The Maryland Collaborative

Measuring College Student Drinking and Related Problems on Your Campus

November 7, 2013

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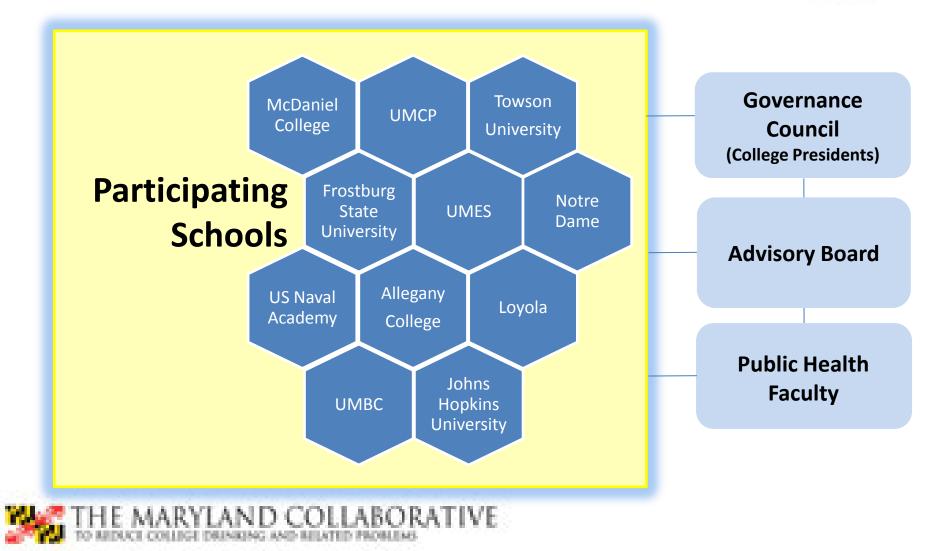
Introductions

- Campus Representatives
- University of Maryland School of Public Health
 - *Center on Young Adult Health and Development Department of Behavioral and Community Health*
 - Amelia Arria
 - Brittany Bugbee
 - Kim Caldeira
 - Becky Kurikeshu
 - Kathryn Vincent
- Johns Hopkins Bloomberg School of Public Health
 - Center on Alcohol Marketing and Youth
 - David Jernigan
 - Molly Mitchell
 - Rebecca Ramirez
 - Alicia Sparks

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Maryland Collaborative Structure



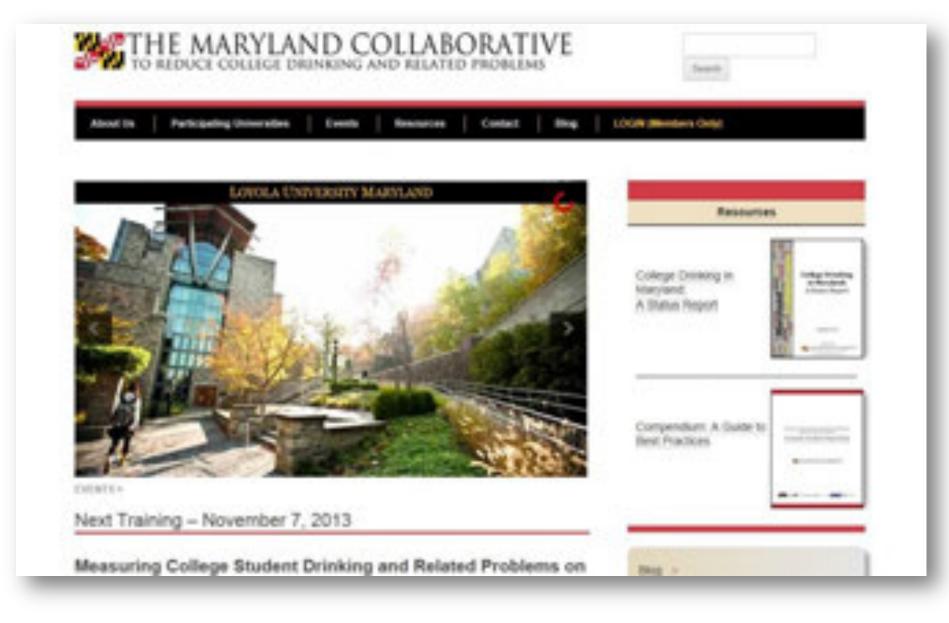
Maryland Collaborative First Year Accomplishments



