
Enforcing Underage Drinking Laws (EUDL) through Community/USAF Base Coalitions: Evaluation Findings

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INTRODUCTION

F.E. Warren “Success Story”

- **Col. Hoapili** assumed command in 2003
- Quickly discovered that alcohol use by underage airmen was a significant problem
- In the AF: 33% of suicides, 57% of sexual assaults, 29% of domestic violence cases, 44% of motor vehicle accidents involve alcohol (CONOPS, 2006)

F.E. Warren “Success Story” (Cont.)

■ Solution:

- Sent letter to nearby bars
- If establishment sells to underage, off-limits to ALL airmen
- “0-0-1-3” Campaign
 - Zero underage drinking
 - Zero DUIs
 - IF of-age, no more than 1 drink per hour, 3 drinks per night
- Development of alternative activities (e.g., paint-ball, sports)

■ Result:

- Alcohol incidents declined by 74%
- 81% fewer cases of underage drinking
- 45% fewer cases of drunk driving

Underage Airmen Discretionary Grant

- In 1998, Congress appropriated EUDL funds

The initiative has four programmatic elements:

- Block grants to states
 - Discretionary grants to selected states (best practices) for activities at the local level
 - Technical assistance to guide states and communities
 - National evaluation of the EUDL Program
- In 2006, OJJDP funded four states to reduce underage drinking among airmen at:
 - Phoenix, AZ/Luke
 - Tucson, AZ/Davis Monthan
 - Sacramento, CA/Beale
 - Great Falls, MT/Malmstrom
 - Honolulu, HI/Hickam

