were more likely to have experienced abuse during pregnancy (28%) than other mothers (8%)
  - ▶ Adjusted for age, marital status, income, parity, intention, smoking, alcohol, etc.
  - ▶ aOR = 3.14 [2.0 - 4.9]
- ▶ 2008 Rodriguez et.al., AJOG<sup>4</sup>

# METHODS

- ▶ PRAMS Survey
- ▶ Pregnancy Risk Assessment Monitoring System
- ▶ 2,000 - 3,600 mothers per year sampled
- ▶ 50-60% mothers complete
- ▶ Oversample:
  - ▶ Low birth weight
  - ▶ African American
  - ▶ Southeast Michigan
- ▶ Survey completed 3-9 months post-partum
- ▶ Population based survey



# RESULTS I: Abuse Before or During Pregnancy

45. During the 12 months before you got pregnant with your new baby, did your husband or partner push, hit, slap, kick, choke, or physically hurt you in any other way?

- No
- Yes

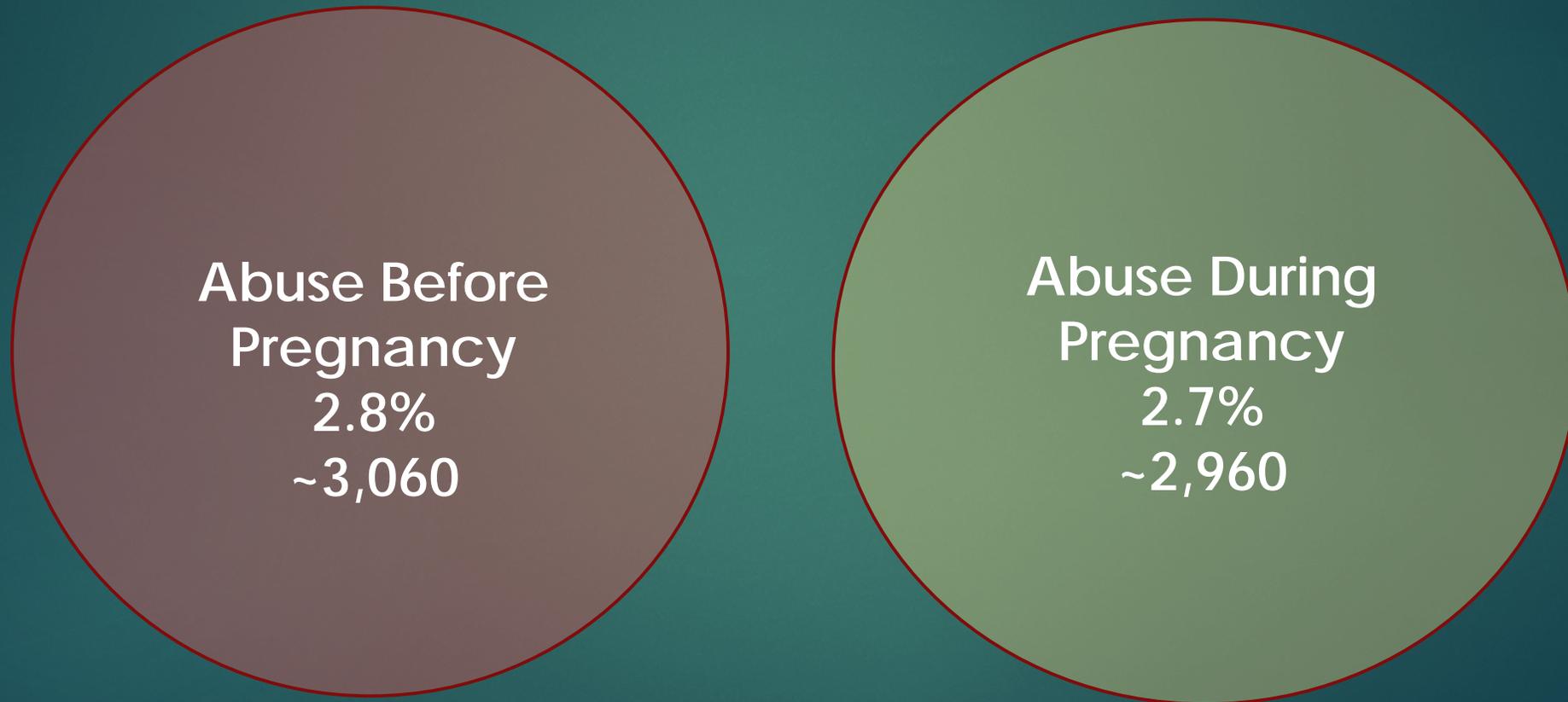
46. During your most recent pregnancy, did your husband or partner push, hit, slap, kick, choke, or physically hurt you in any other way?

