College of Public Health and Human Sciences
Synthesizing Evidence and Identifying Viable Policy Options
Presenter: Jeff Luck
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The best policy is grounded in evidence of effectiveness

Stories and example of policies abound

• But evidence of effectiveness is harder to find:
  • Not all policy implementations are carefully evaluated
    • Not all evaluations are published or disseminated

This short lecture focuses on:

• What we mean by “evidence”
• Sources of evidence—especially reviews and syntheses
• Assessing policy examples for relevance to your work
What do we mean by “evidence?”

High-quality reports or articles about policy examples include:

• Clear description of policy or intervention
  • Including details of the implementation context (to assess reproducibility in other communities)
• Evaluation results
  • Adequate design, eg, pre/post measurement, use of comparison group(s)
  • Measures of cost, process, and/or outcomes (eg, health impact)

High-quality reviews of multiple examples include:

• Comprehensive search for examples
• Systematic comparisons—qualitative or quantitative
• Summary of key success factors for effectiveness
Efficient searching for evidence: Balancing quantity vs. depth of assessment

Greater detail on policy & implementation

Stronger assessment of effectiveness

- Meta-analysis
- Systematic review
- Review—peer reviewed journal
- Review—report or toolkit
  - Multiple examples
  - Single example
- Article in peer-reviewed journal
- Evaluation report
- Descriptive report or article
- Implementation documents
A great place to start: The Community Guide from CDC

http://www.thecommunityguide.org/index.html
New resource: Community Health Improvement Navigator

http://www.cdc.gov/chinav/database/index.html

CDC Community Health Improvement Navigator

Database of Interventions

**SELECT Filters**  
Clear all filters

**TARGET RISK FACTORS**
- Tobacco Use and Exposure
- Unhealthy Diet
- High Blood Pressure
- Physical Inactivity
- High Cholesterol
- Diabetes
- Obesity

**TARGET POPULATIONS**
- Racial/Ethnic Minorities
- Children/Adolescents
- Adults
- Men
- Urban
- Low Income
- Families
- Older Adults
- Women
- Rural

**TARGET OUTCOMES OR INDICATORS**
- Tobacco Use and Exposure
- Healthy Food/Beverage Intake
- Blood Pressure
- Body Mass Index/Weight
- Physical Activity
- Cholesterol/Lipid Level
- Hemoglobin A1c/Glycemic Control
- Health Care Costs

Four ACTION Areas

- **SOCIOECONOMIC FACTORS**  
  24 RESULTS

- **PHYSICAL ENVIRONMENT**  
  17 RESULTS

- **HEALTH BEHAVIORS**  
  46 RESULTS

- **CLINICAL CARE**  
  15 RESULTS

FILTER BY ACTION AREA:

Reviews (more info)  
Individual Studies (more info)

Showing 1 to 10 of 80 results  
Previous  
Next

INDIVIDUAL STUDIES

School Nutrition Policy Initiative

Reducing unhealthy weight gain in children through community capacity-building: results of a quasi-experimental intervention program, Be Active Eat Well.

REVIEWS

Reach Out and Read

More…
CDC programs also offer other topic-specific resources.
Foundations often target public health policy issues


Adverse Childhood Experiences

Early Life Events That Can Damage Our Adult Health

About This Collection

Traumatic childhood events like abuse and neglect can create dangerous levels of stress and derail healthy brain development—resulting in long-term effects on learning, behavior and health. A growing network of leaders in research, policy and practice are leading the way in preventing adverse childhood experiences (ACEs) and mitigating their impact through building resilience. This collection contains commentary from experts and resources detailing innovative approaches for improving mental and physical health using an ACEs framework.

LATEST NEWS AND PERSPECTIVES ABOUT ACES

How Childhood Experiences Shape Our Nation's Health

March 12, 2015 | Blog Post

New findings suggest that Americans are ready for new approaches address early childhood trauma and stress. To do that in a big way, we need more than science—we need a movement.

What Shapes Health

March 2, 2015 | Survey/Poll

What is the public’s perception of factors they believe impact their health?
Advocacy organizations may compile resources

http://www.csh.org/resources/

Reducing Homelessness, Incarceration and Costs Through Supportive Housing – The New York City FUSE Evaluation
The Frequent User Services Enhancement (FUSE) initiative is a supportive ...

