

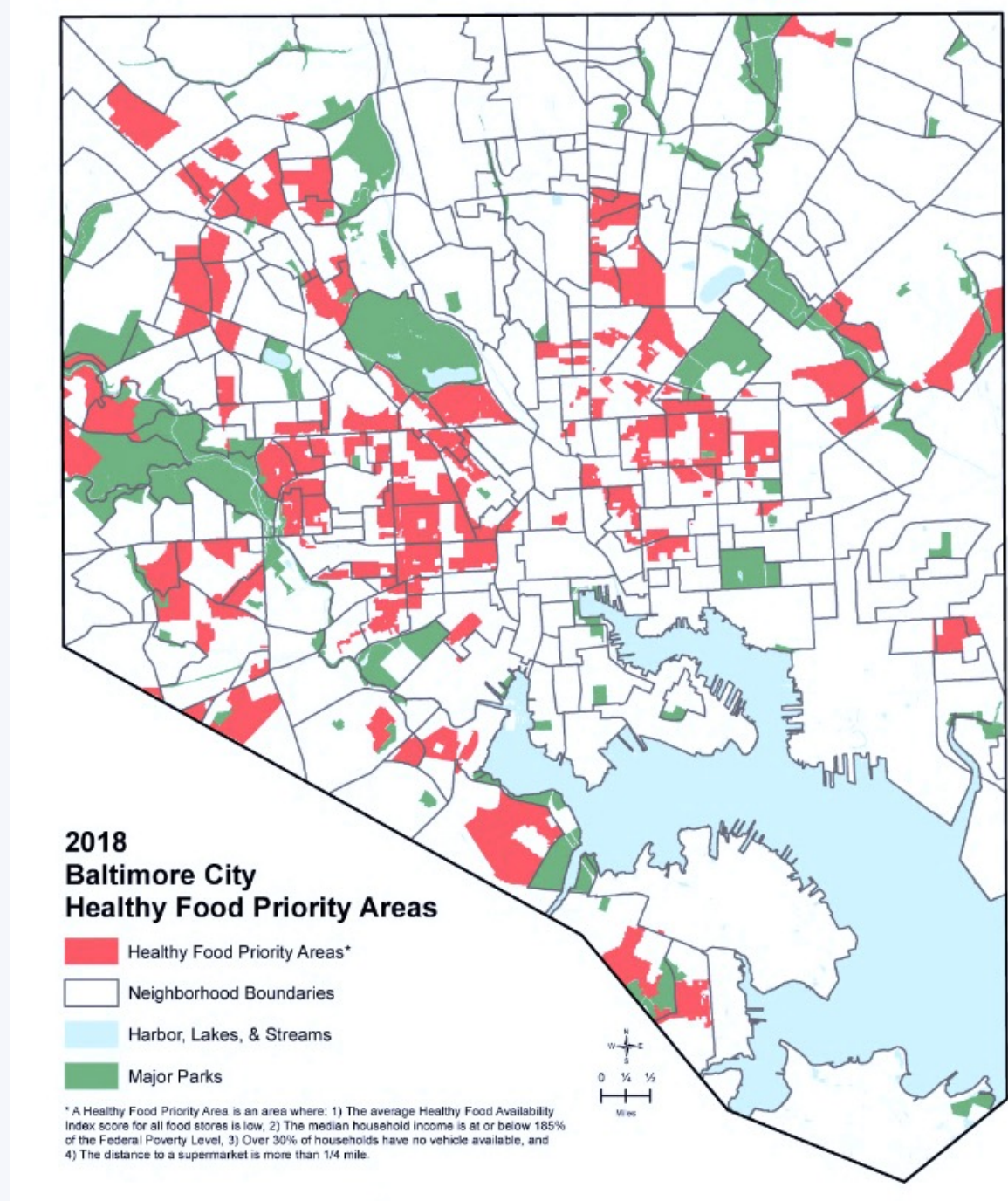
# Food Insecurity during Pregnancy and Adverse Outcomes: A Prospective Study

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## INTRODUCTION

**1 in 10**  
 Americans  
 Food Insecure<sup>1</sup>

**1 in 4**  
 Baltimore City  
 Residents  
 Food Insecure<sup>2</sup>



- Access to food is **essential** for a healthy pregnancy
- There are limited **prospective** studies evaluating the impact of food insecurity on pregnancy outcomes