- Assessed current strategies of 38 college campuses and authored "College Drinking in Maryland: A Status Report"
- Reviewed scientific literature and authored *"A Guide to Best Practices"*
- Held an Educational Conference
- Created Collaborative Website
- Designed Measurement System









Maryland Collaborative Current Activities



- Providing Training and Technical Assistance on Environmental Strategies
- Developing Model Legislation (i.e., Grain Alcohol)
- Developing Training on Individual-level Interventions
- Designing and Developing a Parent-focused Website
- Implementing the Measurement System



Today's Goals

- Describe "Measurement System"
- Unveil General Student Survey
- Discuss domains, items & rationale
- Compare and contrast with CORE, ACHA
- Review proposed sampling methods and procedures
- Review methods for maximizing participation
- Develop Campus Implementation Plans in accordance with Institutional Review Board (IRB) requirements



Goals of Measurement System

- 1) To track the level of college student drinking in Maryland
- 2) To measure the impact of interventions aimed at reducing the problem



Components of Measurement System

- 1. General Student Survey
- 2. Assessment of Academic-Related Harms
- 3. Administrative Data Gathering



Measurement System Implementation *Timeline of Activities*

November 7, 2013: Mid-November 2013: Nov 2013-January 2014: January-February 2014: March 2014: March 2014: Collaborative meeting on the measurement system Submission of primary IRB application to UMCP Submission of specific college IRB applications Promotional Activities Final Sample Selection Administration of General Student Survey

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General Student Survey



B.C. Before Collection

- Rationale behind the survey items
- Sampling Issues
- Strategies for Maximizing Participation
- IRB issues



General Student Survey

Rationale for Items

<u>Main variable</u>: Student Alcohol Use

(how much?, how often?, how intensively?)



General Student Survey

Rationale for Items

We designed the survey to assess both the most important "drivers" of the problem (that can be targeted through our interventions)

AND

outcomes of student alcohol use (that can tell us if those interventions are having an impact)



For example, we know that students believe that alcohol has positive social benefits...

But science tells us that those expectations are overblown.



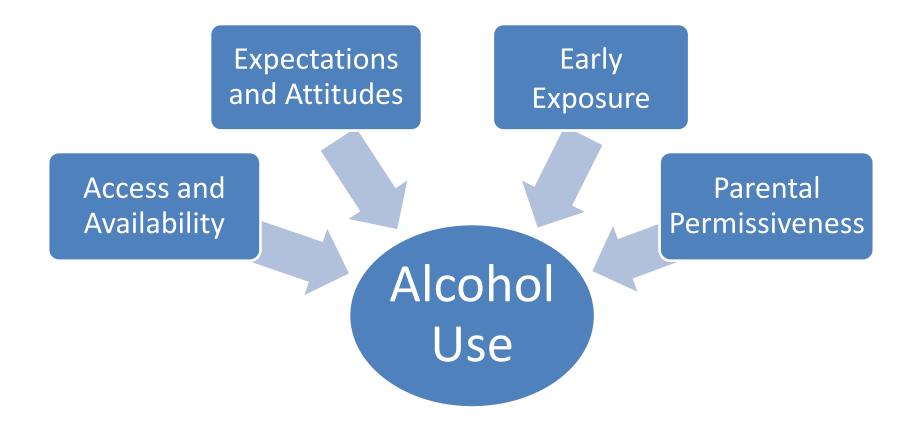
Expectations and attitudes are one set of "drivers" of excessive drinking...

Here are some others that can be the targets of multi-component, multi-level interventions.



