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Characterization of Young Adult Impaired Driving Offenders

and Response to
Indicated Prevention

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Thanks to . . .

Susan Long, manager of Maine's Driver
Education and Evaluation Programs

Alcohol Impaired Driving In US (2011)

- >1.2 million arrests
- 1 impaired driving fatality every 53 minutes
- Fatal crashes:
 - 31% had an impaired driver
 - Cost of \$129.7 billion to public

Young Adults and Impaired Driving

- Impaired driving crashes (blood alcohol $>.08\%$)
 - 52%: drivers were 18-24 years old (2010)
- Risk of a crash: greater for young people at all blood alcohol levels
- Overwhelmingly young men (self-report)
 - 88% of 18 -20 year old
 - 75% of 21 – 24 year old

Young Adults and Intervention

- Emerging adults tend to respond less well to substance abuse intervention (compared to adults and younger adolescents)

Preventing Reoffense: Public Safety

- Jail, fines
- License suspension
- House arrest, electronic monitoring
- Vehicle impoundment
- Ignition interlock devices

Preventing Reoffense: Public Health

- Prevention and treatment to reduce problematic substance use
- Often combined with probation, license suspension, DWI courts

Summary

- Impaired driving creates emotional, physical, and societal costs
- Young adults disproportionately involved in arrests and accidents
- Relevant questions: what are their characteristics and how well do interventions work with them?

PRIME For Life (PFL)

- Delivered in groups, 12-20 hours
- Motivation-enhancing
- Theory-based
- Evidence-derived
- Manualized

PRIME For Life (PFL): Evidence Base

- Short and longer term change in cognitions and behavior
- Reduced impaired driving recidivism
- SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP)

Study 1: Recidivism in Maine (Three year)

Intervention as Usual (IAU)

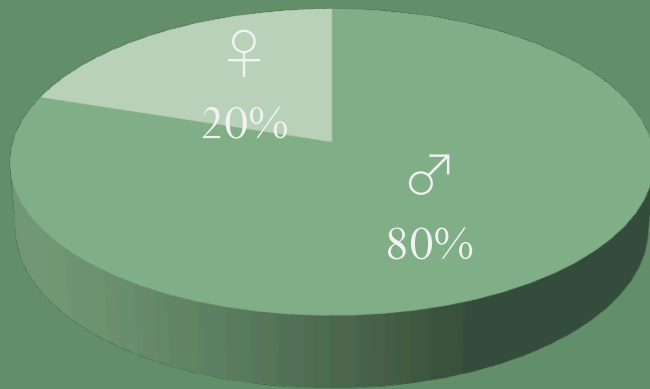
- 22 hours: Weekend Intervention Program
- 2 hours: NEEDS Assessment
- 9/1/1999-8/31/2000

PRIME For Life (PFL)

