Drug Usage Rates Over Time

Dan Burrill

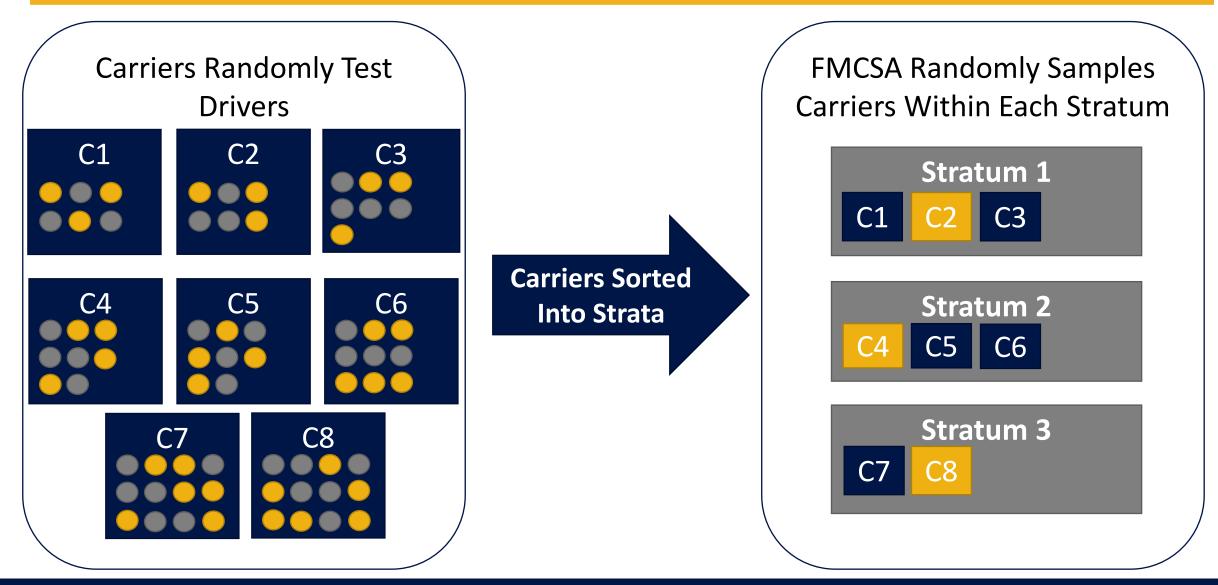




Drug And Alcohol Use Survey: Trends Over Time

- Overview of Drug Testing Results For Last 8 years
 - Annual survey used to assess drug and alcohol usage among population of CDL Drivers.
 - Approximately 10,000 carriers sampled each year
- Objectives and Goals
 - Overview of survey design and results
- Anticipated Outcomes
 - Review of drug testing and positive usage rate estimates