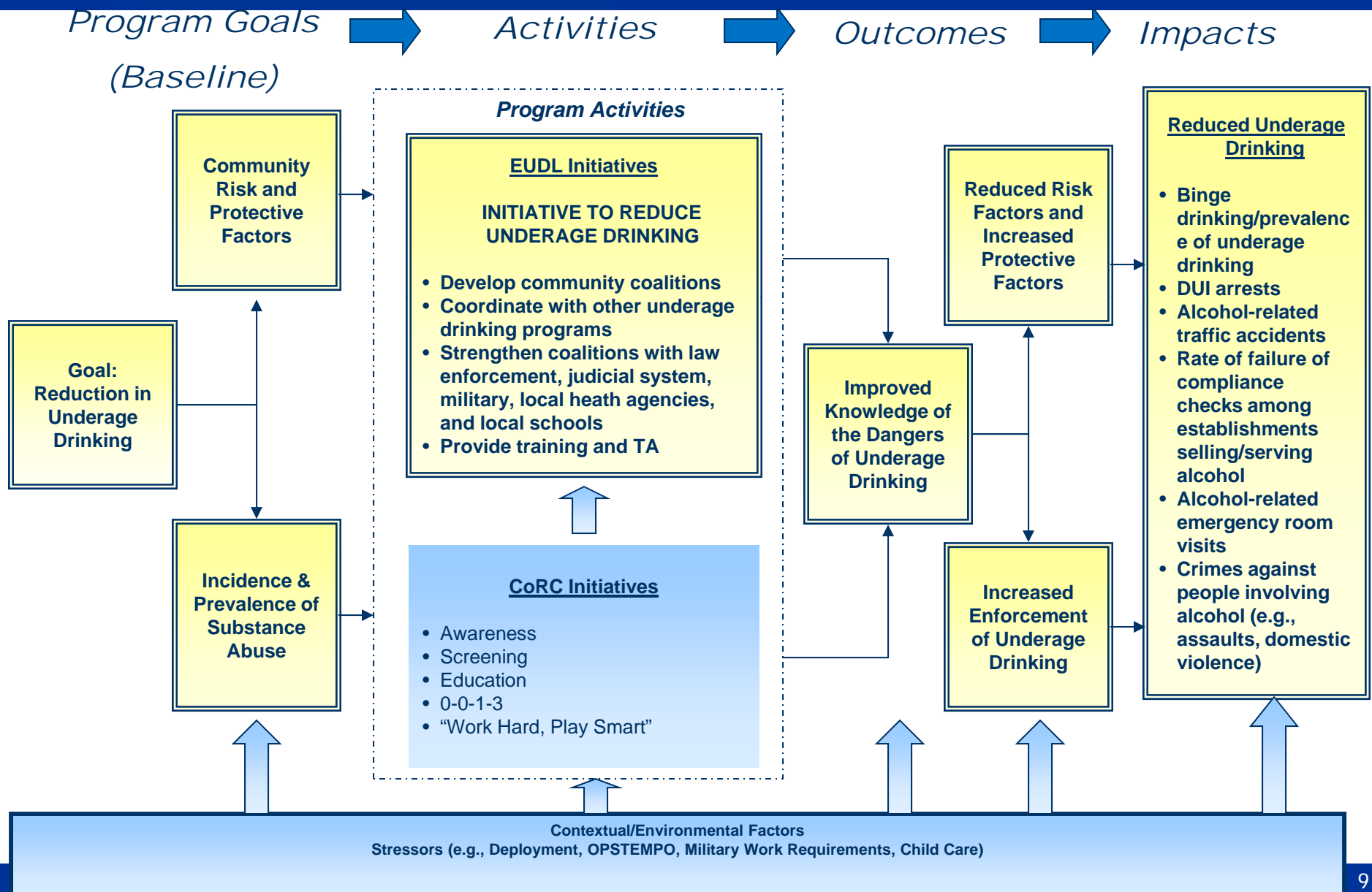
EUDL AF Discretionary Grant: Goals

- Overall Goal:
 - Design and implement a set of interventions to reduce underage drinking among airmen at grantee sites
 - Taking into account that:
 - The Air Force has a zero tolerance approach for underage drinking
 - There is a “Culture of Responsible Choices Initiative” (CoRC) already in place
 - Initiative includes a 0-0-1-3 campaign (spearheaded by success at F.E. Warren AFB)
- The focus is on the community coalition approach that goes above and beyond what other communities are providing either through CoRC or EUDL (state-level) alone

Demonstration Sites: Interventions

- Six core activities:
 - (a) Enforcement aimed at reducing the social availability of alcohol (e.g. controlled party dispersal operations)
 - (b) Compliance checks of local liquor establishments to ensure that the establishments are not selling to underage airmen (CUB checks)
 - (c) Impaired driving enforcement (i.e., increased number and frequency of driving under the influence [DUI] checks)
 - (d) Local policy development
 - (e) Development and deployment of a community-based awareness/media campaign to reduce drinking, including binge drinking
 - (f) Offering of alternative activities that do not include drinking