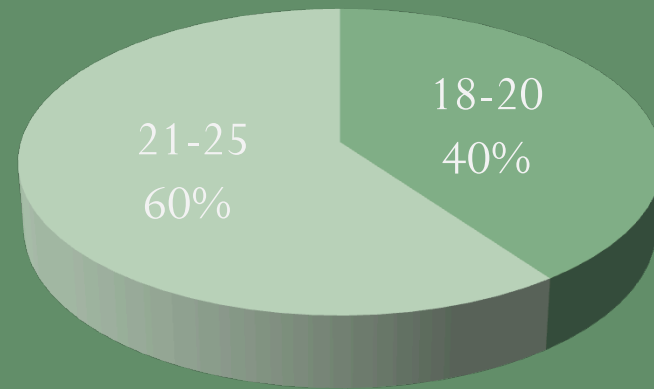
- 20 hours
- 9/1/2002-8/31/2003

Recidivism in Maine: Descriptives

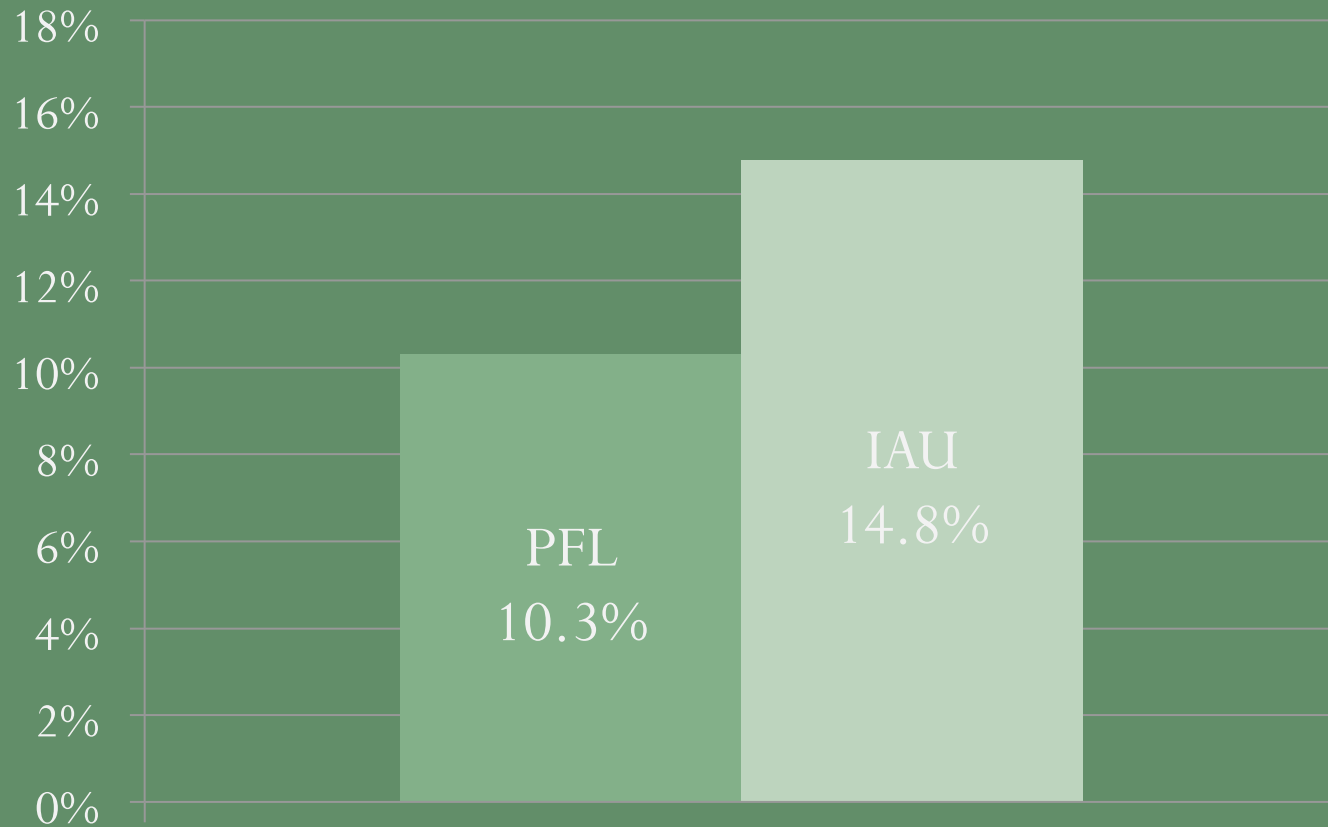
Gender



Age



Three Year Recidivism in Maine



Odds Ratio (IAU vs PFL): 1.64, $p = .03$

Study 2: Three Questions (Latent Transition Analysis)

Among young adults court ordered to intervention:

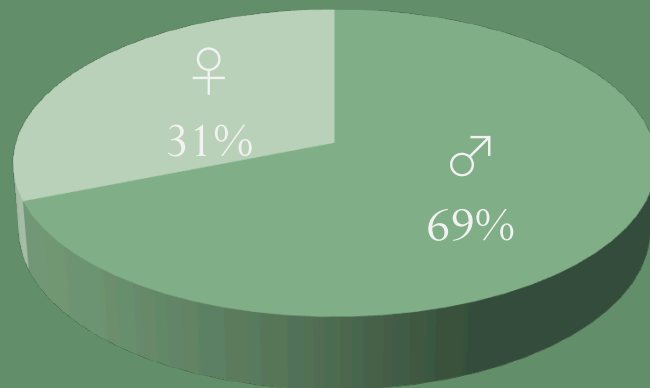
- Who comes?
- How do they change?
- Who changes?