Returning Home – Ohio: Fact Sheet

Supportive Housing for Returning Prisoners: Outcomes and Impacts of the Returning Home-Ohio Pilot Project
This evaluation of a supportive housing reentry pilot project, ...

Project Renewal
Project Renewal is located in New York, NY. The program ...

Blueprint for FUSE
CSH’s Frequent Users Systems Engagement (FUSE) model is being used ...
Pubmed has some tools to help narrow your search
Activity B: Identifying evidence-based policy options

Multiple potential policy options are better than just one!
- Searching for diverse options nourishes creative thinking
- Options allow room for decisions by elected officials or policy makers
- Alternatives may be needed if initial option is not feasible or does not gain strong stakeholder support
- Options may tap into different potential funding streams

To identify viable policy options, look for examples that:
  a) Clearly describe implementation steps and requirements as a basis for planning
  b) Have a community context similar enough to yours
  c) Provide specifics about impacts of the policy
Activity B (cont.): Aspects of policy options to consider

Identify 2 or 3 policy options, and for each describe briefly:

- Target population (individuals and/or organizations)
- Behavior change or action that policy aimed to achieve
- Expected health impact, including:
  - Type and magnitude of impact
  - Strength of evidence
  - Impact on equity?
- Implementation steps and requirements, including:
  - Legal/Regulatory: Legislation or ordinances
    Regulations or rules
  - Partner organizations: Community
    Government
  - Resources: Staff
    Training in skills needed to implement policy
    Infrastructure/equipment
    Communication/outreach
- Key success factors as learned by other communities
Appendix: Types & compendia of evidence reviews
Which reviews meet your purposes best?

Reviews vary in scope and quality
- Precision of question
- Types of studies included
- Assessment of study quality
- How results are synthesized
- Applicability to local context

Reviewers’ criteria may not be the same as yours
- Meta-analyses exclude studies with limited quantitative data
- Systematic reviews may exclude informative examples that lack strong evaluation
- Comparison criteria may not include some dimensions relevant to your problem
Systematic reviews—when available—are ideal for policy analysis

Great source of reviews: Health Evidence

http://www.healthevidence.org
(Login required but is free)

Search our database of 4,259 quality-rated reviews on the effectiveness of public health interventions

>> SEARCH TIPS - get the results you want

>> TUTORIALS - guide your search

>> SEARCH STRATEGY - how we populate this database
University research centers often do topic-specific reviews.

http://www.ph.ucla.edu/hs/health-impact/
Key elements of a systematic review

• Start with an answerable question
• Search comprehensively for evidence
• Abstract study results objectively
• Assess quality of studies
• Synthesize results
• Assess applicability and transferability of results
• Document all steps performed

Example Systematic Review Topics

School-based driver education for the prevention of traffic crashes

Helmets for preventing head and facial injuries in bicyclists

Results from systematic reviews

Helmets reduce bicycle-related head and facial injuries for bicyclists of all ages involved in all types of crashes including those involving motor vehicles.

The results provide **no evidence that drive education reduces road crash involvement**, and suggest that it may lead to a modest but potentially important increase in the proportion of teenagers involved in traffic crashes.

Results from this review suggest that **area-wide traffic calming in towns and cities may be a promising intervention** for reducing the number of road traffic injuries and deaths. However, further rigorous evaluations of this intervention are needed.

Systematic review starts with an answerable question

Are mass media *(or school- or community-based)* interventions effective in preventing smoking in young people?

<table>
<thead>
<tr>
<th>Problem, population</th>
<th>Intervention</th>
<th>Comparison</th>
<th>Outcome</th>
<th>Types of studies</th>
</tr>
</thead>
</table>
| Young people under 25 years of age | a) Television  
b) Radio  
c) Newspapers  
d) Bill boards  
e) Posters  
f) Leaflets  
g) Booklets | a) School-based interventions  
b) No intervention | a) objective measures of smoking (saliva thiocyanate levels, alveolar CO)  
b) self-reported smoking behaviour  
c) Intermediate measures (intentions, attitude, knowledge, skills)  
d) Media reach | a) RCT  
b) Controlled before and after studies  
c) Time series designs |