Logic Model



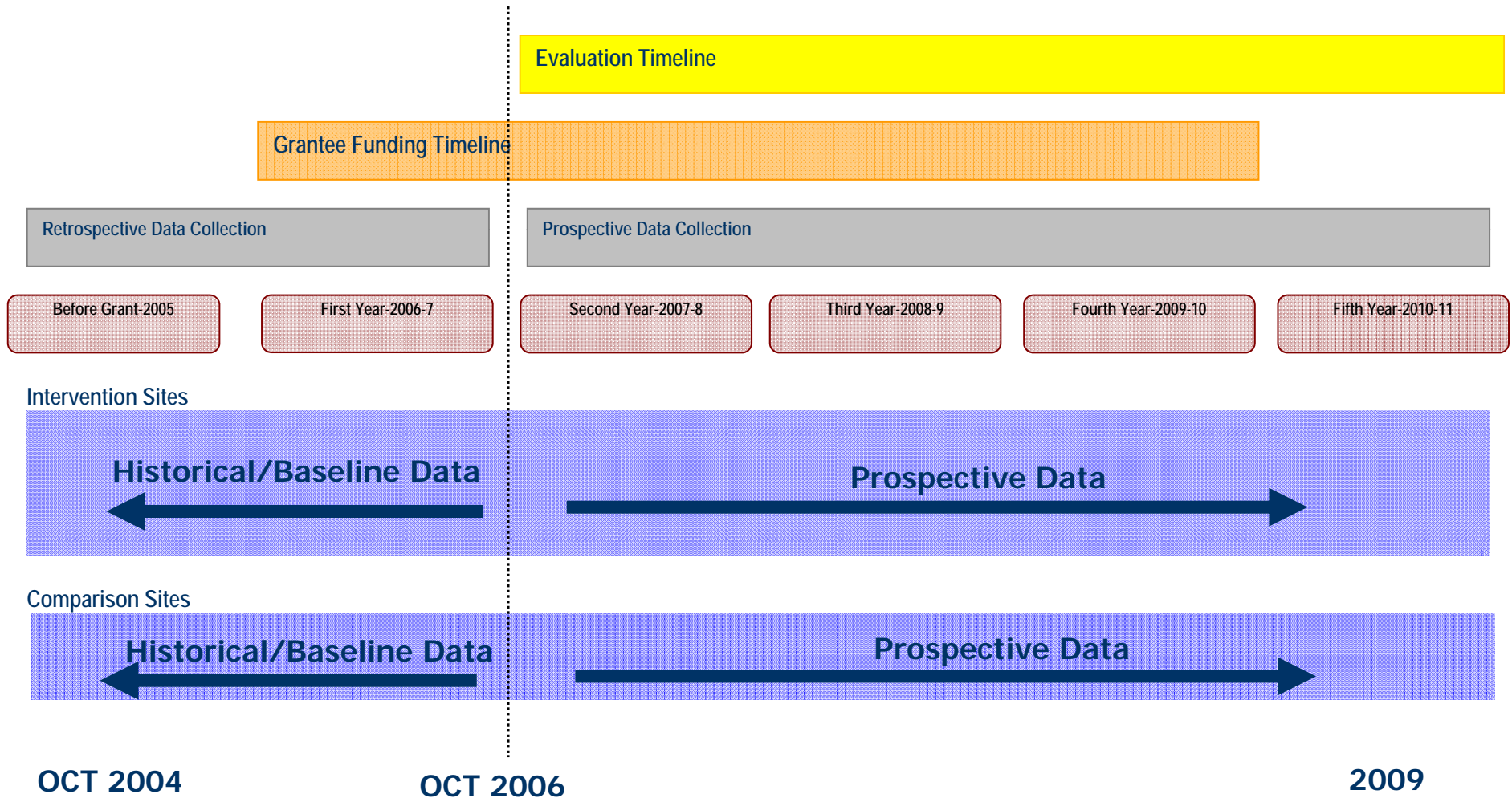
Primary Research Questions

- Research Questions:
 - 1) Did the activities implemented by the four states and five associated communities have an impact on underage drinking and alcohol-related misconducts (above and beyond any effects due to CoRC or state EUDL activities)?
 - 2) If so, what were the impacts (pre- and post-intervention) at each community on the following six outcomes for underage airmen:
 - Prevalence of drinking
 - Rate of failure of compliance checks among establishments selling/serving alcohol
 - Minors in possession of alcohol citations
 - DUI arrests

METHODS

- Evaluation design
 - Longitudinal within site (i.e., each community) design across five years (to 2009)
 - Comparing pre-program implementation data with post-program implementation data for each site
 - The design includes a comparison site for each of the five communities – comparison sites were matched on:
 - Mission
 - Size
 - Location (i.e. Urban/Rural)
 - Alcohol Use

Evaluation Plan: Data Collection



■ Two Primary Sources of Data:

- Air Force Community Assessment (CA) Survey
- Data collected by each community

■ Air Force Community Assessment (CA) Survey:

- **Large Scale Survey** - biennial, anonymous survey of active duty personnel conducted in spring of 2006 (i.e., pretest) and spring of 2008 (i.e., posttest) across all AF communities
- **Sample Size** - Five communities: $n = 2,008$ in 2006 and 2,112 in 2008 with stratification by rank, gender, and deployment status within each AF base
- **Response Rates** - 2006 = 48.5% and 2008 = 49.0%

Measure of Rate of Alcohol Problems

- **Audit** – The rate of alcohol problems on the CA was measured via the Alcohol Use Disorders Identification Test (AUDIT), developed by the World Health Organization.
 - **Example questions** –
 - “How often do you have a drink containing alcohol?”;
 - “How often in the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?”;
 - “Have you or someone else been injured as a result of your drinking?”
 - **Scoring** – All items are on a five point scale and each item is given a score of 0 to 4, which is then summed across the 10 items; a score of 8 and above was used in the current study to signify individuals at risk for problem drinking.

Data from Communities

- **Primary data sources included:**
 - Arrest records by AFB Security Forces
 - Air Force Alcohol and Drug Abuse Prevention and Treatment (ADAPT) Program records
 - Local PD arrest and citation reports
- Data provided quarterly to ICF via a web-based data collection system
- Pre-EUDL and Post-EUDL cut points were determined by the date of work plan approval – earliest was June 2007 for MT and latest was Jan 2008 for HI

RESULTS

Intervention Activities by Community

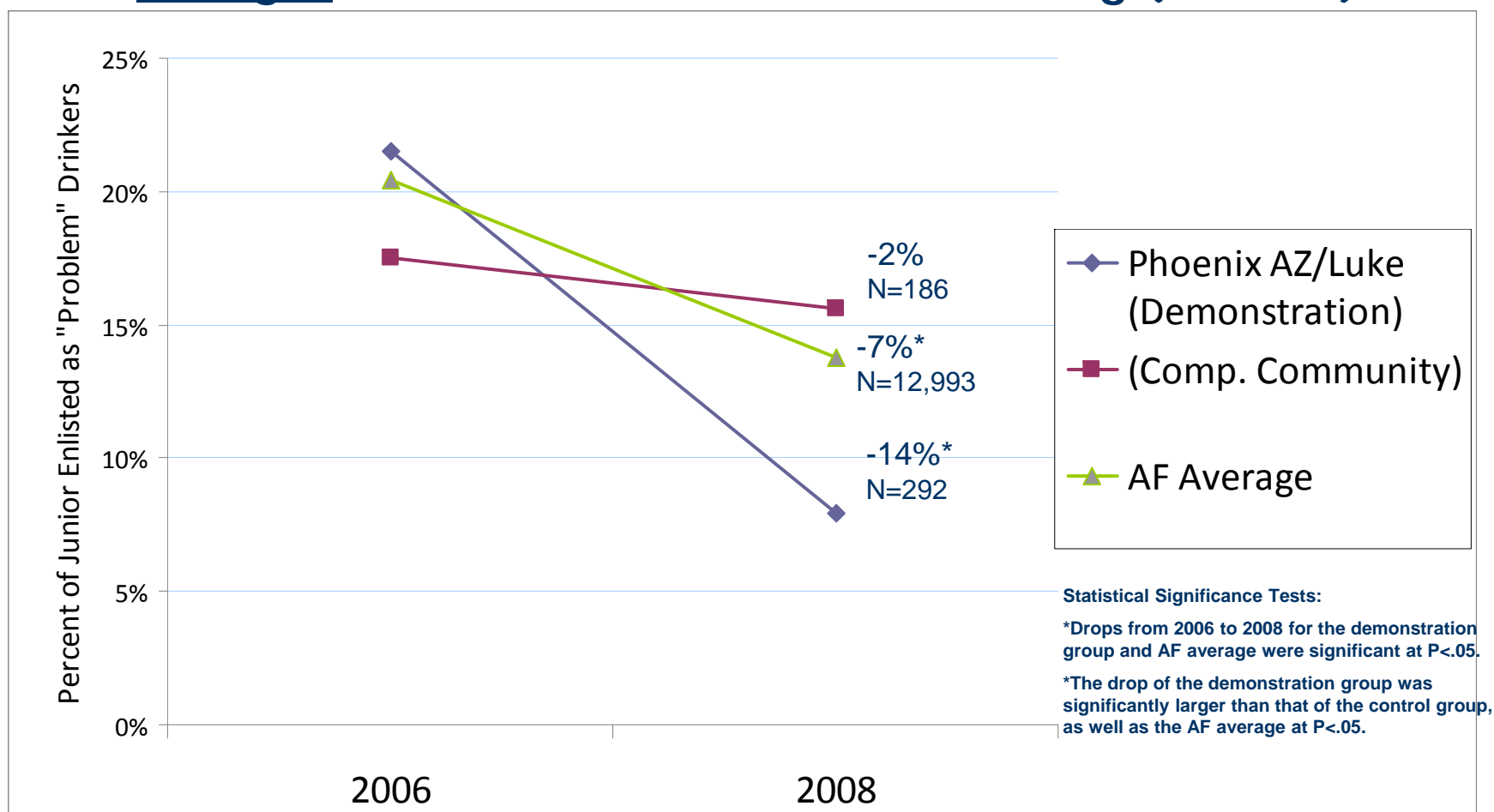
EUDL Core Activity Categories	Great Falls, MT /Malmstrom AFB		Tucson, AZ /Davis-Monthan AFB		Phoenix, AZ /Luke AFB		Honolulu, HI /Hickam AFB		Sacramento, CA /Beale AFB	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1. Enforcement aimed at reducing social availability of alcohol (e.g. controlled party dispersal operations)	1	2	0	1	0	2	0	3	0	2
2. Compliance check operations of local liquor establishments to ensure that they are not selling to underage Airmen (CUB check operations)	2	4	0	19	0	18	1	3	0	1
3. Impaired driving enforcement operations (i.e., increased number and frequency of driving under the influence [DUI] checks)	0	3	0	6	0	21	3	11	0	6
4. Local policy development	0	1	0	1	0	0	0	3	0	1
5. Community-based awareness events and campaigns to reduce drinking, including binge drinking	16	49	6	3	5	8	0	50	0	0
6. Offering of alternative activities that do not include drinking	2	29	13	17	6	5	0	10	0	4
Total Number of Activities	21	88	19	47	11	54	4	80	0	14
TOTAL	109		66		65		84		14	