Study 2

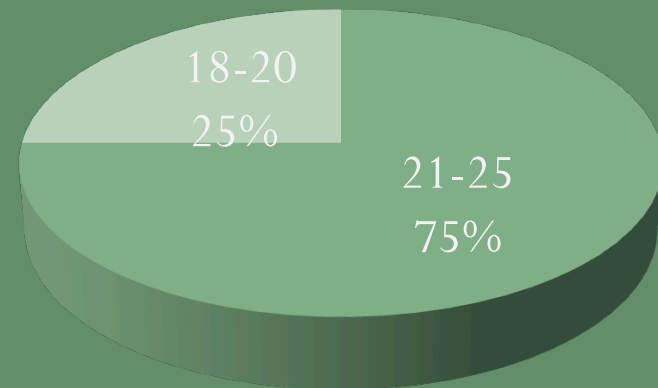
- Program evaluation data
- Baseline to postintervention
 - Previous behavior vs. future intentions
- Five states (GA, IA, IN, KY, UT)
- 18 to 25 year olds, $n = 1,075$

Study 2: Participants

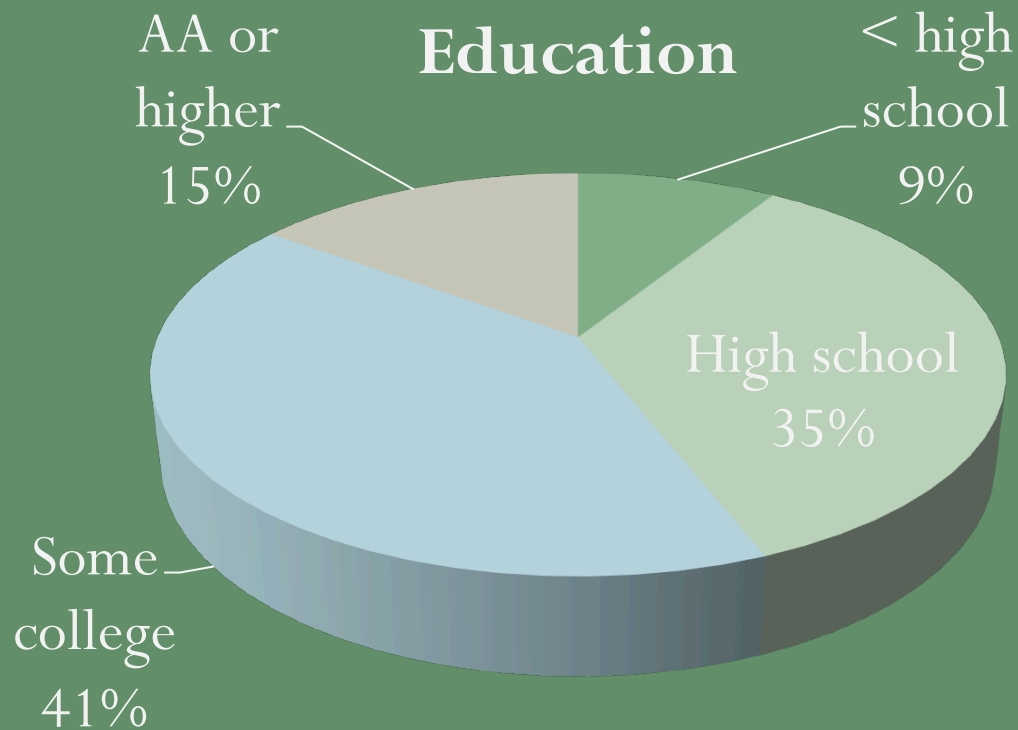
Gender



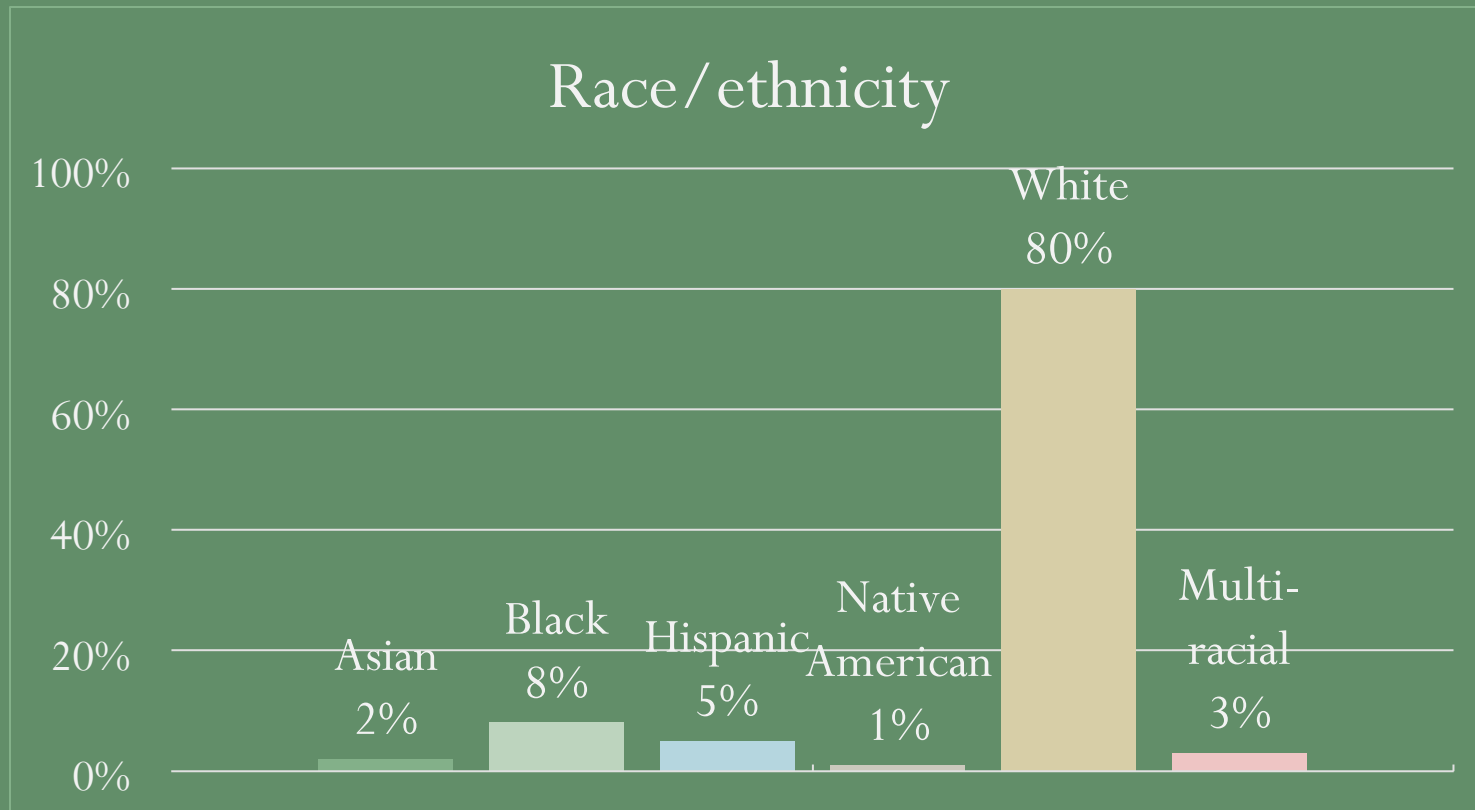
Age



Study 2: Participants



Study 2: Participants



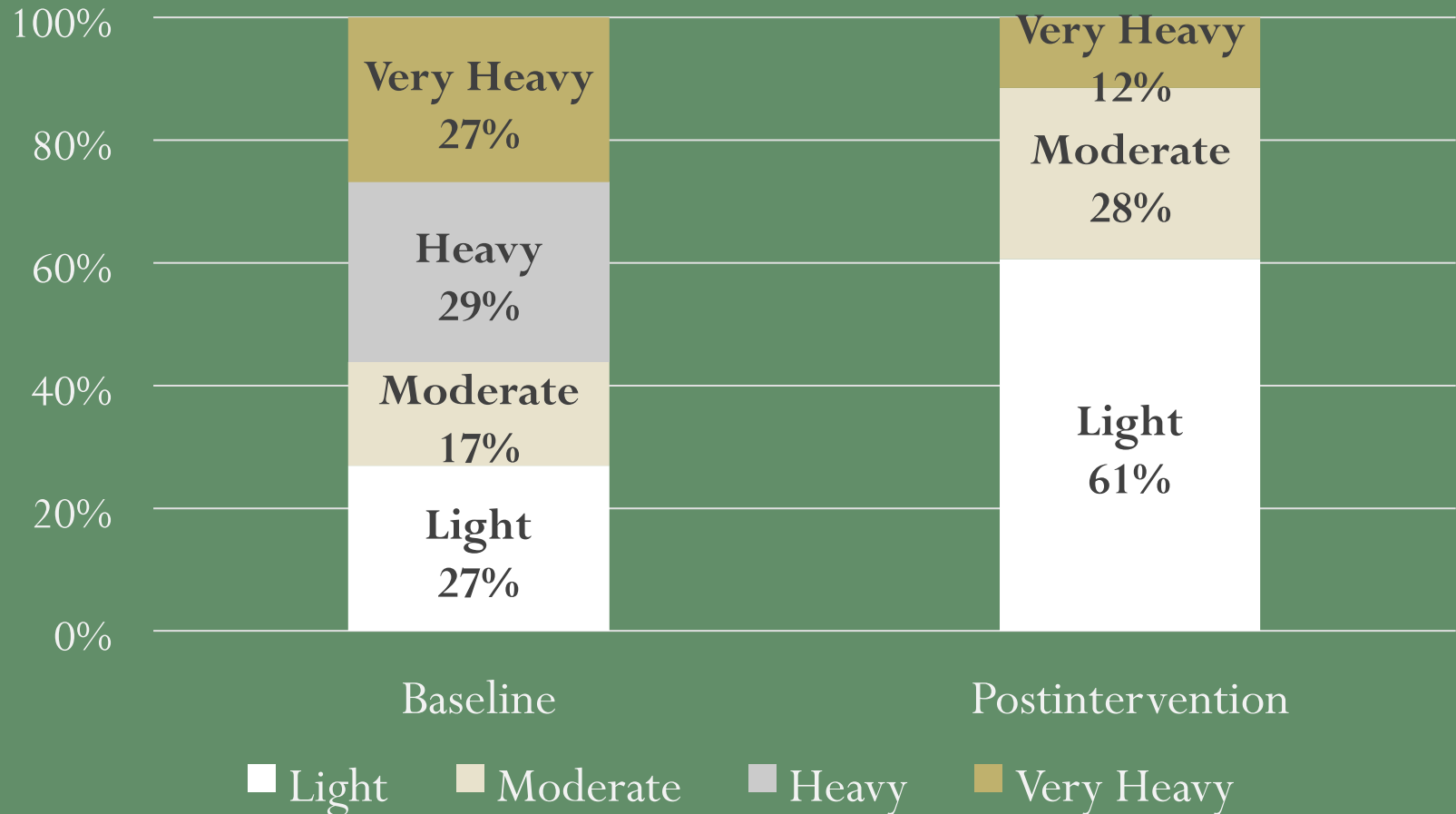
Study 2: Preliminary Analysis

- Intentions to use less in next 90 days than in 90 days prior to intervention
 - Usual number of drinks in a day
 - Frequency of 4 to 6 drinks
 - Frequency of 7 or more drinks
- All $p < .001$

Question 1: Who Comes?

| Number of standard drinks | | Baseline Groups: Type of Drinker | | | |
|---------------------------|---------------|----------------------------------|----------|-------|------------|
| | | Light | Moderate | Heavy | Very Heavy |
| Usual number | 0 | X | | | |
| | 1 to 3 | X | X | | |
| | 4 to 6 | | X | X | |
| | 7+ | | | X | X |
| Frequency 4-6 | Never | X | | | |
| | < once a week | | X | X | |
| | ≥1 X week | | | X | X |
