

Disparities in Toxicology Testing Results During the Birthing Hospitalization

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INTRODUCTION

- Universal toxicology testing during the birthing hospitalization within a single health system provides the opportunity to evaluate a snapshot of substance use in pregnant people.
- The purpose of this study is to provide updated data of substance use during pregnancy with the intention of redirecting prevention and education efforts for this population.
- We also consider the potential impact of removing Cannabis from toxicology test results, to see how this might affect overall test result interpretation.

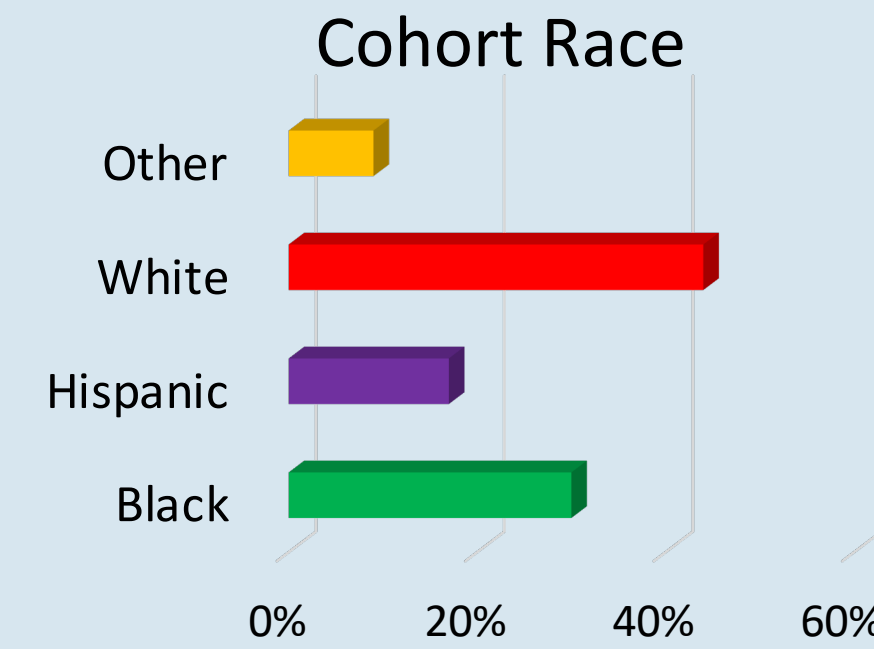
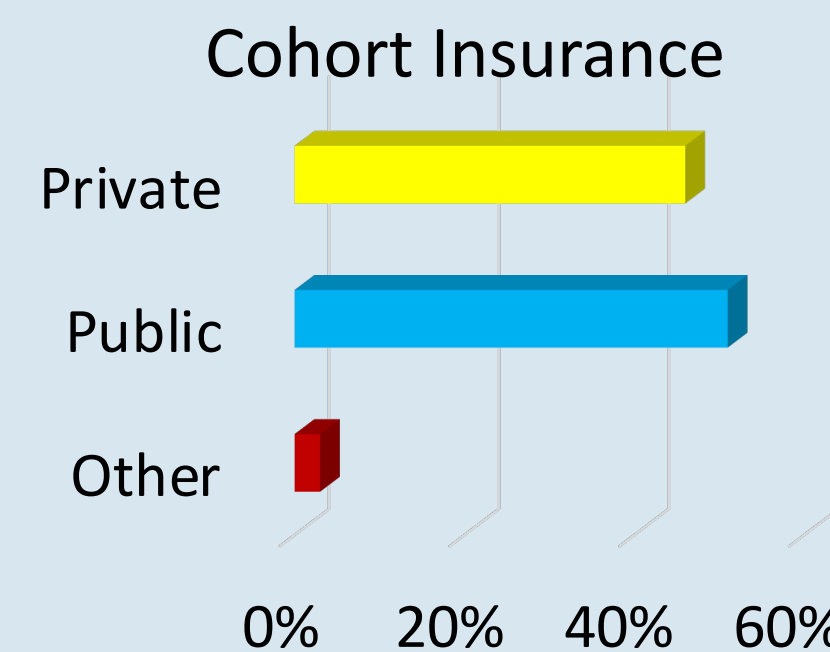
METHODS