The cut-point between the pre- and post-test was based on the month and year of grantee work plan acceptance by the funding agency (OJJDP). It varied slightly for each of the five grantees (1 – Great Falls, MT = July 2007; 2 – Tucson, AZ = Nov 2007; 3 – Phoenix, AZ = Nov 2007; 4 – Honolulu HI = Jan 2008; 4 – Sacramento, CA = Oct 2007).

Prevalence of Problem Drinking

Phoenix, AZ / Luke Community: Junior Enlisted Results**

Changes in Prevalence of Problem Drinking (AUDIT*)

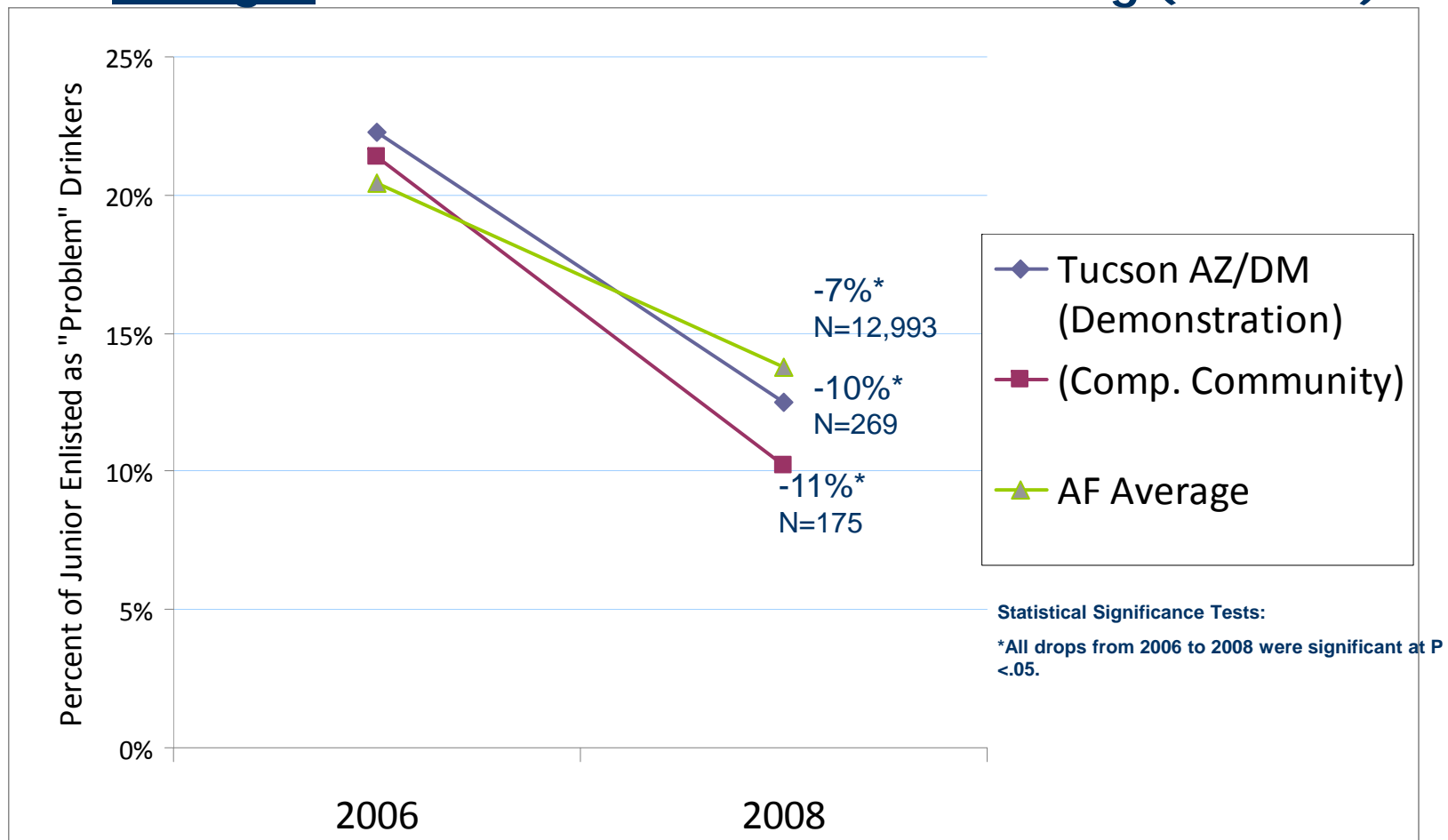


*Alcohol Use Disorders Identification Test (AUDIT). A score of 8 or higher is considered a 'problem drinker'.

** In the Phoenix AZ/Luke sample, 17% of junior enlisted are underage and 72% are 18-25. In the Control sample, 21% of junior enlisted are underage and 63% are 18-25.

Tucson, AZ / Davis-Monthan Community: Junior Enlisted Results**

Changes in Prevalence of Problem Drinking (AUDIT*):