- No
- Yes

- 2012-2014 MI PRAMS
- 2.8% Respond "YES"
  - (95% CI 2.3% - 3.4%)
- ~9,200 / 328,000 mothers (3 years)
- ~3,060 / 109,000 mothers per year

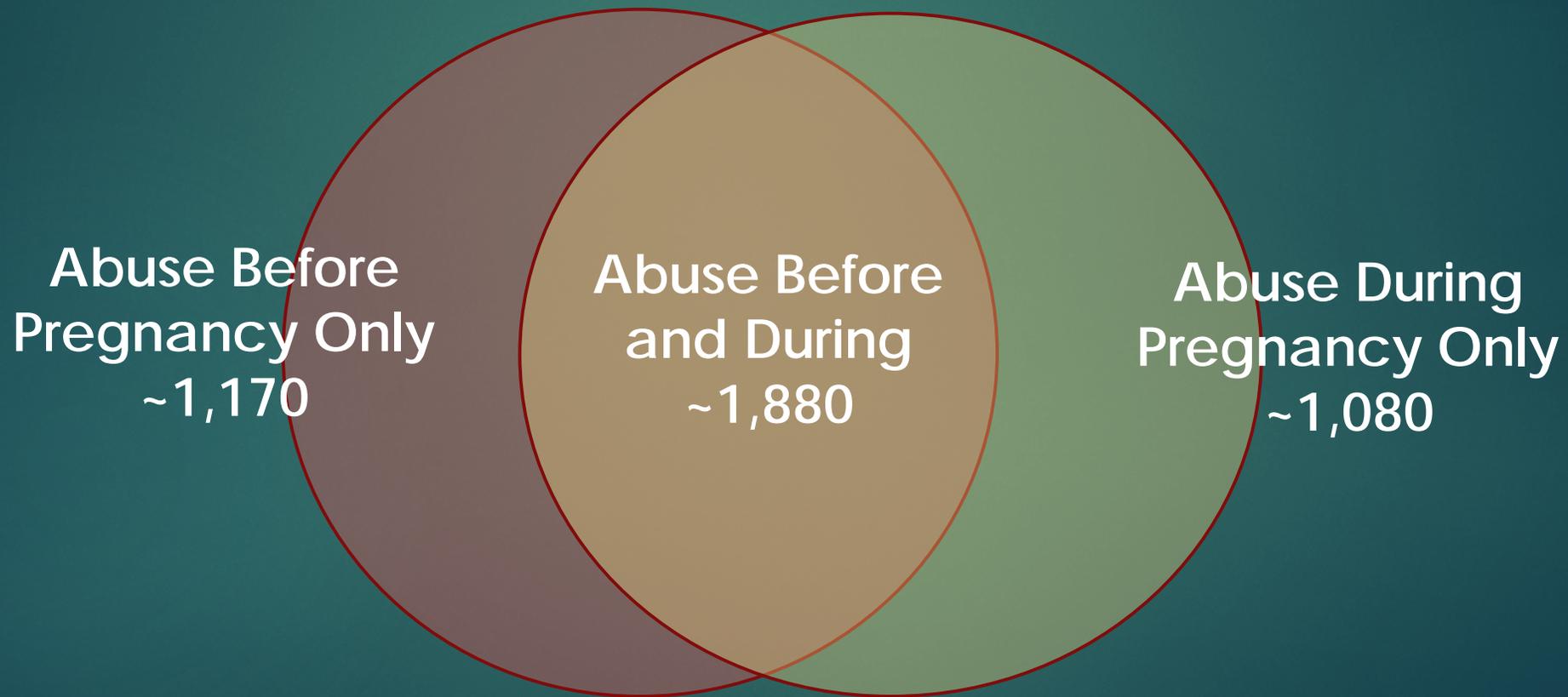
- 2012-2014 MI PRAMS
- 2.7% Respond "YES"
  - (95% CI 2.2% - 3.3%)
- ~8,900 / 328,000 mothers (3 years)
- ~2,960 / 109,000 mothers per year

