Blair Beadnell

Prevention Research Institute, Lexington University of Washington, Seattle

Annual meeting, Society for Prevention Research May 30, 2013

Characterization of Young Adult Impaired Driving Offenders

and Response to Indicated Prevention

Coauthors and Conflicts of Interest

- Erin Casey
 University of Washington, Seattle
 (PRI Contractor)
- Michele A. Crisafulli
 University of Maryland, Baltimore County
 (PRI Graduate Research Assistant)
- Pamela A. Stafford & David B. Rosengren Prevention Research Institute

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 Evidencebased Programs and Practices (NREPP)

Study 1: Recidivism in Maine (Three year)

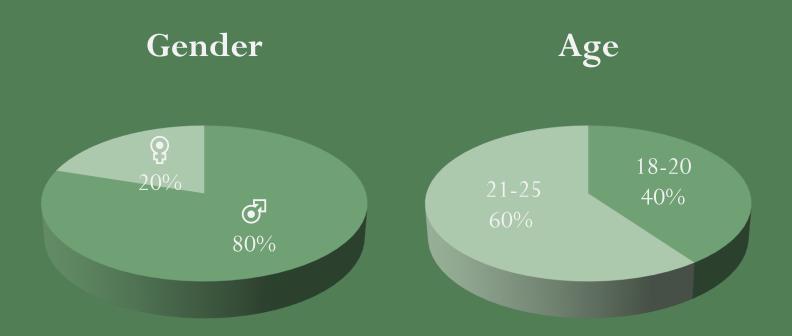
Intervention as Usual (IAU)

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

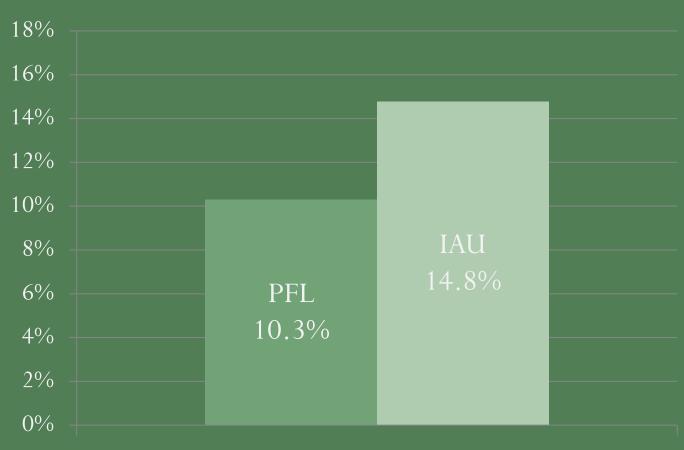
PRIME For Life (PFL)

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

Recidivism in Maine: Descriptives



Three Year Recidivism in Maine



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

Study 2: Three Questions (Latent Transition Analysis)

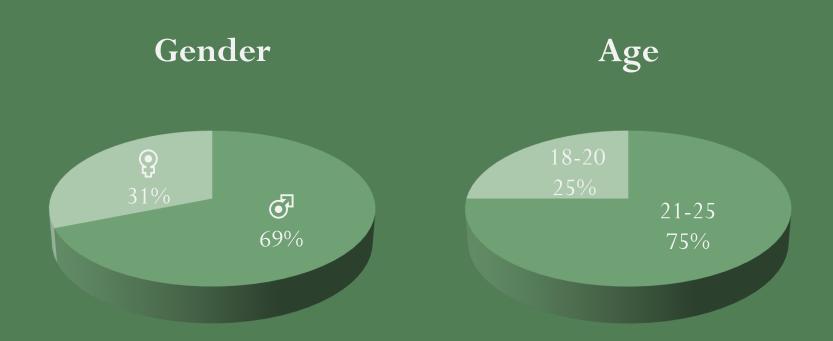
Among young adults court ordered to intervention:

