Prevention Research Centers

- Network supported by Centers for Disease Control and Prevention
- Academic & community collaborations
- Focused on applied public health work
Introductions

Paul Gilbert, PhD, ScM
Assistant Professor, Community & Behavioral Health
Training Director, Prevention Research Center

Research interests include
• Health equity/alcohol-related disparities
• Immigration and health
• Mixed-methods study designs
• Participatory action research
Barbara Baquero, PhD, MPH
Assistant Professor, Community & Behavioral Health
Deputy Director, Prevention Research Center

Research interests include
• Design, implementation, and evaluation of community-based participatory health interventions
• Obesity and chronic disease prevention and control interventions
• Social, cultural, and behavioral factors related to health outcomes
• Reducing and eliminating health disparities for Latino immigrants in the United States
• Health disparities
Natoshia Askelson, PhD, MPH
Assistant Professor, Community & Behavioral Health
Communication and Dissemination Director, Prevention Research Center

Research interests include
• Intersection of health policy and behavior change
• Family and child health
• Health communication
• Evaluation
Learning Objectives

1. Explain the concepts underlying evidence-based public health
2. Describe how to select evidence-based interventions and programs for local use
3. Analyze potential barriers to successful implementation of evidence-based interventions and programs
Audience Summary

- 54% work in local health departments
- 85% have used an EBI in their work
- 52% very or mostly confident they know where to find EBIs
- 48% are very or mostly confident they can select and adapt an EBI
BACKGROUND & PRINCIPLES OF EVIDENCE-BASED PUBLIC HEALTH
What is “evidence-based public health? Why the emphasis?
Evidence-Based Public Health

A program, policy, or intervention that:
• Has been rigorously developed; and
• Has been evaluated scientifically.
Hierarchy of Evidence

- Anecdotal
- Ideas, expert opinions, editorials
- Case studies
- Cross sectional surveys
- Case control studies
- Cohort studies
- RCTs
- Systematic review and meta analyses of RCTs
Increasing Emphasis

Evidence-based public health:
• Avoids duplicating efforts
• Holds promise of desired outcomes
• Justifies allocation of resources
• Increasingly mandated by funders
• Bridges academic and practice worlds
WHERE TO FIND EVIDENCE-BASED PROGRAMS
Audience Poll

Where have you looked for EBIs?

• The Community Guide
• Research-Tested Intervention Programs (RTIPS)
• Cancer Control: PLANET
• Some other source
• I have never looked for an EBI
Evidence-based interventions

• There are different types of evidence-based approaches
  – Packaged programs
  – Strategies
  – Policies
Evidence-base intervention resources typically include:

– Search engines to quickly sort by topic, setting, population and intervention type
– Information about core elements, cost, and evaluation tools
– Actual intervention materials
“The Community Guide”

- Sponsor: Taskforce for Preventive Services, Centers for Disease Control and Prevention
- Health topics: Multiple
- Resources available: Recommendations from systematic reviews
“The Community Guide”

- **Recommended**: systematic review, strong and sufficient evidence
- **Recommended against**: evidence it is harmful or not effective
- **Insufficient evidence**: additional research is needed
Your online guide of what works to promote healthy communities

Insufficient Evidence Guides
How to interpret and use Task Force findings of insufficient evidence is now available for the following users:

- Public health practitioners
- Public health funders
- Public health researchers

New Publications Available
Excessive Alcohol Use

How Can We Help You?
Vaccination

Diseases that can be prevented by vaccines remain major causes of illness and death for people of all ages in the United States.

- In the U.S., an estimated 800,000 to 1.4 million persons have chronic Hepatitis B virus infection (CDC) 
- Flu seasons are unpredictable and can be severe. Between 1976 and 2007, estimates of flu-associated deaths range from a low of about 3,000 to a high of about 49,000 people (CDC)

Task Force Findings

Vaccination Programs: Home Visits to Increase Vaccination Rates
Recommended | Completed February 2016

Vaccination Programs: Requirements for Child Care, School, and College Attendance
Recommended | Completed February 2016

Vaccination Programs: Client-Held Paper Immunization Records
Insufficient Evidence | Completed February 2016

Vaccination Programs: Monetary Sanction Policies
Insufficient Evidence | Completed September 2015

Vaccination Programs: Community-Wide Education When Used Alone
Insufficient Evidence | Completed September 2015
http://cancercontrolplanet.cancer.gov/

- Sponsor: NCI, CDC, AHRQ, SAMHSA
- Health topics: Multiple cancers & behaviors
- Resources available: Access to data, resources for evaluation, evidence-based programs, cancer plans and budgets and links to potential collaborators
http://rtips.cancer.gov/rtips

- Sponsor: NCI and SAMHSA
- Health topics: Multiple
- Resources available: Evidence-based programs
## Search

Select program attributes (if you like) and then click the button at the bottom of the page to get a list of relevant programs. Multiple selections within a category expand your criteria; selections in different categories narrow them.

