Why focus on *community-level* prevention research?

Bob Saltz
Prevention Research Center
Oakland, California
Why Community Prevention?

- Takes a public health approach
Public Health Approach

Two Questions:

- “Why are some people more likely to drive drunk than others?”
- “Why are there more impaired drivers in Springfield than in Shelbyville?”
Public Health Model

Individual

Alcohol

Environment

Alcohol-Related Problems
Alcohol Environmental Interventions Defined

Strategies used to reduce problems associated with the use of alcohol through alterations in the physical, social, legal or economic alcohol environment.
Illustrations of Environmental Interventions

- Physical—Restrictions on Densities of Outlets
- Legal—Minimum Drinking Age Laws
- Social—Parental Monitoring of Alcohol Availability in the Home
- Economic—Taxes on Alcohol Sales
RECOGNIZING ENVIRONMENTAL EFFECTS
Frequency of drinking and of getting drunk during the last 30 days among European and American 15- and 16-year-olds, 2003. Data on European adolescents were taken from the 2003 European School Project on Alcohol and Other Drugs (ESPAD).

Mean Score for 5+ Drinks in a Row in Past 2 Weeks by 4-year College Student Status

Twice
Once
None

College
Non-College


Measurement Wave
Drugs Involved in U.S. Overdose Deaths, 2000 to 2016

- Synthetic Opioids other than Methadone, 20,145
- Heroin, 15,446
- Natural and semi-synthetic opioids, 14,427
- Cocaine, 10,619
- Methamphetamine, 7,663
- Methadone, 3,314
Probability of alcoholism (risk) over the life course: the envelope of risk expression as a function of genes, intermediate traits, environment and life stage.
“How must we organize...to improve health?”

- What can reduce alcohol consumption?
- What can reduce the chances of harm subsequent to consumption?
- What is amenable to purposeful change?
- What gives greatest impact or cost-effectiveness?
- What might give rise to unintended consequences?

*Oakes and Kaufman, 2006*
Why Community Prevention?

- Facilitates a public health approach
- The most consequential level at which policies fail or succeed
- For interventions, a pragmatic criterion
...but there are challenges

let’s see an example
Safer California Universities

Project Goal:

To evaluate the efficacy of a “Risk Management” approach to alcohol problem prevention

NIAAA grant #R01 AA12516 with support from CSAP/SAMHSA.
What are we trying to prevent?

- Intoxication
- Harm related to intoxication
<table>
<thead>
<tr>
<th>Intervention Sites</th>
<th>Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSU Chico</td>
<td>Cal Poly SLO</td>
</tr>
<tr>
<td>Sacramento State</td>
<td>San Jose State</td>
</tr>
<tr>
<td>CSU Long Beach</td>
<td>CSU Fullerton</td>
</tr>
<tr>
<td>UC Berkeley</td>
<td>UC Irvine</td>
</tr>
<tr>
<td>UC Davis</td>
<td>UC Los Angeles</td>
</tr>
<tr>
<td>UC Riverside</td>
<td>UC San Diego</td>
</tr>
<tr>
<td>UC Santa Cruz</td>
<td>UC Santa Barbara</td>
</tr>
</tbody>
</table>
Integrated Intervention Strategies for Off-Campus Parties

- Compliance Checks
- DUI Check Points
- Party Patrols
- Pass Social Host “Response Cost” Ordinance
- A Social Host Safe Party Campaign
Typical Hurdles for Comprehensive Prevention Strategy

- Implicit assumption that the only “target” is high-risk drinkers
- Ambivalence about youth drinking
- Low perceived efficacy of preventive interventions
- Challenges of coordination and resource allocation
- Possible fears of “backlash”
Unique Hurdles for College Prevention

- Emphasis often on “process” over “outcome”
- Preference for persuasion over control
- Universities are complex, diffuse organizations
- Prevention staff trained in education, awareness strategies
- Prevention staff usually lacks authority to launch initiatives
Strategies for Implementation

- Focused on one (at most two) settings
- Focused on beginning of academic year
- Highly-specified planning and implementation process
- Maximum attention to tasks and implementation per se (rather than process)
- Planned mid-course correction
Outcomes

- Likelihood of getting drunk at a given generic setting (e.g., Greek parties; residence halls) plus additional aggregate measure across all settings

- Two baseline years combined vs. two years post-intervention combined

- Controlling for individual-level variables and campus/community variables
Practical Significance

- At each campus, 900 fewer students drinking to intoxication at off-campus parties and 600 fewer getting drunk at bars/restaurants during the fall semester at intervention schools relative to controls.

- Equivalent to 6,000 fewer incidents of intoxication at off-campus parties and 4,000 fewer incidents at bars & restaurants during the fall semester at Safer intervention schools relative to controls.
In addition...

No Displacement
Dosage Effects
Semi-Replication
LOCATIONS OF COMMUNITY ACTION
PROJECTS FROM AROUND THE WORLD

- Western Australia
- Israel
- Florence, Italy
- Lahti, Finland
- Stockholm, Sweden
- Aarhus, Denmark
- Ontario, Canada
- Massachusetts, USA
- South Carolina, USA
- Minnesota, USA
- California, USA
- New Zealand
- Paulinia, Brazil
- Diadema, Brazil
- Western Australia
- PAKKA, Finland
- 6 Community Trial, Sweden
- Israel
## Examples of International Community Action Projects for Alcohol Prevention