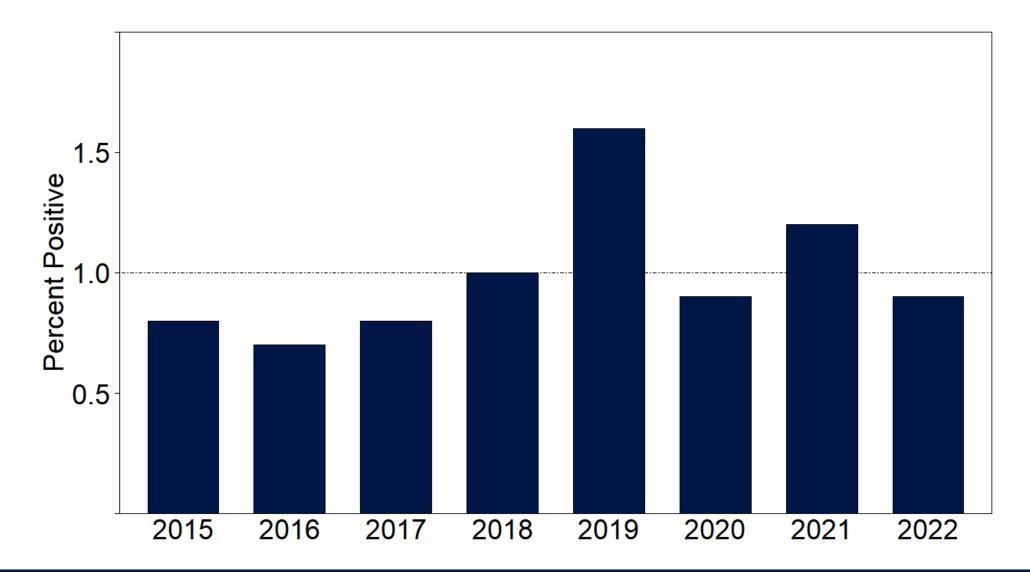
Survey Design Overview



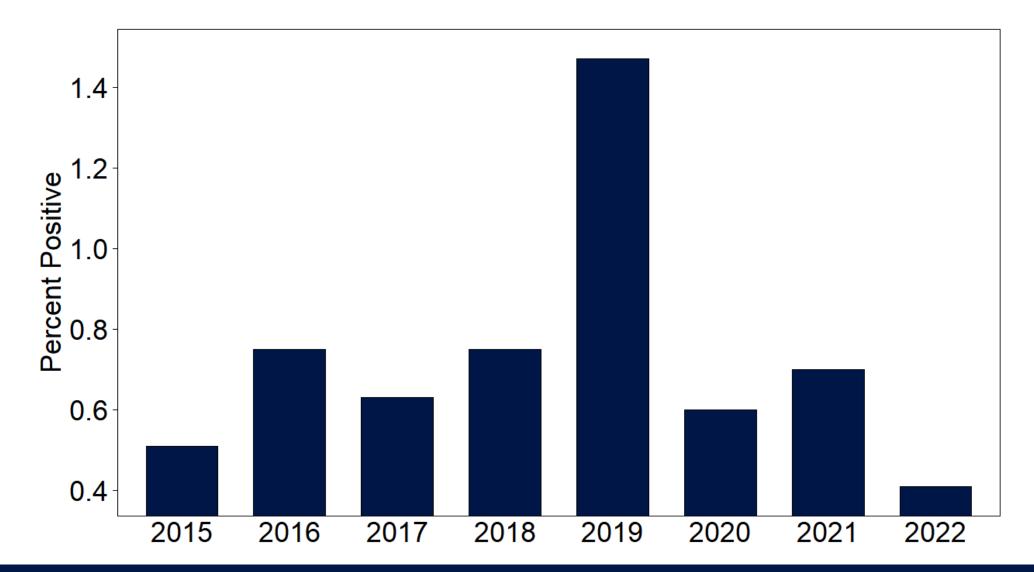
What Should Carriers Report?

- Results from their drug testing program for the year in question
 - NOT cumulative results for multiple years
 - NOT results for the current calendar year
- Number of CDL drivers (safety sensitive employees)
 - Should be 1 for Owner-operators, since carrier is self-employed
 - Employees that do not work as CDL drivers should not be included

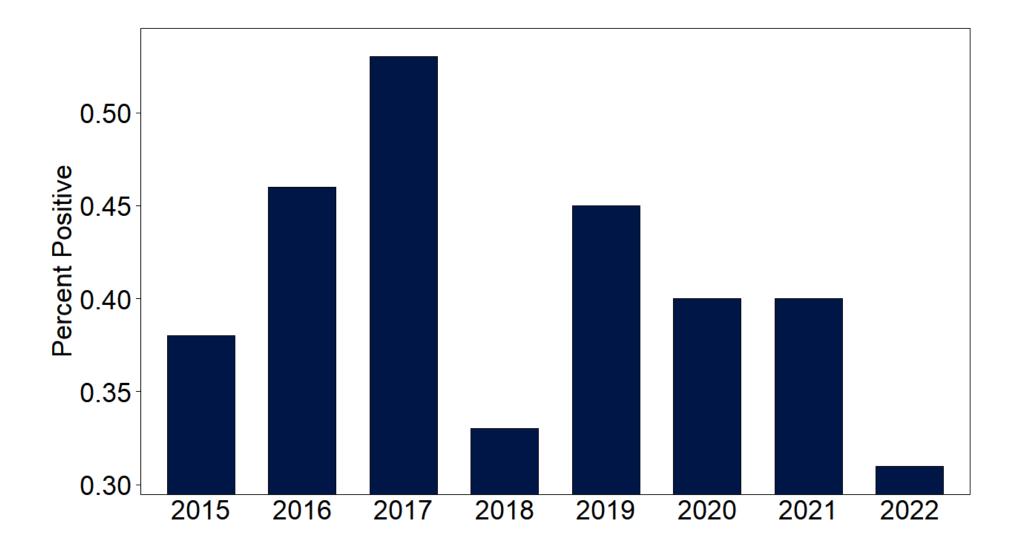
Estimated Positive Rates: Any Controlled Substance



