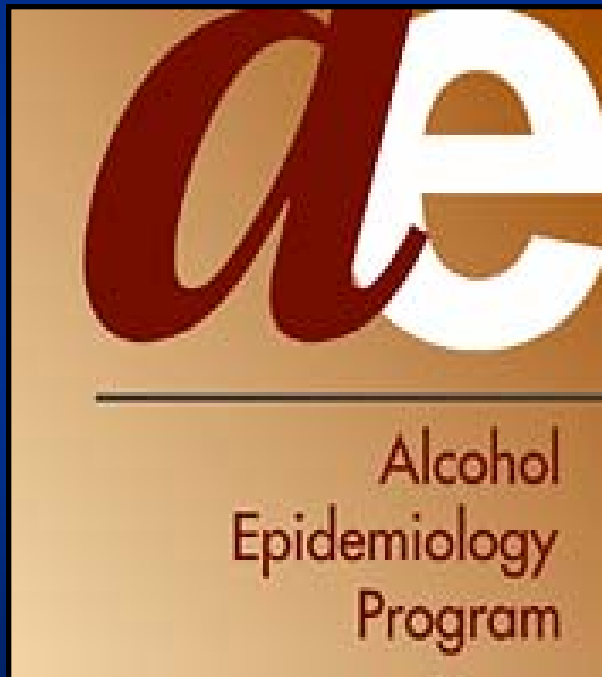


Blood Alcohol Levels of Patrons at Professional Sport Stadiums



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Goals

- Determine feasibility of measuring BAC levels of patrons at professional sporting events
- Assess BAC levels of patrons at professional sporting events
- Assess factors associated with higher BACs

Outline

- Background research
- Methods
 - Protocol for BAC testing
 - Analyses
- Results
- Limitations
- Summary

Background Research

- No research on BAC levels of patrons at stadiums
- Positive BACs lead to various problems
 - Traffic crashes
 - Assaults
- BAC = .08 legal limit for driving
- BAC = .05 linked to significant impairments

Methods

- Conducted 382 Breathalyzer tests
- 16 games
 - 3 football: 118 tests
 - 13 baseball: 264 tests
- May through October 2006



Intoxilyzer 400

Protocol

Data collectors:

- Teams of two
- Stood outside of stadium (public property)

Participants:

- Randomly selected
- Adults age 21 or older

Protocol

- Anonymous
- Consent read and repeated back
- Double-blinded
- Short survey after test
 - Tailgate?
 - Drink?
 - Age?
 - Gender?

Analyses

- Survey results
- Overall BAC levels

Multivariate:

- Outcome variable: BAC level
- Independent variables
 - Event characteristics (day, time, sport)
 - Tailgating activities
 - Drinking at game
 - Demographics (age, gender)

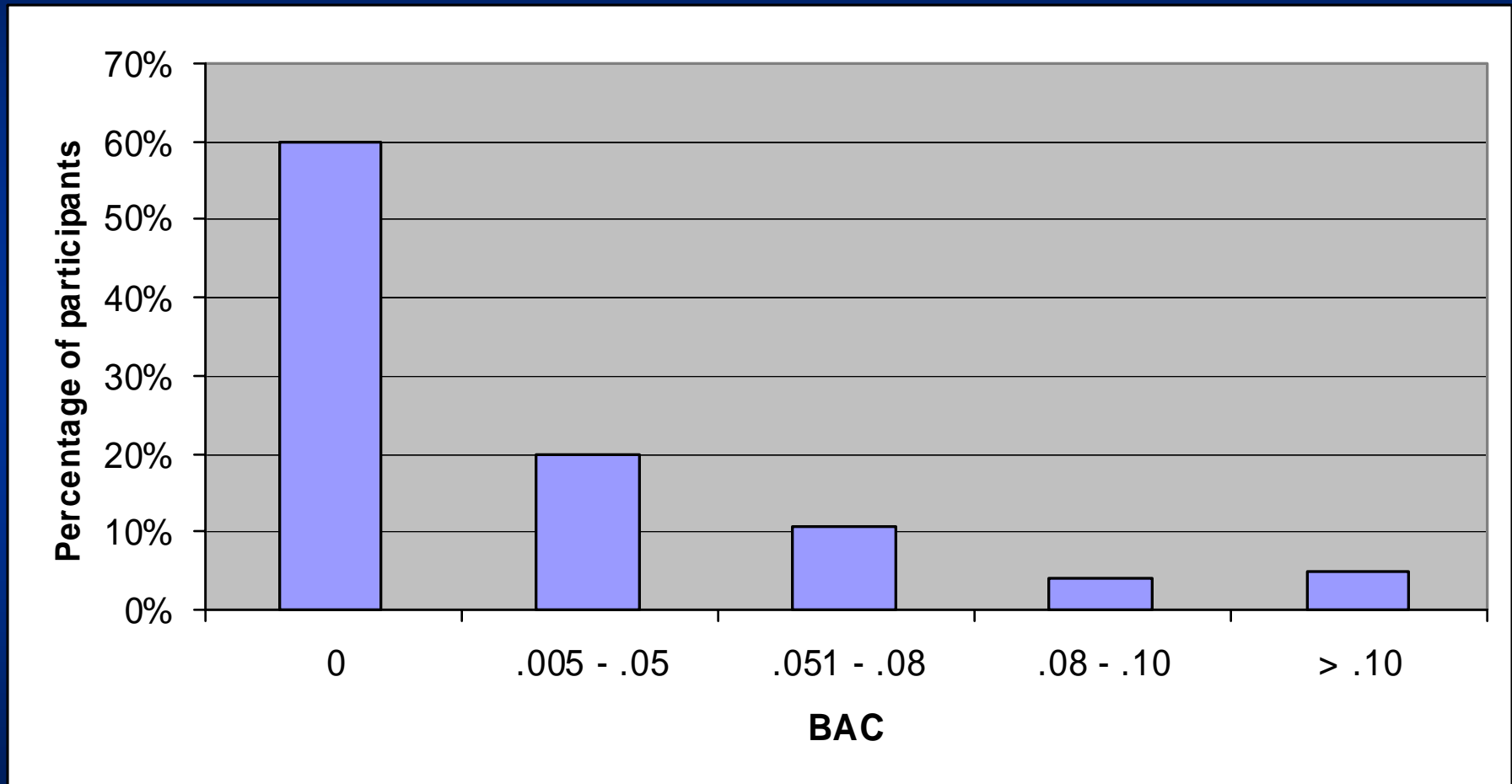
Results: Survey

- 20% had tailgated
 - Of these:
 - 93% drank while tailgating
 - 83% drank at game
- 51% drank at game
 - Of these, 32% tailgated
- 55% were aged 21-25
- 58% were male

Results: BAC levels

- 40% (n=146) had a positive BAC
- Among these:
 - 50% had a BAC > .05 (n = 73)
 - 22% had a BAC > .08 (n = 32)
 - Mean BAC = .06
- Overall mean BAC = .03
- Among tailgaters, mean BAC = .05

Results: BAC Levels



Factors associated with higher BACS

Odds of patron having $\geq .08$ BAC:

- 5.5 times higher if aged 21-35
(vs. older than 35)
- 4.7 times higher if tailgated

Limitations

- Refusals
- Busy environment for data collection
- Survey: self-report

Summary

- BAC levels at stadiums not previously studied
- Protocol was feasible
- 8% were over legal limit for driving
 - Approximately 5,000 patrons at one NFL game
- Tailgaters and younger attendees more likely to be over legal driving limit