### Topics
- Breast Cancer Screening
- Cervical Cancer Screening
- Colorectal Cancer Screening
- Diet/Nutrition
- HPV Vaccination
- Informed Decision Making
- Obesity
- Physical Activity
- Public Health Genomics
- Sun Safety
- Survivorship/Supportive Care
- Tobacco Control

### Setting
- Community
- Religious establishments
- Rural
- Suburban
- Urban/Inner City
- School-based
- Clinical
- Workplace
- Home-based
- Day care / Preschool

### Materials
- Available on RTIPs
- Partially available on RTIPs
- Available from third party only

### Origination
- Australia
- Canada
- United Kingdom
- United States

### Race/Ethnicity
- □ Alaskan Native
- □ American Indian
- □ Asian
- □ Black, not of Hispanic or Latino origin
- □ Hispanic or Latino
- □ Pacific Islander
- □ White, not of Hispanic or Latino origin

### Gender
- □ Male
- □ Female

### Note:
- Not selecting any search criteria will return all 172 programs
- Selecting all search criteria will not return all programs

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Last Modified: 05/12/2010

[Content on this page is maintained by the Division of Cancer Control and Population Sciences at the National Cancer Institute.](#)
Words of Wisdom

• Understand what the criteria were for inclusion
• Understand what ‘it’ is
• Look to see if any permissions or cost are involved
ASSESSING & ADAPTING EVIDENCE-BASED PROGRAMS
Assessing and Adapting EBIs means...

- Making changes or modifications to fit to the characteristics of the population and local context
- Making additions, deletions and substitutions of elements of the intervention
- Finding a balance between fitting the intervention to your local context and maintaining the integrity of the intervention

Adapt from CPCRN/CDC: Putting Evidence Based Into Action
Steps for Assessment & Adaptation

1. Assess fit to consider adaptation
2. Assess the acceptability and importance of adaptation
3. Make final decision of what to adapt
4. Make the adaptation
5. Pretest and pilot test

Adapt from CPCRN/CDC: Putting Evidence Based Into Action
## Adaptation Planning Tool*

<table>
<thead>
<tr>
<th>Adaptation Categories</th>
<th>Your Community</th>
<th>EBA</th>
<th>Fit outcome; adaptation ideas</th>
<th>Recommendation</th>
<th>Importance</th>
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<tbody>
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<td>Environment</td>
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<td>Availability, preferences:</td>
<td>Channel/ vehicle used:</td>
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## 1. Assess fit for Adaptation

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# 2. Assess Acceptability and Importance

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<td>Health outcome/goal</td>
<td>Goal:</td>
<td>Outcome:</td>
<td>Yes, No, Partially; Notes</td>
<td>No</td>
<td>Maybe</td>
<td>Yes</td>
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<tr>
<td>Behavior Sub-behaviors</td>
<td>Objectives:</td>
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2. Assess Acceptability and Importance

<table>
<thead>
<tr>
<th>Should be avoided</th>
<th>Should be careful</th>
<th>Should be safe to adapt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mechanisms of change</td>
<td>• Change sequence or length of activities</td>
<td>• Increase reach, receptivity and participation</td>
</tr>
<tr>
<td>• Health topic or behavior</td>
<td>• Apply to different pop</td>
<td>• Customize stats or guidelines</td>
</tr>
<tr>
<td>• Reduction dose</td>
<td>• Who delivers the program</td>
<td>• Changes names, pictures or wording</td>
</tr>
<tr>
<td>• Add contradicting activities from original</td>
<td>• Materials or setting</td>
<td></td>
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<tr>
<td>• Delete wholes components</td>
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A Prevention Research Center Designated by the Centers for Disease Control and Prevention
2. Assess Acceptability and Importance

• Determine what elements are core or RED
  – Consult with experts – use your analysis to:
    • Colleagues who have gone through this process
    • Funding agency or TA provided
    • Academics or research
2. Assess Acceptability and Importance

**• RED** adaptations that probably cannot be made (Core Elements)

**• Methods used**
  – Mechanisms of change – theoretical foundations

**• Content**
  – Health topic or behavior
  – Add an activity that contradicts from the original goals
  – Delete whole sections or major activities
  – Reduce duration or dose
3. Make Decision about what to Adapt

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3. Make Decision about What to Adapt