- Retrospective cohort study evaluating all birthing hospitalizations within the University of Maryland Medical System (UMMS) where universal toxicology testing was carried out at the time of admission, from 2019-2022.
- Reported the proportion of patients tested, as well as the proportion of patients with positive toxicology results.
- Logistic regression was carried out to determine the odds by race of a positive test, as a crude bivariate estimate and then an adjusted estimate—based upon both predictor and covariate variables: insurance, maternal age, gestational age, year of birth, and hospital of birth.
- Logistic regression was carried out in the same manner—with Cannabis removed from the toxicology positive results. All findings were reported using odds ratios (ORs) with corresponding 95% confidence intervals (CIs)

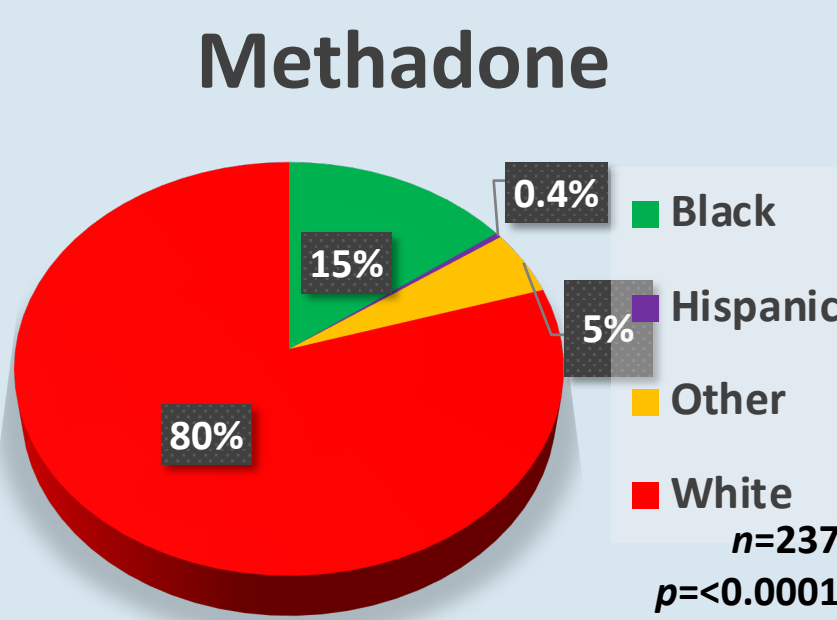
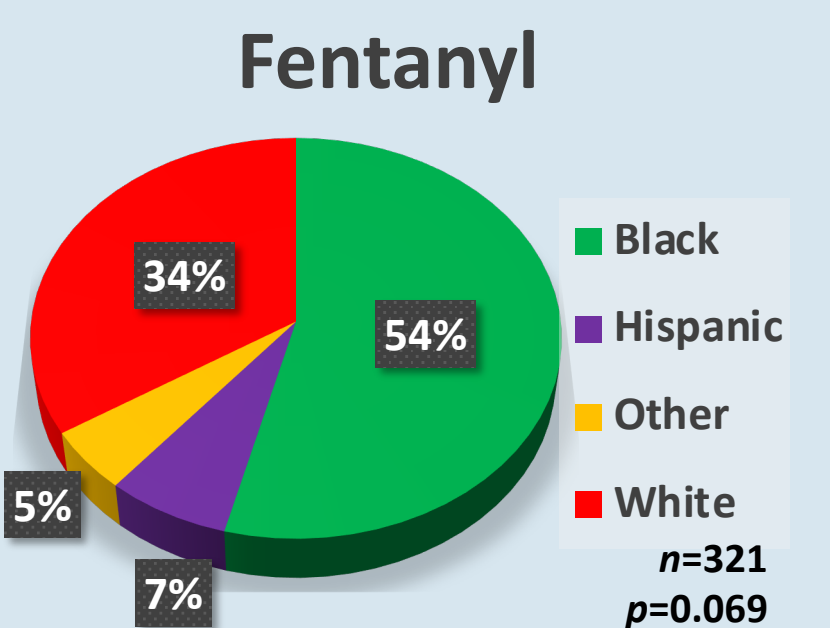
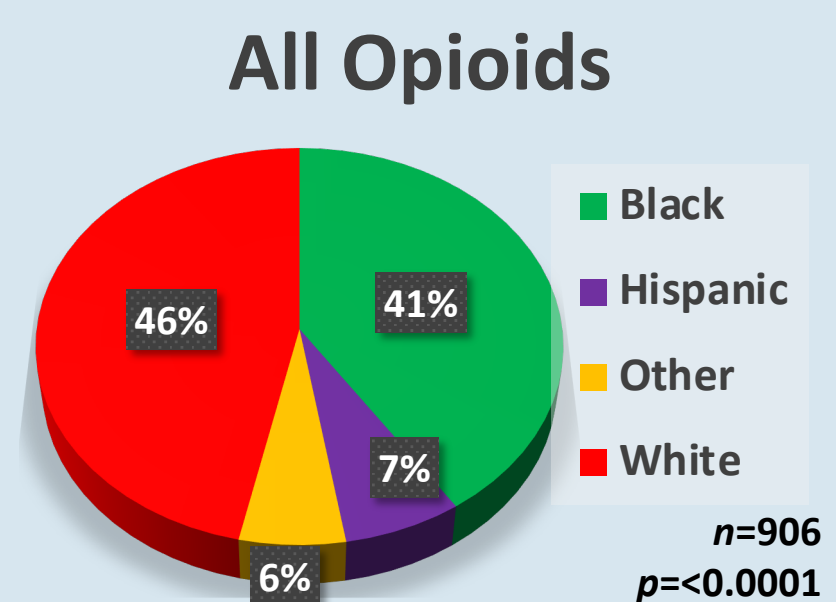
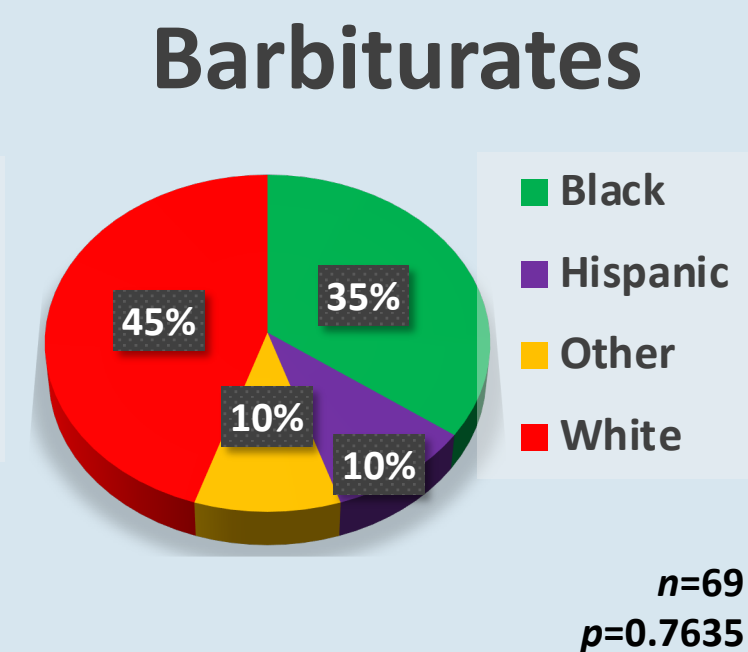
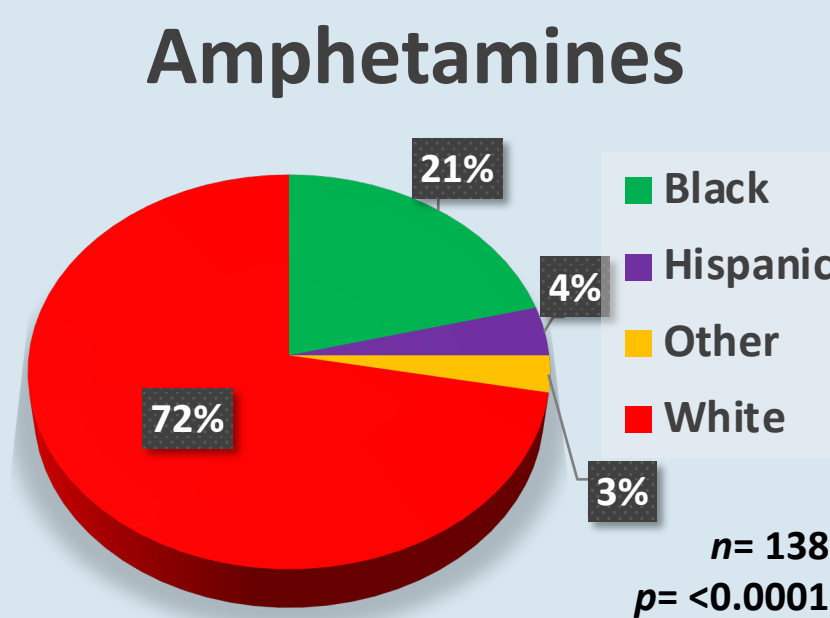
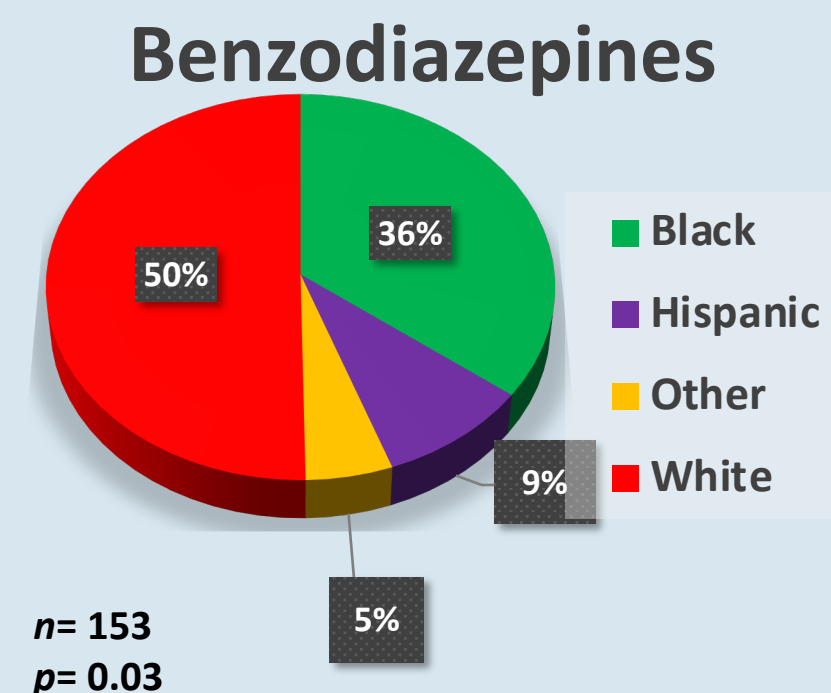
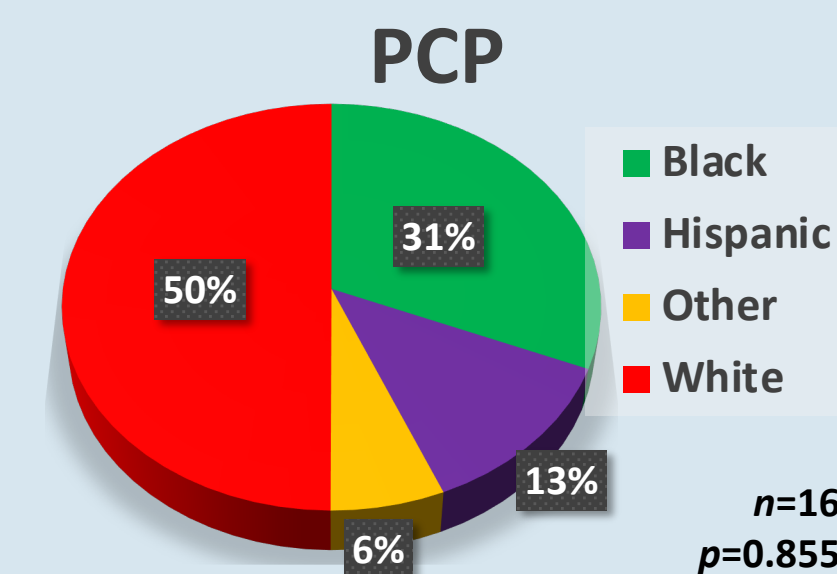
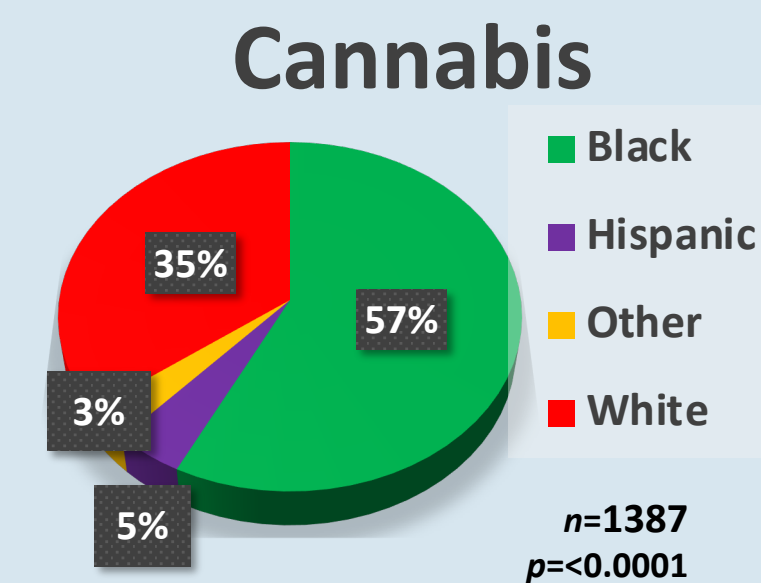
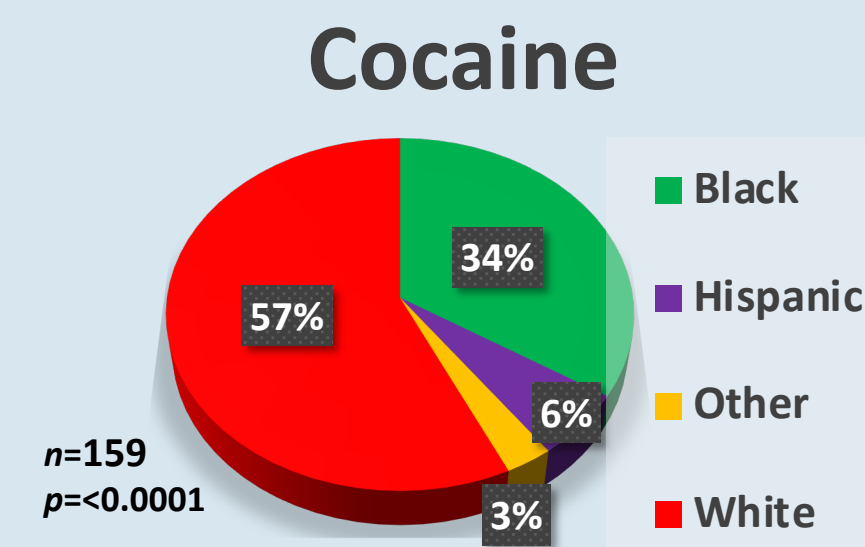
RESULTS