# RESULTS I: Abuse Before or During Pregnancy



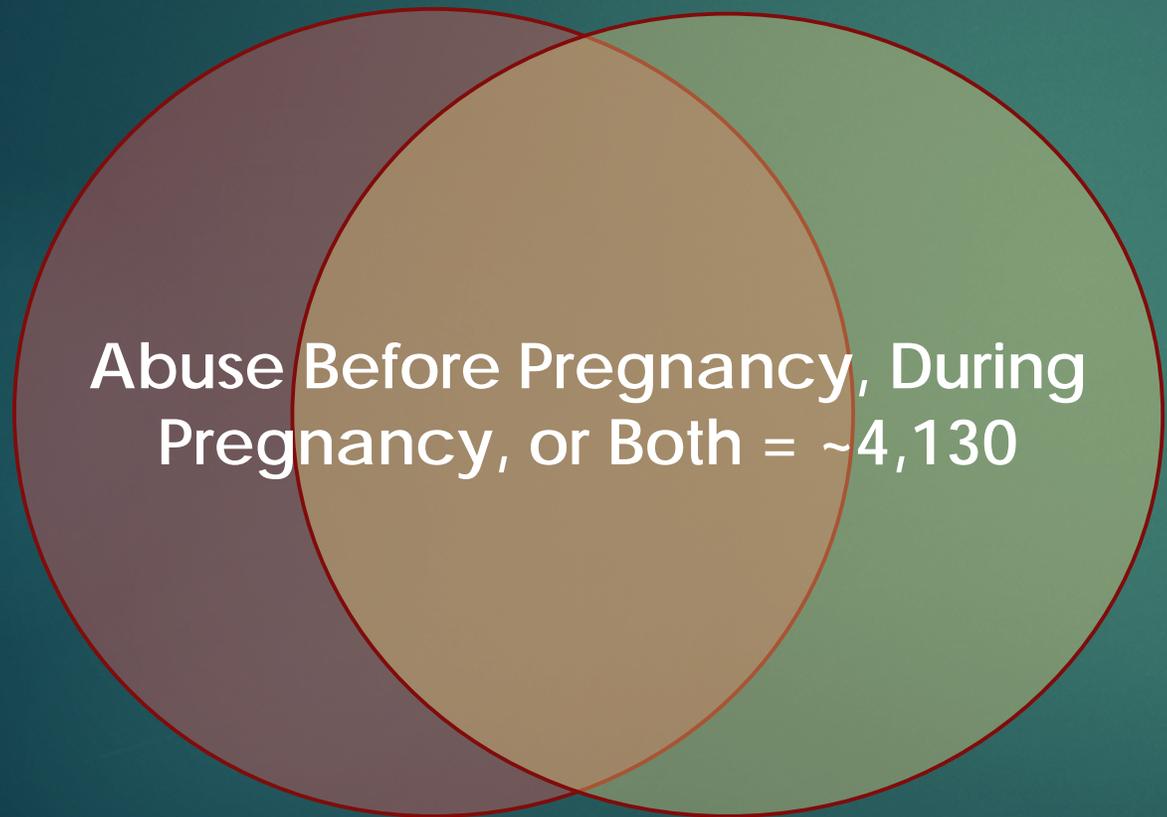
- # Per Year; 2012-2014 MI PRAMS

# RESULTS I: Abuse Before And / Or During Pregnancy



- # Per Year; 2012-2014 MI PRAMS