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

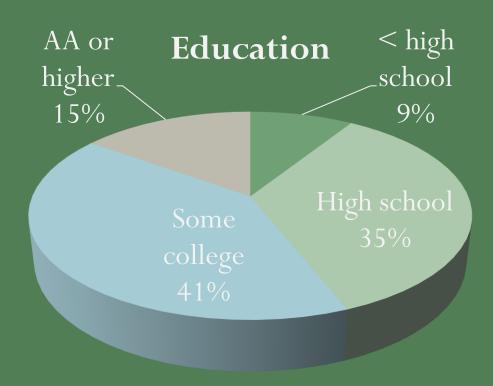
Study 2

- 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

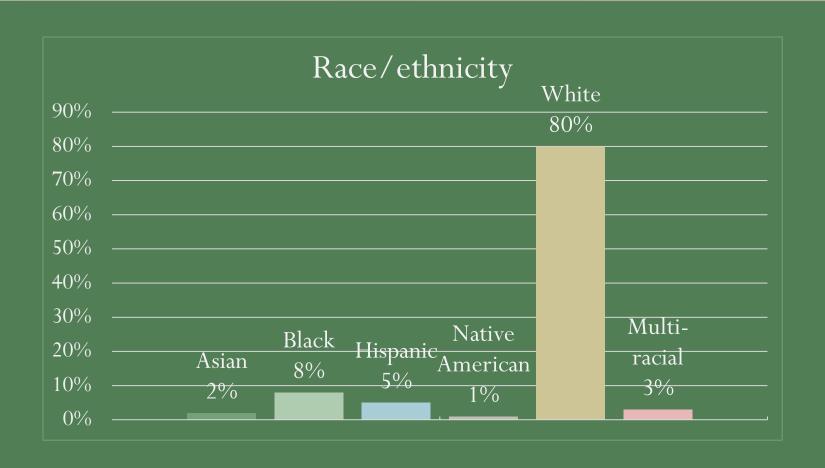
Study 2: Participants



Study 2: Participants



Study 2: Participants



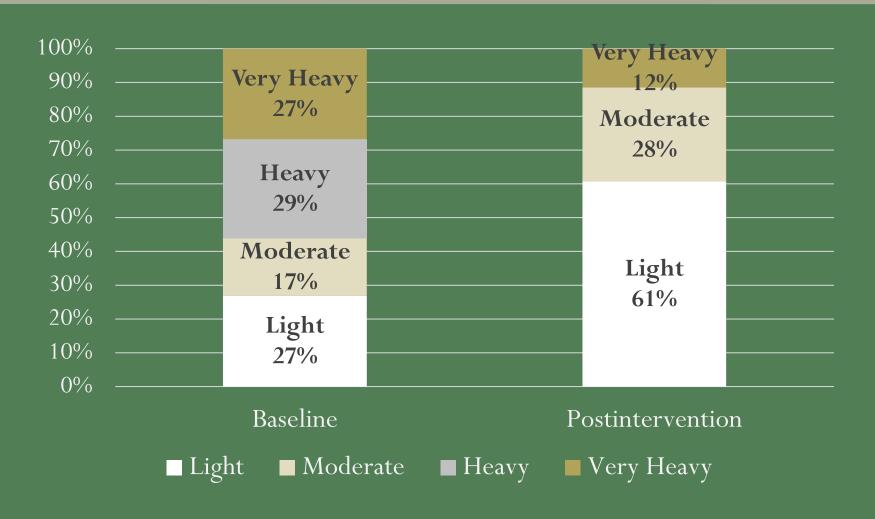
Study 2: Preliminary Analysis

- 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?

| | | Baseline Groups: Type of Drinker | | | | |
|---------------------------|---------------|----------------------------------|----------|-------|------------|--|
| Number of standard drinks | | 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 | Postintervention Groups (Future Intentions) | | | | | | |
| (Past Behavior) | 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