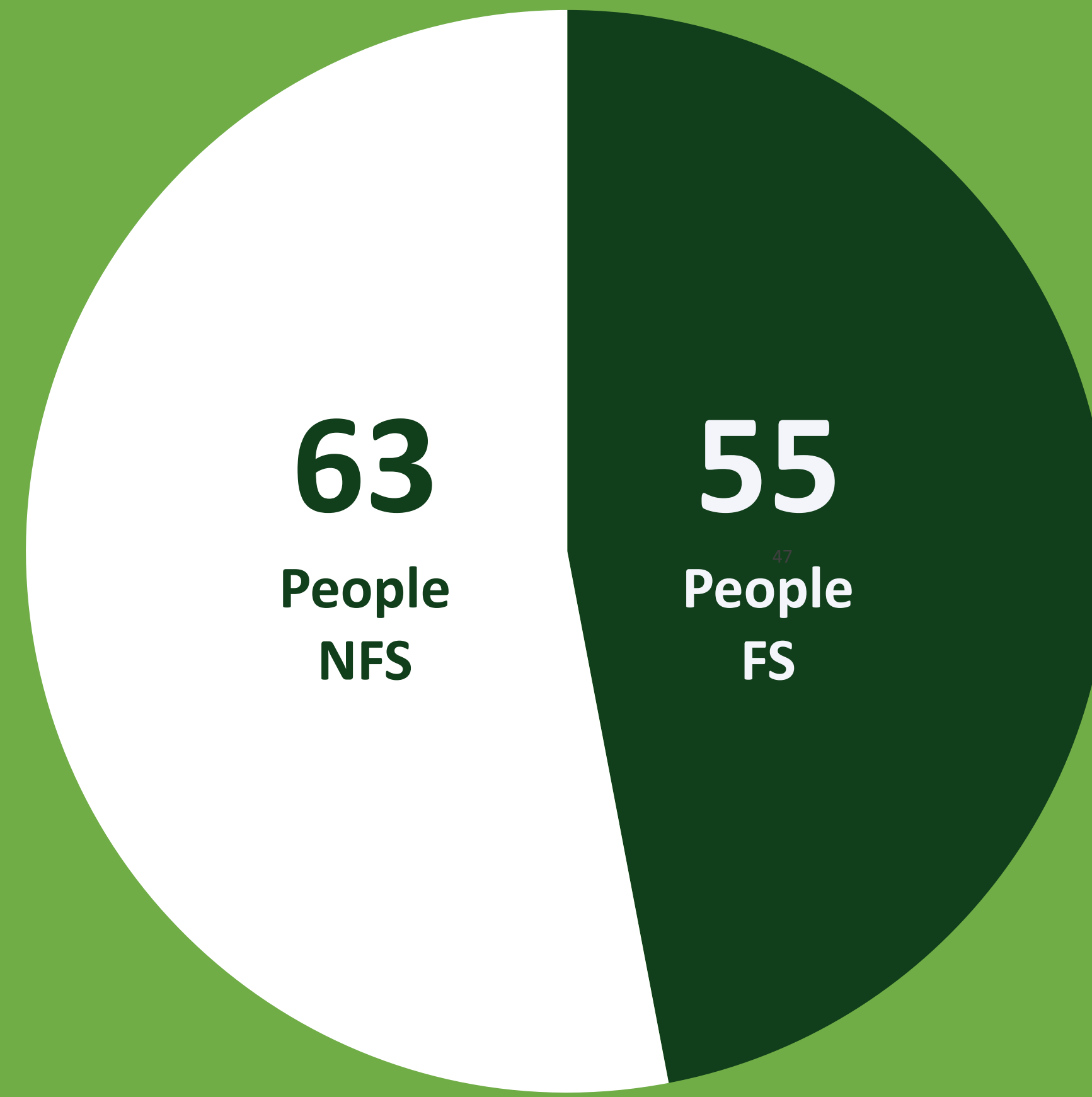
## OBJECTIVES

- Identify the **prevalence** of food insecurity in a pregnant population
- Measure the **association** between food insecurity and adverse pregnancy outcomes in a prospective cohort

## METHODS

- Pregnant and postpartum people (15 yrs +) were approached to take a community health factors survey at one urban academic clinic in Baltimore
- 180 pregnant and postpartum participants were included in analysis
- Food Insecurity was defined as scoring  $\geq 1$  on the **6 Item USDA Food Security Module**
- Peripartum, postpartum, and neonatal outcomes at delivery were abstracted using the electronic medical record
- **Chi-Square Analyses** were performed using STATA