General Student Survey

Assessing the Drivers of Student Alcohol Use



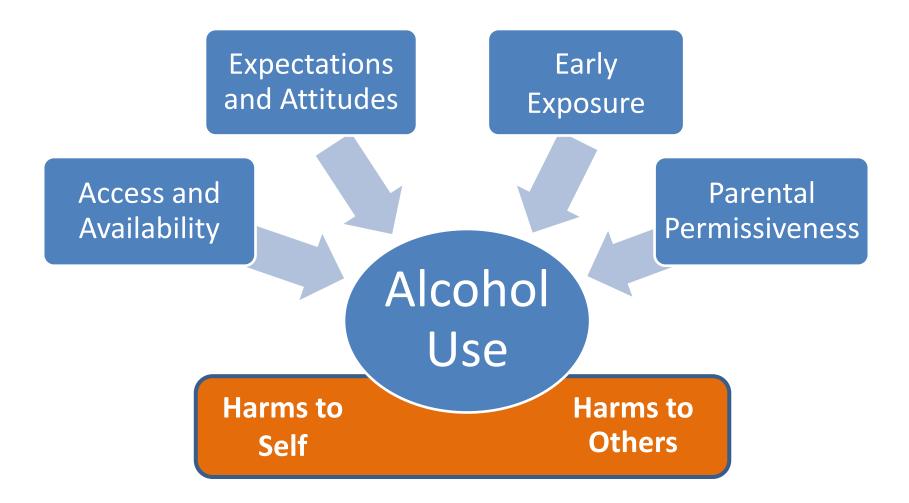


And what about the consequences?



General Student Survey

Assessing the Drivers and Outcomes of Student Alcohol Use





Also Measured: Risk for Alcohol Use Disorders (AUD)

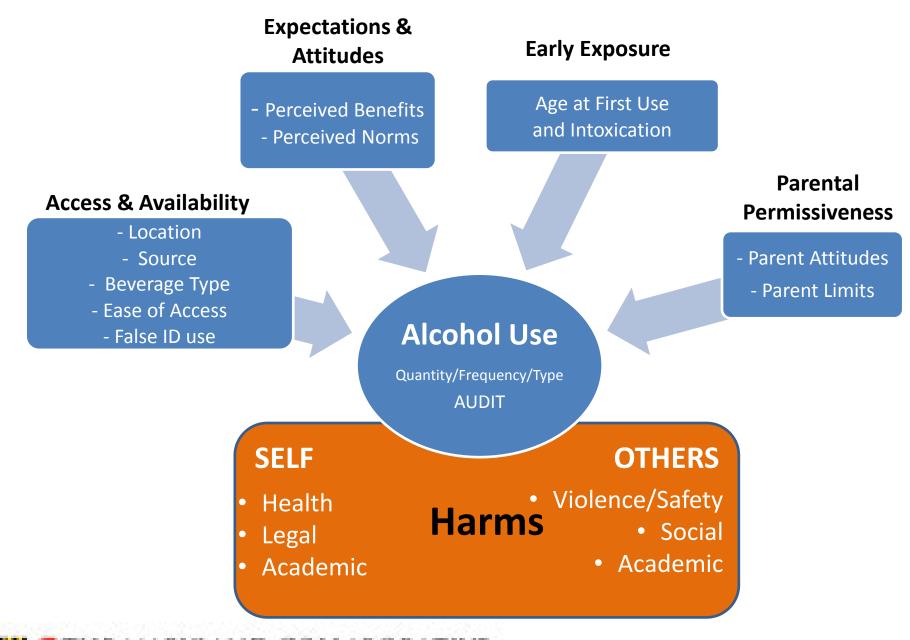
- Alcohol Use Disorders Identification Test (AUDIT)
- During data analysis phase, the AUDIT will be scored to give schools a sense of the proportion of students who need different levels of intervention
- Should be useful for resource allocation
- Can also compare other alcohol use measures (i.e., quantity/frequency) to AUDIT results



Moving from constructs to survey items...

See Handout





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General Student Survey *Comparison to CORE & ACHA*

See handout



Sampling Issues



Determining the Sample Size

- Calculations for precision were based on "Binge Drinking" variable (40%) and an expected annual change of 2%
- Precision (or margin of error) was calculated at 2%, 3%, 4%
- 95% Confidence Interval used
- Initial run to determine sample sizes was based on total undergraduate population at each campus