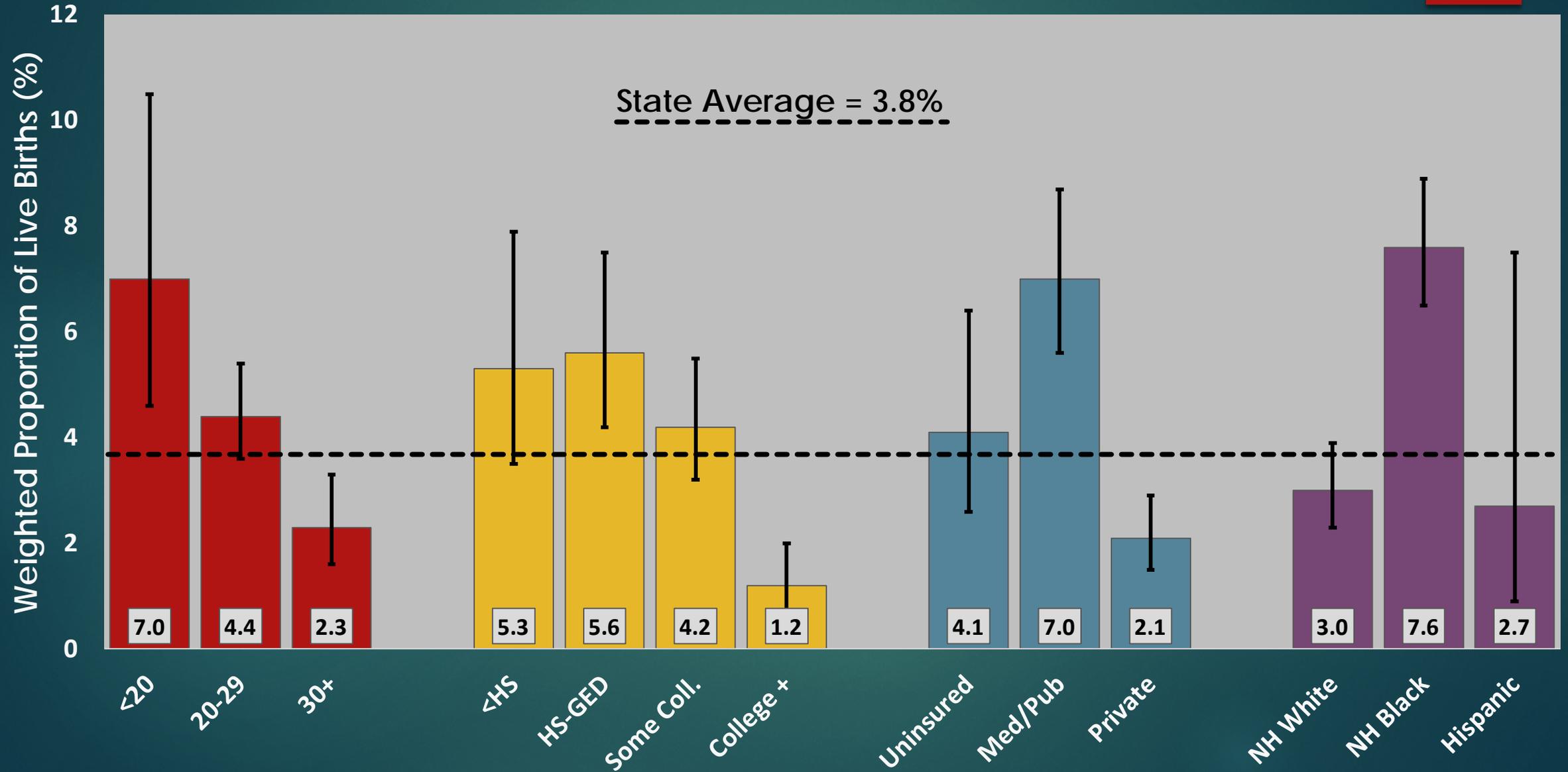
# RESULTS I: Any Abuse Before Or During Pregnancy



- 3.8% respond "YES" to one or both abuse questions
  - (95% CI 3.2% - 4.5%)
- ~4,130 / 109,000 mothers