| Frequency 7+ | Never | X | | | |
| | < once a week | | X | X | |
| | ≥1 X week | | | X | X |

Question 2: How Do They Change?



Question 2: How Do They Change?

| Transition Probabilities | | | |
|------------------------------------|--|----------|------------|
| Baseline Groups (Past Behavior) | Postintervention Groups (Future Intentions) | | |
| | Light | Moderate | Very heavy |
| Light → | 96% | 3% | 1% |
| Moderate → | 72% | 27% | 1% |
| Heavy → | 44% | 51% | 5% |
| Very heavy → | 36% | 28% | 36% |

Question 3: Who Changes?

- 21-25 versus 18-20 year olds
 - No difference in baseline group
 - No difference in transition probabilities
- Men versus women
 - No difference in baseline group
 - Among “Very heavy drinkers”: less likely to transition to “Light drinker” (OR= 0.52, $p < .01$)

Question 3: Who Changes?

- Use drugs versus not
 - More likely to be “Heavy drinkers” and “Very heavy drinkers” (ORs = 3.26 and 4.86, both $p < .001$)
 - Among “Very heavy drinkers”: less likely to transition to “Moderate drinker” (OR=.67, $p < .05$)

Summary

- A motivationally-based, structured, group-delivered indicated prevention program can reduce recidivism among young adults

Summary, continued

- Who comes?
 - Court ordered young adults vary considerably in self-reported drinking patterns

Summary, continued

- How do they change?
 - Substantial increase in groups intending lower drinking amounts
 - Typical transitions: higher to lower drinking groups, or remain in same group
 - Some appear less influenced (remain in same group)

Summary, continued

- Who changes?
 - Age and gender typically did not moderate change
 - Drug users tend to be heavier drinkers than drug abstainers, and change similarly
 - Some indications that drug users may be more likely to change to intending to be light drinkers; more research needed

Implications

- Indicated intervention holds promise for young adult impaired drivers
- Programs should be relevant to people with a range of drinking habits
 - Provide meaningful/interesting content to all
 - Reinforce those drinking lightly
 - Motivate others to reduce drinking
- More intensive intervention for subgroup of most challenging individuals