■ Food Insecure ■ Not Food Insecure



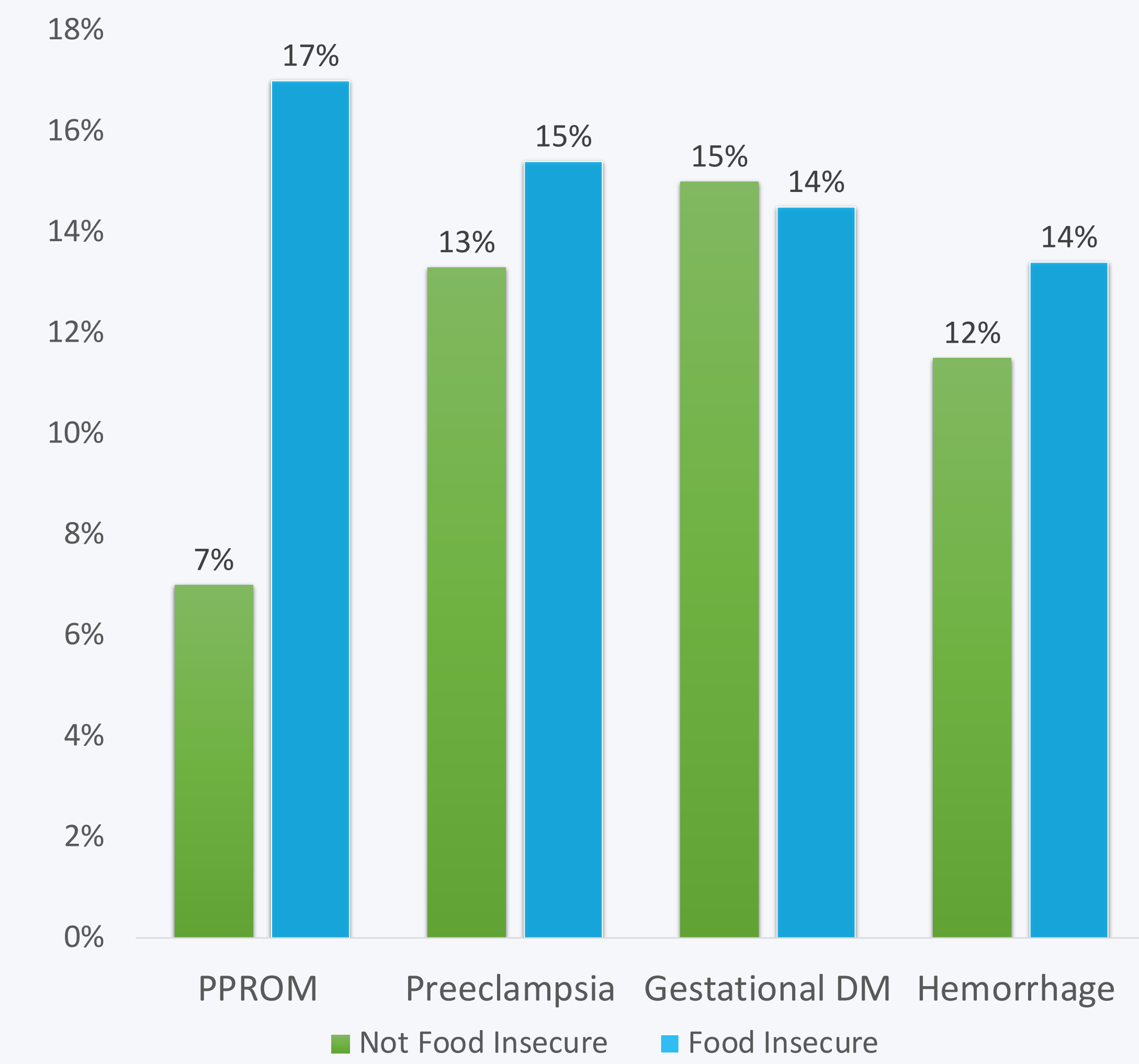
# 1 in 2 pregnant people were food insecure



# Food Insecurity was not associated with adverse maternal pregnancy outcomes

## RESULTS

Frequency of Select Adverse Outcomes in Food Insecure vs. Not Food Insecure Participants



Outcome	Chi-Square	Outcome	Chi-Square
Preeclampsia	0.76	Chorioamnionitis	0.10
GDM	0.87	Pre-term Birth	0.77
PPROM	0.07	Low Birth Weight	0.57
Hemorrhage	0.75	IUGR	0.77
Anemia	0.17	Breastfeeding Postpartum	0.77
Postpartum Depression	0.77	Unplanned Pregnancy	0.30
Short Interval Pregnancy	0.86	Gestational HTN	0.17

## DISCUSSION

- Food insecurity is **highly prevalent** in Baltimore City pregnant people, higher than national and city averages
- Food Insecurity alone may not have an association with adverse pregnancy and neonatal outcomes; must include other social determinants of health
- Further research must include additional sites and non-English speakers to improve generalizability

## CONCLUSION

- We recommend **universal screening** for food insecurity at multiple time points pre- and postpartum
- High prevalence of adverse outcomes in Baltimore warrants more research

1. USDA ERS - Household Food Security in the United States in 2020. Accessed May 11, 2023. <https://www.ers.usda.gov/publications/pub-details/?pubid=102075>  
 2. Overall (all ages) Hunger & Poverty in Baltimore city County, Maryland | Map the Meal Gap. Accessed May 11, 2023. <https://map.feedingamerica.org/county/2017/overall/maryland/county/baltimore-city>