- # Per Year, 2012-2014 MI PRAMS

# RESULTS I :Abuse in 12 Months Before Pregnancy / During Pregnancy by Maternal Demographics; MI PRAMS 2012 - 2014



# RESULTS II: Received Services During Pregnancy to Reduce Violence

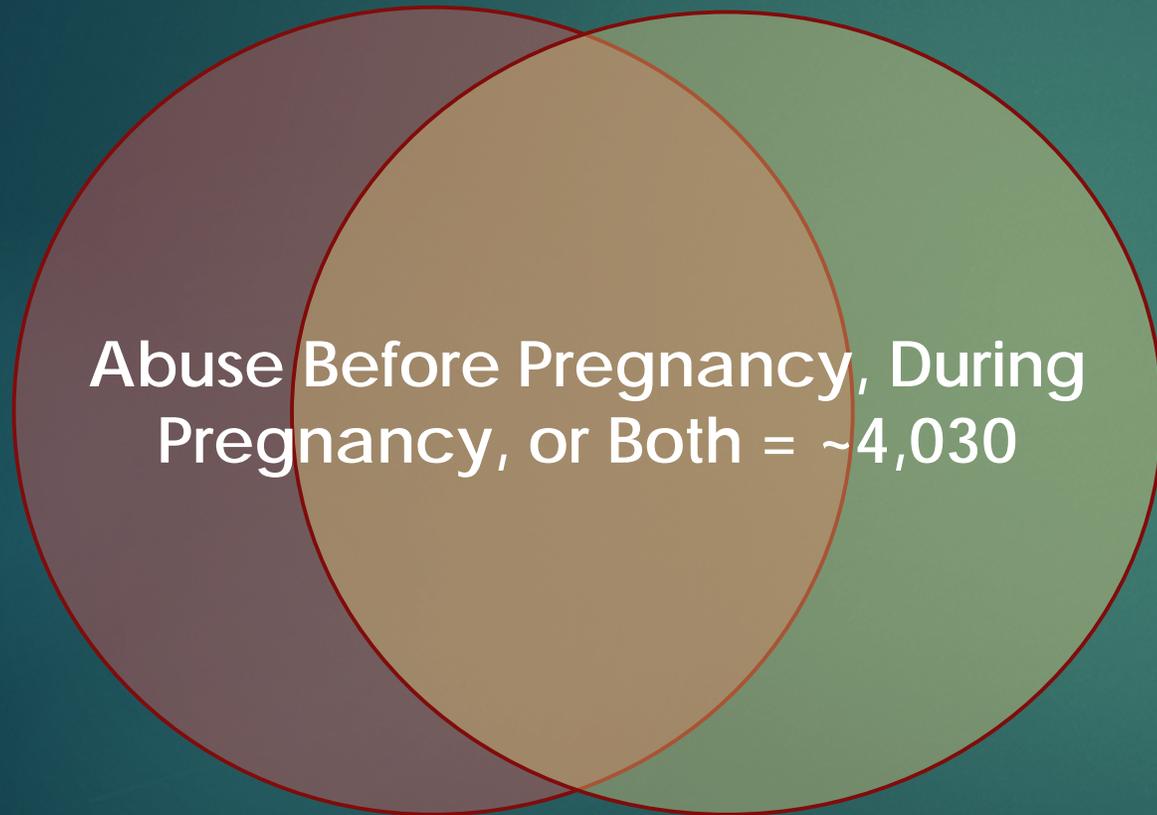
**76. During your most recent pregnancy, did you receive any of the following services?**  
For each one, check **No** if you did not receive the service or **Yes** if you received the service.

	No	Yes
a. Counseling or a support group for depression .....	<input type="checkbox"/>	<input type="checkbox"/>
b. A class or support group to help stop smoking cigarettes.....	<input type="checkbox"/>	<input type="checkbox"/>
c. Help to reduce violence in your home .....	<input type="checkbox"/>	<input type="checkbox"/>

- 2012-2014 MI PRAMS
- 1.1% Respond "YES"
  - (95% CI 0.8% - 1.4%)
- ~1,170 / 108,000 mothers per year

# RESULTS II: How Many Women Who Experienced Abuse Received Services?

12



- ~260 abused mothers received help to reduce violence in their home
- Only 6.4% of those who needed the services
- (95% CI 3.7% - 10.7%)

