How can the Community Guide be Used to Inform and Support Injury Policies and Programs?

Randy Elder, MEd, PhD
Scientific Director for Systematic Reviews
Guide to Community Preventive Services

CSTE/ASTHO Webinar: From Analysis to Action
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Disclaimer

The findings and conclusions in this presentation are those of the Task Force on Community Preventive Services and do not necessarily represent the views of the Centers for Disease Control and Prevention.
Outline

• Goals and use of the *Community Guide*
• Motor vehicle injury prevention programs and policies addressed by the *Community Guide*
• The *Community Guide* process—a case study
“In order to advocate effectively for lifesaving legislation, advocates must have clear and compelling scientific evidence to provide a basis for policy change. The combination of scientific research and advocacy efforts is key to success at the federal level, in state legislatures, and in communities across the nation…We weave research findings into every piece of our advocacy efforts.”

- Millie Webb, Mothers Against Drunk Driving
“The research community was generating evidence on drinking and driving long before changes occurred in public policy…Data alone were not sufficient to bring about major changes in policies affecting individual behavior. Success is attributable to a wide range of participants, including legislative, enforcement, judicial, public health, medical, and public organizations and advocates.”

• Patricia Waller, PhD, Former Director,
  U Michigan Transportation Research Institute,
  UNC Highway Safety Research Center
1) State-of-the-science systematic reviews that:
   a) Analyze all available evidence on the effectiveness of community-based interventions in public health
   b) Assess the economic benefit of all effective interventions
   c) Highlight critical research gaps

2) Recommendations for practice from the Task Force on Community Preventive Services
A Practical Focus

• Community Guide processes are grounded in trying to provide information that meets the needs of user audiences

• By actively engaging those who are expected to be the users and beneficiaries of the research, it is more likely the findings and recommendations will be relevant to their needs
Intended Uses

• Identify effective policies and programs that fit well with community
  – Needs
  – Values
  – Resources
• Provide credible information to inform implementation of effective interventions
• Highlight gaps in the current research
• Foster more high-quality evaluation studies
Program Planning Steps

Planning & Assessment
What’s the problem?

Setting Objectives
What do we want to achieve?

Selecting Interventions
What works?

Implementing
How do we do it?

Evaluating
Did it work? How well?
Task Force Findings on Motor Vehicle Related Injury (MVRI) Prevention
### Alcohol-Impaired Driving Findings (1)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Task Force Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.08% blood alcohol concentration (BAC) laws</td>
<td>Recommended</td>
</tr>
<tr>
<td>Lower BAC laws for young or inexperienced drivers</td>
<td>Recommended</td>
</tr>
<tr>
<td>Maintaining current minimum legal drinking age (MLDA) Laws</td>
<td>Recommended</td>
</tr>
<tr>
<td>Sobriety checkpoints</td>
<td>Recommended</td>
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<tr>
<td>Mass media campaigns</td>
<td>Recommended</td>
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<tr>
<td>Multicomponent interventions with community mobilization</td>
<td>Recommended</td>
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<tr>
<td>Ignition interlocks</td>
<td>Recommended</td>
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</tbody>
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## Alcohol-Impaired Driving Findings (2)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Task Force Finding</th>
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</thead>
<tbody>
<tr>
<td>School-based programs</td>
<td></td>
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<tr>
<td>Instructional programs</td>
<td>Recommended</td>
</tr>
<tr>
<td>Peer organizing interventions</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Social norming campaigns</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Designated driver promotion programs</td>
<td></td>
</tr>
<tr>
<td>Incentive programs</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>Population-based campaigns</td>
<td>Insufficient Evidence</td>
</tr>
</tbody>
</table>
# Safety Belt Findings

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Task Force Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laws mandating use</td>
<td>Recommended</td>
</tr>
<tr>
<td>Primary (vs. secondary) enforcement laws</td>
<td>Recommended</td>
</tr>
<tr>
<td>Enhanced enforcement programs</td>
<td>Recommended</td>
</tr>
</tbody>
</table>
## Child Safety Seat Findings

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Task Force Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laws mandating use</td>
<td>Recommended</td>
</tr>
<tr>
<td>Community-wide information &amp; enhanced enforcement campaigns</td>
<td>Recommended</td>
</tr>
<tr>
<td>Distribution &amp; education programs</td>
<td>Recommended</td>
</tr>
<tr>
<td>Incentive &amp; education programs</td>
<td>Recommended</td>
</tr>
<tr>
<td>Education programs when used alone</td>
<td>Insufficient Evidence</td>
</tr>
</tbody>
</table>
Example: 0.08% Blood Alcohol Concentration (BAC) Laws
Fatal Crash Risk by BAC and Age
What is a .08% BAC Law?