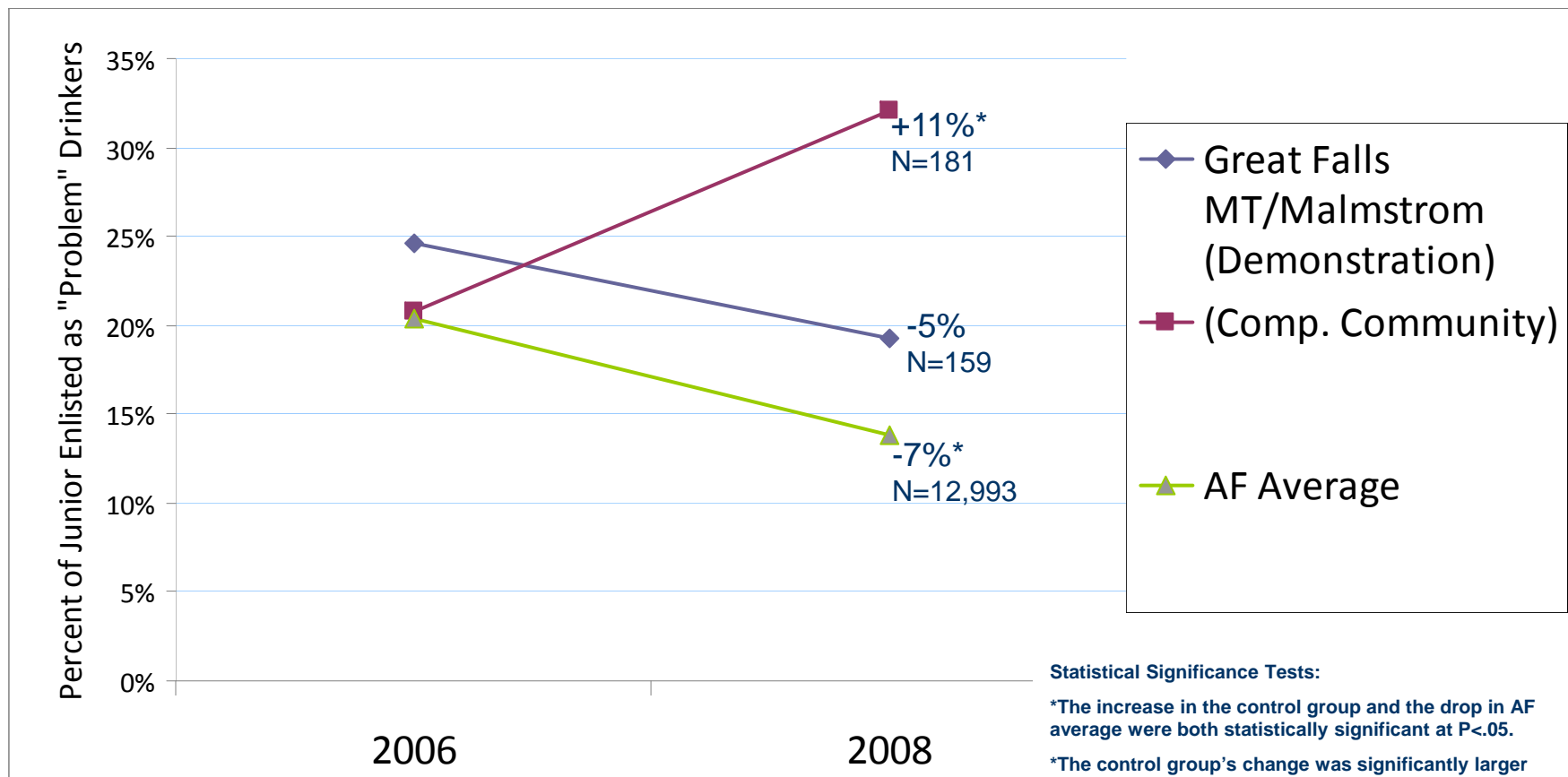


*Alcohol Use Disorders Identification Test (AUDIT). A score of 8 or higher is considered a 'problem drinker'.

** In the Tucson AZ/D-M sample, 20% of junior enlisted are underage and 62% are ages 18-25. In the Control sample, 17% of junior enlisted are underage and 67% are ages 18-25.

Great Falls MT / Malmstrom Community: Junior Enlisted Results* *

Changes in Prevalence of Problem Drinking (AUDIT*)



Statistical Significance Tests:

*The increase in the control group and the drop in AF average were both statistically significant at $P < .05$.