- # Per Year, 2012-2014 MI PRAMS



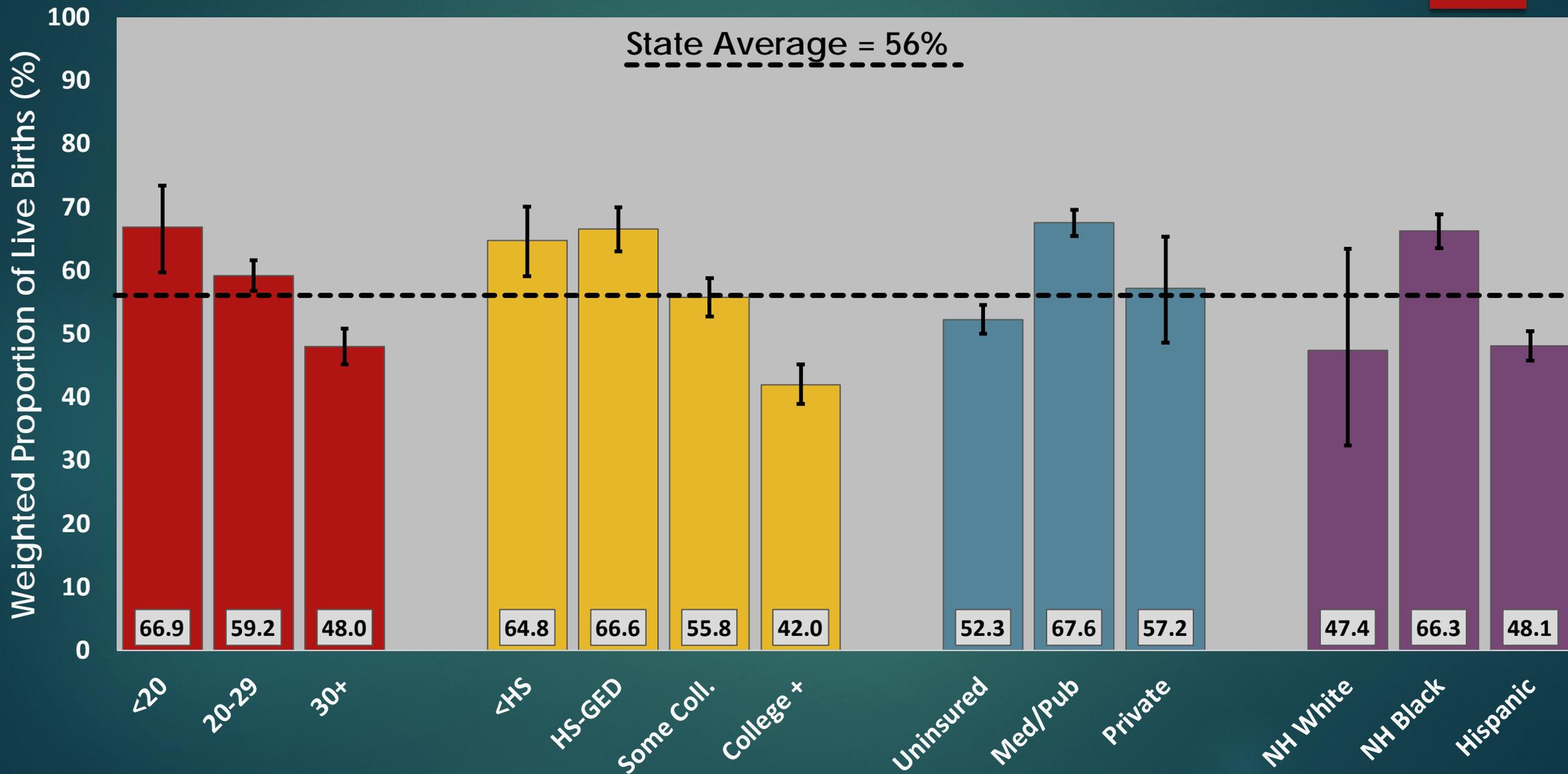
# RESULTS III: How Often do Prenatal Care Providers Discuss Physical Abuse?