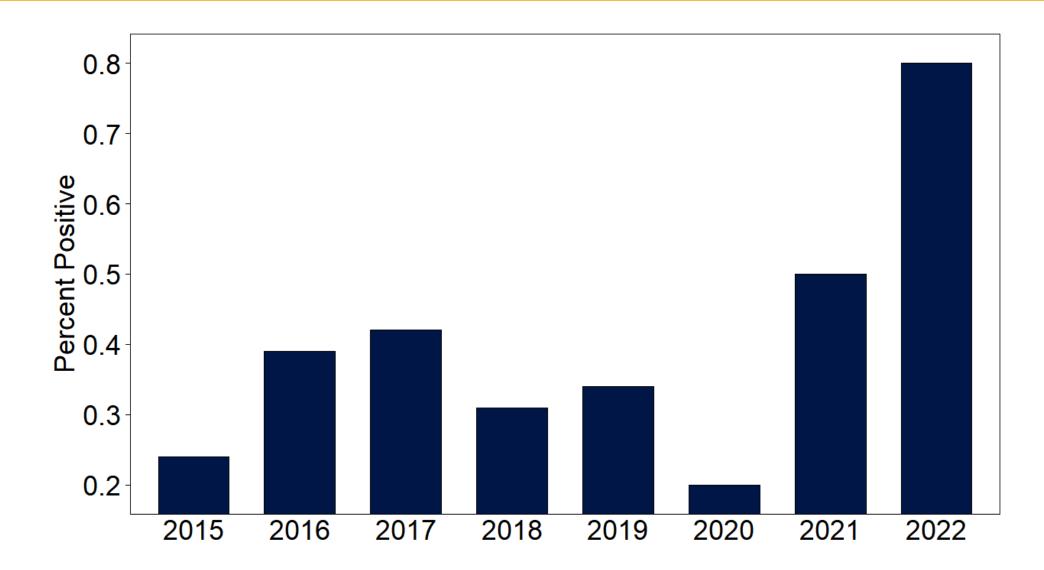
Estimated Positive Rates: Marijuana



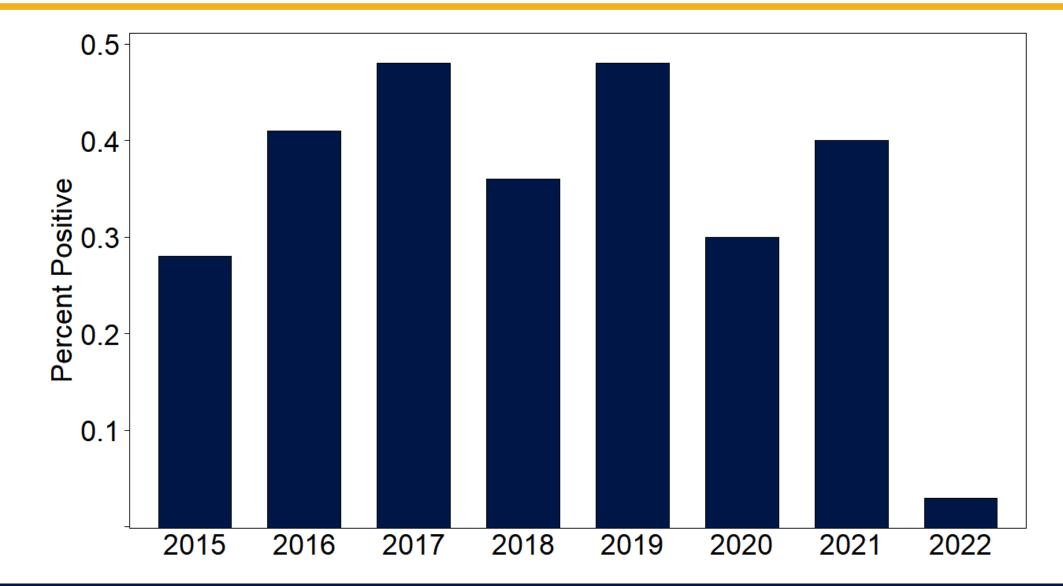
Estimated Positive Rates: Cocaine



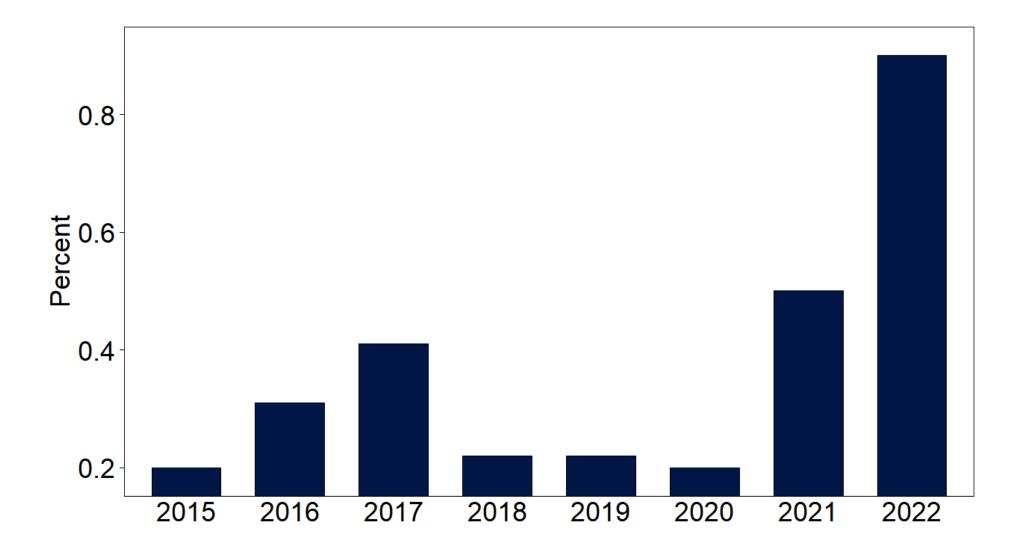
Estimated Positive Rates: Opiates



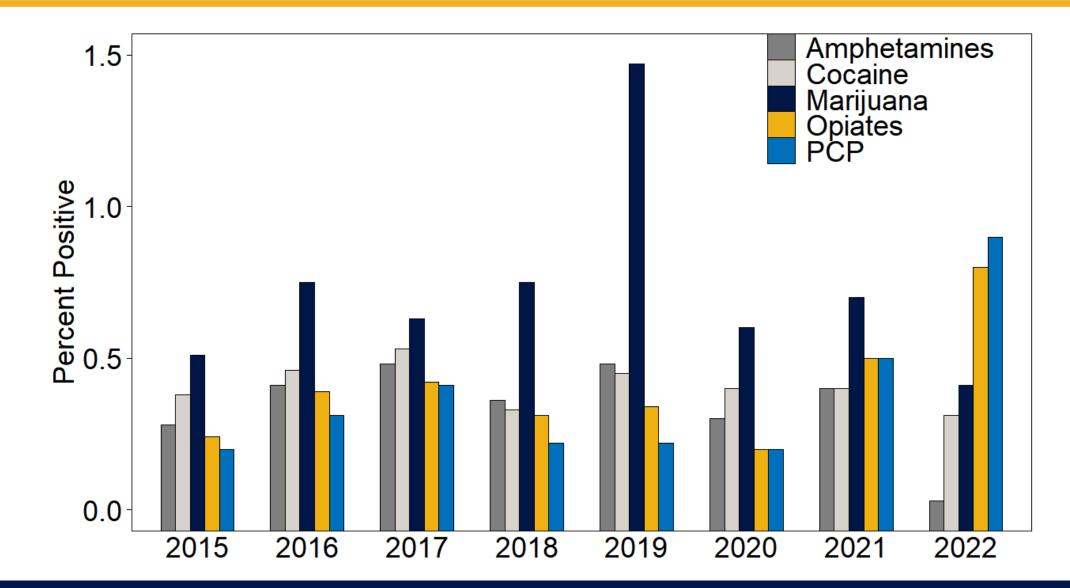
Estimated Positive Rates: Amphetamines



Estimated Positive Rates: PCP

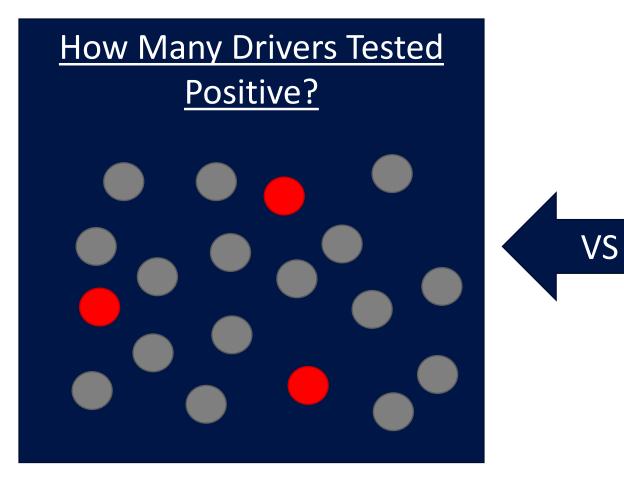


Estimated Positive Rates: Side By Side





Estimating Trends Over Time



How Are Positive Rates Changing Over Time?

- Year 1: 1.0%
- Year 2: 1.1% + 0.1
- Year 3: 0.9% 0.2
- Year 4: 0.9% ± 0.0
- ETC...

Future Work

- Improve Imputation Methods
 - Multiple Imputation
 - Multiple Imputation Through Chained Equations
- Statistical significance testing for rate changes

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