Demographics

Sample size (n)	37,438
Maternal Age (mean)	30 ± 5.7
Gestational Age (mean)	38.4 ± 2.2



Substance by Patient Race



Positive Toxicology by Patient Race

Race	n (%)	OR (95% CI)	aOR* (95% CI)
Black	1181 (11.1)	1.91 (1.75-2.09)	0.75 (0.67-0.84)
Hispanic	141 (2.3)	0.358 (0.30-0.43)	0.15 (0.13-0.19)
Other	110 (3.5)	0.56 (0.46-0.69)	0.36 (0.29-0.45)
White	1004 (6.1)	-	-

*adjusting for insurance, gestational age, maternal age, year of birth and hospital of birth.

CONCLUSION

- These findings demonstrate contrasting results to the often-cited work on urine toxicology test results during pregnancy.
- When controlled for sociodemographic factors: patients of Black, Hispanic and Other race all have lower odds of having a positive urine toxicology during the birthing hospitalization when compared to their White counterparts.
- These findings are maintained, even when Cannabis is removed from the toxicology test results.
- This data will hopefully shed light on where to direct policy, prevention, and education efforts.
- As overdose deaths continue to rise, particularly during pregnancy and postpartum, it is imperative to have evidence-based data that is reflective of the current times.

DISCLOSURES

Authors have nothing to disclose.

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