24. *During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? Please count only discussions, not reading materials or videos. For each item, check **No** if no one talked with you about it or **Yes** if someone did.*

**No** **Yes**

- 1. Physical abuse to women by their husbands or partners .....

# Results III: Prenatal Care Discussion About Husband/Partner Abuse by Maternal Demographics; MI PRAMS 2012 - 2014



# Results III: How Often do Prenatal Care Discussions of Physical Abuse Overlap with Physical Abuse?

24. *During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? Please count only discussions, not reading materials or videos. For each item, check No if no one talked with you about it or Yes if someone did.*

- |  | No                       | Yes                                 |
|--|--------------------------|-------------------------------------|
| 1. Physical abuse to women by their husbands or partners ..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

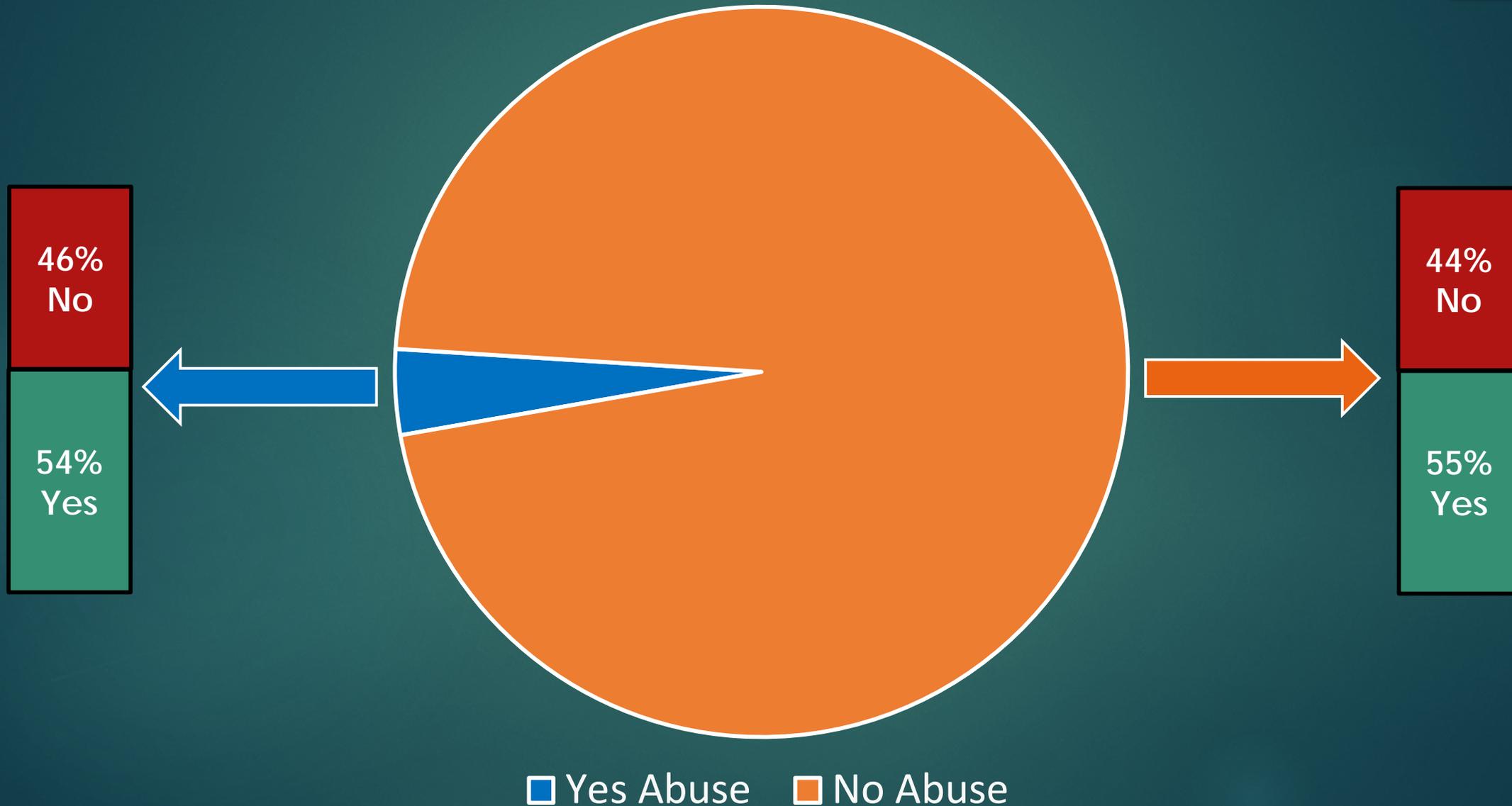
45. *During the 12 months before you got pregnant with your new baby, did your husband or partner push, hit, slap, kick, choke, or physically hurt you in any other way?*