*The control group's change was significantly larger than changes of both the demonstration group and AF average ($p < .05$).














*Alcohol Use Disorders Identification Test (AUDIT). A score of 8 or higher is considered a 'problem drinker'.

** In the Great Falls MT/Malmstrom sample, 18% of junior enlisted are underage and 65% are 18-25. In the Control sample, 23% of junior enlisted are underage and 64% are 18-25.

Core Outcomes

Summary of Outcomes for EUDL Grantees from Pre-EUDL to Post-EUDL



Outcome	Great Falls, MT ¹ Malmstrom AFB	Tucson, AZ ² Davis-Monthan AFB	Phoenix, AZ ² Luke AFB	Honolulu, HI ¹ Hickam AFB	Sacramento, CA ¹ Beale AFB
Compliance Check Failure Rate			NS	NS	NS
Possession by Minor Arrests		----	----	----	NS
DUIs/DWIs for <21 years of age	NS			NS	----
DUIs/DWIs for ≥21 years of age					----
DUIs/DWIs for all ages					NS

¹ This indicates that the outcomes represent data from Air Force members only.

² This indicates that the outcomes represent data from both civilian and Air Force members; data could not be broken out by for each sub-population.

An arrow in the down position indicates a positive finding (i.e., a direction consistent with the intervention having an impact) that is statistically significant from pre- to post-test at $p < .05$.

An arrow in the up position indicates a negative finding (i.e., a direction inconsistent with the intervention having an impact) that is statistically significant from pre- to post-test at $p < .05$.

NS indicates a non-significant finding.

---- indicates that the data was not available and/or could not be obtained.

Discussion Points

- Although data from the two sources are not linked, both sources suggest program impacts:
 - Communities showing broadest range of effects consistent across data sets - Montana and Arizona
 - Lack of findings in California also consistent across both data sources
- Findings suggest EUDL was successful in the communities that implemented it well:
 - Great Falls, MT, one of the smallest communities, had the most activities and experienced the largest number of effects
 - Sacramento area in CA had difficulties implementing activities and had no significant findings

Discussion Points - continued

- The mix of activities was also important:
 - Phoenix emphasized DUI activities and saw drop in DUIs
 - HI implemented many activities, many were briefings on awareness of underage drinking to community leaders which may explain some of the lack of findings in HI
- Further investigation needed:
 - Given quasi-experimental nature of study it is not possible to establish cause and effect
 - Other factors may have contributed to observed declines

Policy Implications

- A standardized system for local law enforcement to record and report to military bases all incidents, including arrests and citations, that involve an active duty member should be implemented across all 50 states
- Further expansion of the EUDL program (or similar environmental strategies program) to communities with high concentrations of service members from AF and other branches of armed forces

Further Reading

Two articles published in *Journal of Studies on Alcohol and Drugs* (www.jsad.com)

- Published in May 2010 on the CA Survey Findings

Reducing Drinking Among Junior Enlisted Air Force Members in Five Communities: Early Findings of the EUDL Program's Influence on Self-Reported Drinking Behaviors*

CHRISTOPHER SPERA, PH.D.,[†] KEITA FRANKLIN, M.S.W., KAZUAKI UEKAWA, PH.D., JOHN F. KUNZ, M.A., RONALD Z. SZOC, PH.D., RANDALL K. THOMAS, PH.D., AND MILTON H. CAMBRIDGE, PH.D.[†]

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Relationship of Military Deployment Recency, Frequency, Duration, and Combat Exposure to Alcohol Use in the Air Force*

CHRISTOPHER SPERA, PH.D.,[†] RANDALL K. THOMAS, FRANCES BARLAS, PH.D., RONALD SZOC, PH.D., AND MILTON H. CAMBRIDGE, PH.D.[†]

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- Forthcoming in January 2011 on effects of deployment on likelihood of problem drinking

- Article in progress on the administrative data reported by grantee communities

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