• Specifies that it is illegal *per se* to operate a vehicle with a BAC of >0.08 g/dL

• Replace older laws that set BAC limit of 0.10 g/dL
16 states with .08 (1983-1997)
32 States with .10

Status in 1997
The Data Speak for Themselves?

- In 1999-2000, a Transportation Appropriations bill that included sanctions for states without a 0.08 BAC law was under consideration.

- According to NHTSA:
  - Conclusive evidence that .08% BAC is effective.

- According to the GAO:
  - "Overall, the evidence does not conclusively establish that .08-BAC laws, by themselves, result in reductions in the number and severity of alcohol-related crashes."
The Community Guide MVRI Reviews

At the time:

- The Community Guide was undergoing its first review topic prioritization process
  - Extensive input from intended user audiences
- The Task Force identified motor vehicle-related injury prevention as high priority
- The Community Guide and CDC’s Division of Unintentional Injury Prevention (DUIP) initiated a series of systematic reviews of the effectiveness of interventions to reduce motor vehicle-related injuries
Community Guide Review Process

- Convene review teams
  - Coordination team
  - Consultation team

- Develop a conceptual framework

- Develop prioritized list of interventions
  - Using a Delphi process

- Develop: clear research questions, intervention definitions, models of how interventions are presumed to work (Lump/split decisions)
The Motor Vehicle Coordination Team

• Subject Matter Experts
  – DUIP, CDC
  – NHTSA

• Systematic Review Methodologists
  – Community Guide, CDC
The Motor Vehicle Consultation Team

• Federal Agencies
  – Centers for Disease Control and Prevention
  – National Highway Traffic Safety Administration
  – Health Resources Services Administration
  – Substance Abuse and Mental Health Services Administration
  – National Institute for Alcohol Abuse and Alcoholism, NIH
  – Indian Health Service

• Professional and Non-Governmental Organizations
  – National SAFE KIDS Campaign
  – Insurance Institute for Highway Safety
  – National Safety Council
  – National Public Service Research Institute

• Other SMEs from:
  – State, County, City Departments of Health
  – Academic institutions
The CG Seeks to Answer Key Questions about Interventions

- Do they work?
- How well?
- For whom?
- To what circumstances are applicable?
- What do they cost?
- Do they provide value?
- Are there barriers to their use?
- Are there any harms?
- Are there any unanticipated outcomes?
Community Guide Review Process

• Abstract, critically evaluate all available studies

• Synthesize the evidence
  – Qualitatively
  – Quantitatively:
    • Calculate effect estimates
    • Assess harms, benefits, applicability

• Task Force draws conclusions, makes recommendations
  – With input from Official Liaisons, Team, etc.

• Disseminate the findings

• Support translation of findings into action
In General, a Conclusion About Effectiveness Requires….

**A Body of Evidence**
- Number of studies
- Quality of studies
- Study limitations
- Suitability of study design

**A Demonstration of Effectiveness**
- Consistency of Effect
  - “Most” studies demonstrated an effect in the direction of the intervention
- Sufficient Magnitude of Effect
  - The effect demonstrated across the body of evidence is “meaningful”
Percent Change in Alcohol-related Motor Vehicle Fatalities Attributable to .08% BAC Laws, by State

Median percent change: -7%; interquartile interval: -15%, -4%
Task Force Recommendation

The Task Force on Community Preventive Services recommends 0.08% BAC laws based on strong evidence of their effectiveness in reducing alcohol-related motor vehicle crash fatalities.
After the Recommendation...

• CDC:
  – Intensive communication efforts with all important partners, stakeholders
    • Facilitated by NHTSA

• Consultation Team members and partners:
  – Ensured legislators were aware of the results of the Community Guide review and Task Force recommendations
  – Their third party dissemination fostered public support throughout the nation

• The bill was passed and signed, eventually saving an estimated 500 lives per year
A Best-Case Scenario

• Policy debate was explicitly focused on evidence of effectiveness
• There were many reasonably high-quality studies
  – Subject to the usual limitations of policy evaluations
• Able to capitalize on
  – Credible, rigorous, impartial process
  – Broad participation of stakeholders
Thank You!

For More Information, Contact:
Randy Elder, MEd, PhD
Scientific Director for Systematic Reviews
Guide to Community Preventive Services
E-mail: rfe3@cdc.gov

www.thecommunityguide.org