- No  
 Yes

46. *During your most recent pregnancy, did your husband or partner push, hit, slap, kick, choke, or physically hurt you in any other way?*

- No  
 Yes

# Results III: Prenatal Care Discussion About Husband/Partner Abuse by Reported Abuse; MI PRAMS 2012 - 2014



# Conclusions: What To Do With This Information?

- ▶ Educate care providers about the prevalence of domestic abuse before and during pregnancy among their pregnant population
  - ▶ 1 / 26 Michigan mothers overall
  - ▶ 1 / 14 mothers < 20 years
  - ▶ 1 / 13 non-Hispanic Black mothers
  - ▶ 1 / 14 mothers with pre-pregnancy public insurance
  - ▶ No demographic group is without risk
- ▶ Highlight the number of abused / recently abused mothers who did not receive services to reduce violence during pregnancy
  - ▶ 94% of mothers reporting abuse did not get this service!
- ▶ Reinforce the importance of having prenatal care providers discuss domestic abuse with every expectant mother

# Limitations / Strengths

18

## LIMITATIONS

- ▶ Cross-sectional study
- ▶ Recall of prepregnancy events
- ▶ Recall of prenatal care conversations
- ▶ Underreporting
- ▶ Responder bias
- ▶ Univariate / Bivariate

## STRENGTHS

- ▶ Standardized methodology
- ▶ Validated / tested questions
- ▶ Population based sample
- ▶ 50-60% response rate
- ▶ Adjustment for non-response

# MI PRAMS Resources

- ▶ Pete Haak
- ▶ [haakp@michigan.gov](mailto:haakp@michigan.gov)
  
- ▶ [www.michigan.gov/PRAMS](http://www.michigan.gov/PRAMS)
  - ▶ Past annual reports
  - ▶ Fact sheets and newsletters
  - ▶ TOPIC MAP!!
  
- ▶ [www.cdc.gov/PRAMS/PRAMStat](http://www.cdc.gov/PRAMS/PRAMStat)



# MI PRAMS People

20

## ▶ MDHHS

- ▶ Patricia McKane, DVM MPH
- ▶ Chris Fussman, MS
- ▶ Jill Hardy
- ▶ Hannah Sauter
- ▶ Jacob Paciorek
- ▶ Mei You, MS
- ▶ Carol Davis

## ▶ CDC

- ▶ Tanya Williams MPH
- ▶ Nan Ruffo MPA
- ▶ Rutgers Bloustein Center for Survey Research (2016 -->)
  - ▶ Nancy Wolff
  - ▶ Vanessa Loyola
- ▶ Michigan State University Office for Survey Research
  - ▶ (1987 - 2015)
- ▶ Larry Hembroff Survey Consulting

# Works Cited

- ▶ 1) Tjaden, P and Thoennes, N. ***Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women: Findings From the National Violence Against Women Survey***. November 2000. National Institute of Justice.
- ▶ 2) Black, M.C., Basile, K.C., et al. (2011). ***The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report***. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- ▶ 3) Silverman J, Decker M et al. ***Intimate partner violence victimization prior to and during pregnancy among women residing in 26 U.S. states: Associations with maternal and neonatal health***. American Journal of Obstetrics and Gynecology 2006. 195, 140-8
- ▶ 4) Rodrigues T, Rocha L, Barros H. ***Physical abuse during pregnancy and preterm delivery***. American Journal of Obstetrics and Gynecology 2008. 198:171.e1-171.e6