<table>
<thead>
<tr>
<th>Country</th>
<th>Goals</th>
<th>Strategies</th>
<th>Results</th>
</tr>
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<tbody>
<tr>
<td>United States</td>
<td>Reduce alcohol injury and death</td>
<td>• DUI enforcement</td>
<td>➢ 10% reduction in alcohol crashes</td>
</tr>
<tr>
<td>California/</td>
<td></td>
<td>• Alcohol service</td>
<td>➢ 43% reduction in violence</td>
</tr>
<tr>
<td>South Carolina</td>
<td></td>
<td>• News coverage</td>
<td>➢ Lower alcohol sales to youth</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Reduce alcohol crashes</td>
<td>• Underage sales</td>
<td>➢ Lower alcohol sales to youth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Alcohol outlets</td>
<td>➢ Reduced traffic crashes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• News coverage</td>
<td>➢ 25% reduction in fatal crashes</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Reduce youth drinking</td>
<td>• Local sales policies and enforcement</td>
<td></td>
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<tr>
<td>New Zealand</td>
<td>Reduce drink/drive problems</td>
<td>• Public awareness using local news</td>
<td>➢ Fatal alcohol crashes reduced from 22 to 14%</td>
</tr>
<tr>
<td>Waikata Rural Drink/ Drive Project</td>
<td>Reduce drink/drive problems</td>
<td>• Highly visible drink/drive enforcement</td>
<td>➢ Public perception of risk of being caught increased</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Investigation of on-license premises based upon “place of last drink” data</td>
<td>➢ Alcohol positive breath checks decreased by 600%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Increase local alcohol policy</td>
<td>• Local coordinating committee</td>
<td>➢ Greater news coverage</td>
</tr>
<tr>
<td>Six City Project</td>
<td>Increase local alcohol policy</td>
<td>• Review of alcohol availability</td>
<td>➢ Increased public support of local policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Local alcohol advertising limits</td>
<td></td>
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<tr>
<td>Canada</td>
<td>Reduce alcohol problems</td>
<td>• Alcohol serving practices &amp; policies</td>
<td>➢ Reduced public drinking</td>
</tr>
<tr>
<td>Ontario (6 Projects)</td>
<td></td>
<td>• Municipal policies</td>
<td>➢ Lower heavy drinking in bars and restaurants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DUI enforcement</td>
<td>➢ Modest effects on overall drinking</td>
</tr>
<tr>
<td>Finland</td>
<td>Reduce heavy drinking</td>
<td>• Primary health care</td>
<td>➢ Reductions in heavy drinking</td>
</tr>
<tr>
<td>Lathi</td>
<td></td>
<td>• Community education</td>
<td>➢ Greater news coverage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• News</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>Reduce heavy drinking and youth drinking</td>
<td>• School education</td>
<td>➢ Modest effect on heavy drinking</td>
</tr>
<tr>
<td>Stockholm--</td>
<td></td>
<td>• Public education</td>
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<td>Kungsholmen</td>
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<tr>
<td><strong>Sweden</strong>&lt;br&gt;Stockholm City -- STAD</td>
<td>Reduce alcohol and drug problems</td>
<td>• Youth Program  &lt;br&gt;• Secondary prevention in health care  &lt;br&gt;• Responsible Beverage Service</td>
<td>➢ Modest effect in medium strength beer sales to youth  &lt;br&gt;➢ Reduction in sales to intoxicated patrons (5% to 47%)  &lt;br&gt;➢ Violent crime down by 29%</td>
</tr>
<tr>
<td><strong>Stockholm City</strong> (18 Districts) &amp; Stockholm County Targets</td>
<td>Increase local alcohol policy</td>
<td>• Local work committees  &lt;br&gt;• Develop Alcohol Plan  &lt;br&gt;• Decrease sales of folk beer to youth</td>
<td>➢ Reduced Sales to Youth in 2 target sites (81% to 25% &amp; 48% to 42%)  &lt;br&gt;➢ Increased interest in local policy</td>
</tr>
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</table>
| Sweden  | Reduce alcohol problems | • Public education  
• Primary health care screening  
• Reduce alcohol access | ◀ Low effects on problem indicators  
▶ Reduced male consumption and problems in (a) screening program and (b) general population  
▶ Program adopted by city |

Malmö
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| Australia        | Reduce alcohol injury and death            | • Local coalitions  
                   |                                                                              | • Health education  
                   |                                                                              | • Local alcohol policy concerning public alcohol sale | ➢ Modest effect on injury |
| COMPARI Project  |                                             |                                                                             |                                              |
| Australia        | Lower alcohol involved violence            | • Community Forum & alcohol safety audit  
                   |                                                                              | • Model House Policies  
                   |                                                                              | • Increased enforcement of alcohol licensed premises | ➢ Violent events:  
                   |                                                                              | --original site from 9.8 to 4.7  
                   |                                                                              | --replication sites from 12.2 to 3.0 |
| Surfers Paradise |                                             |                                                                             |                                              |
| Safety Action    |                                             |                                                                             |                                              |
| Project          |                                             |                                                                             |                                              |
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<tr>
<td>Australia</td>
<td><strong>Reduce harm from private drinking</strong></td>
<td>• local media</td>
<td>➢ Heightened local awareness of alcohol issues</td>
</tr>
<tr>
<td><em>Partysafe</em></td>
<td><em>(males 25-45 years)</em></td>
<td>• peer cartoon character</td>
<td></td>
</tr>
<tr>
<td>Carnarvon,</td>
<td></td>
<td>• server training</td>
<td>➢ Unknown effects on drinking</td>
</tr>
<tr>
<td>Western Australia</td>
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<td></td>
</tr>
</tbody>
</table>
Question:

Why aren’t these community prevention approaches adopted universally?
Possible Reasons

- Communities are simply unaware of them
- People don’t believe these strategies will work
- The level of effort seems too high
- People are philosophically opposed
- These approaches are incompatible with how prevention is organized
- .....and???
Translational Research

- Seeks to accelerate diffusion of science to practice
- Can be pursued with the same rigor as research on strategies themselves
- Will require greater collaboration of researchers and practitioners
Thank you!