Determining the Sample Size for number of completed student surveys

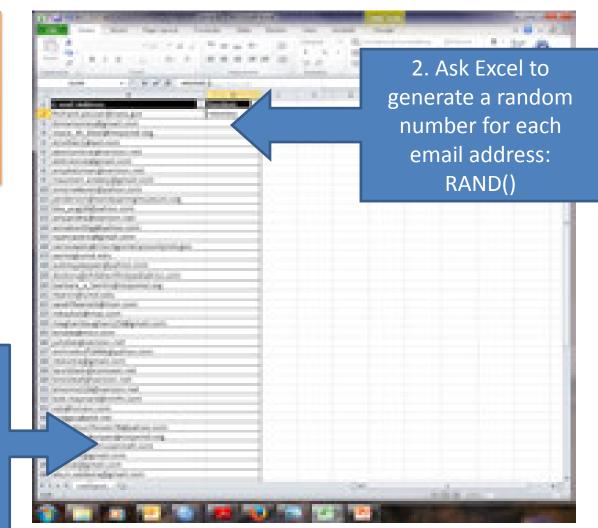
| | | | Precision | | | | |
|--|-----------------------------------|--------|-----------|-------|--|--|--|
| Institution | Total Undergraduate Population | 2% | 3% | 4% | | | |
| Allegany College of Maryland | 3770 | 1431 | 806 | 500 | | | |
| Frostburg State University | 4731 | 1551 | 843 | 514 | | | |
| Johns Hopkins University | 5837 | 1653 | 872 | 525 | | | |
| Loyola University Maryland | 3863 | 1444 | 810 | 502 | | | |
| McDaniel College | 1584 | 940 | 623 | 423 | | | |
| Naval Academy | 4576 | 1534 | 838 | 512 | | | |
| Notre Dame of Maryland University | 1293 | 829 | 572 | 399 | | | |
| Towson University | 17517 | 2038 | 968 | 577 | | | |
| University of Maryland, Baltimore County | 10573 | 1893 | 935 | 547 | | | |
| University of Maryland, College Park | 26826 | 2125 | 1025 | 577 | | | |
| University of Maryland, Eastern Shore | 3862 | 1444 | 810 | 502 | | | |
| | | | | | | | |
| Total Sample Size | | 16,882 | 9,102 | 5,578 | | | |



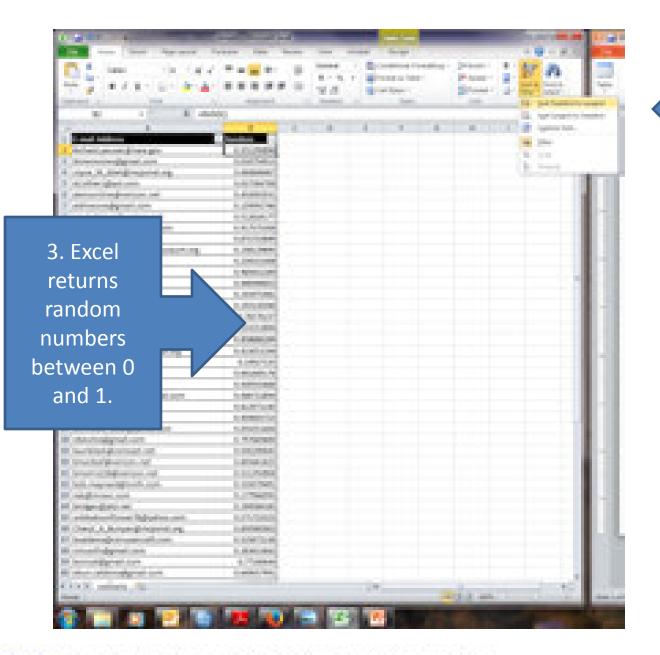
For Example: Simple Random Sampling

Say we want to randomly select a sample of 20 email addresses from a list of 60.

> Start with an Excel file listing email addresses for 60 individuals



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4. Sort the file by the random number.





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Boosting the Response Rates

Maximizing Participation, Minimizing Burden



Student Engagement and Promotional Activities

- College presidents highly in favor of student involvement
- General Email message to students from key administrator?
- Branding ideas??
- Messaging about the survey easy, painless...
 Other ideas?
- Description of promotional activities must be reviewed by the IRB



Informed Consent and Confidentiality

- Survey participation is voluntary
- Email addresses will only be used to recruit participants.
- No identifying information will be linked to survey responses.
- Data will be stored in accordance with IRB regulations.



Follow-up Efforts

- Reminder emails will be sent only to students who have not completed the survey.
- Pre-determined schedule for reminder emails <u>Recommendation</u>: every four days for four weeks (about 10 follow-up reminders)
- The timing of the emails will vary.



Participant Incentives

- State money cannot be allocated for student incentives
- College contributions?
- Raising matching funds through community outreach? Donors?
- Other ideas?



A.D. After Data (is collected)

- Data Management and Analysis
- Report Writing
- Uses of the Data
- Data Storage



Uses of the Data

- Prevalence over time
- Relative magnitude of specific variables (e.g., location, beverage type)
- Examine particular risk factors for your campus that can be the target of new interventions
- Assess the impact of specific interventions