• Consult with community stakeholders to determine the adaptation to achieve fit
  – Reach
  – Acceptability
  – Feasibility (implementation)
    • Representatives of the priority audience or population
    • Representative from organizations
4. Make the Adaptation

<table>
<thead>
<tr>
<th>More Complex Adaptations</th>
<th>Straightforward Adaptations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Weather or other environmental factors that should be considered</td>
<td>• Replace graphics, key stats about community</td>
</tr>
<tr>
<td>• Translate correctly to other languages</td>
<td>• Replace pictures and words</td>
</tr>
<tr>
<td>• Train who will deliver the program</td>
<td>• Changes names, represent local context</td>
</tr>
<tr>
<td>• Cultural factors</td>
<td></td>
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</tbody>
</table>
5. Pretest and Piloting

• Pretest
  – Trying out program elements (e.g., materials) with intended end users
  – Adapted elements & Non-adapted elements

• Pilot test
  – Tryout implementation to assess fit with community and organization/coalition
Everybody Active helps organizations promote physical activity and healthy lifestyles by providing the tools and technical assistance necessary to train community volunteers to instruct group exercise and healthy lifestyle classes.

The goal is to make physical activity part of our culture and available for free or at little cost to the community. We provide organizations with:

The toolkit includes resources to help implement group exercise and healthy lifestyle classes at schools, recreation centers, and community centers.

Program Manual
Community Health Instructor Training Manual and Video
Community Health Instructor Facilitator Guide for Exercise & Healthy Lifestyle Classes
Posters and other materials for Healthy Lifestyle Classes
Participant Guide for Healthy Lifestyle Classes

Technical assistance to support organizations wishing to train community health instructors, and to obtain resources and collaborations to support their efforts.

## Adaptation Planning Tool
### Example Everyone Active

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<tr>
<td>Health outcome/goal</td>
<td>Goal: Prevent and control heart disease</td>
<td>Outcome: Promote physical activity and healthy lifestyles</td>
<td>Yes could be a good fit</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Behavior Sub-behaviors</td>
<td>Objectives: Increase PA activities community</td>
<td>Outcomes: Increase PA in community</td>
<td>Yes could be a good fit</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Environment</td>
<td>Actors, facilities: Churches and schools</td>
<td>Actors, facilities: Comm. organizations</td>
<td>Partially need adaptation</td>
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<td></td>
<td>X</td>
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<tr>
<td>Determinants, Related Objectives; Methods</td>
<td>Determinant &amp; related objectives; Methods: Rural context, low funding</td>
<td>Determinants addressed; methods used: Urban context, federal funds</td>
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<td>X</td>
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<td><strong>Delivery mechanisms</strong></td>
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<tr>
<td>Channel, vehicle</td>
<td>Availability, preferences: Members of community Available times</td>
<td>Channel/vehicle used: Community Health Workers Free or reduce</td>
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<td>X</td>
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</tbody>
</table>
Words of Wisdom

1. There is not a perfect match out there. We always need to adapt
   1. Identify the core elements of an EBI and keep them intact in adaptation
   2. Collaborate from experts and community to get advice and feedback as you consider the changes
   3. Consider including evaluation measures to determine the impact and integrity of the intervention.
Resources

https://www.public-health.uiowa.edu/prc/
Resources

Evidence-Based Interventions

General Resources:
  - The Guide to Community Preventive Services is a free resource to help you choose programs and policies to improve health and prevent disease in your community. Their database is searchable by topic and they classify interventions as being either recommended, having insufficient evidence, or not recommended.
  - Programs are chosen for inclusion based on these questions:
    - Which program and policy interventions have been proven effective?
    - Are these effective interventions appropriate for my community?
    - What might effective interventions cost; what is the likely return on investment?
  - http://www.thecommentaryguide.org/

Research tested Intervention Programs (RTIPs):
- 105 evidence-based intervention programs, searchable database related to cancer.
  - http://cancergov.cancerfinder.dcop

Teen Pregnancy Prevention Resource Center
- Database of adolescent pregnancy prevention program evidence-based interventions.
  - http://www.hhs.gov/ascd/aah-initiatives/teen_pregnancy/db/

CDC on HIV Resources:
- Complete listing of risk-reduction evidence-based interventions.
  - http://www.cdc.gov/mmwr/rr/rr1803/guidelines/hivrrr1803.htm

Blueprints for Healthy Youth Development:
- Searchable database of evidence-based programs on youth-related topics: bullying, violence, substance abuse, obesity, delinquency.
  - http://www.blueprintsprograms.com/

Evidence-based Behavioral Practice
- Evidence-based programs related to depression, anxiety, and obesity.
  - http://www.ebhp.org/skillsBasedResources.html

Substance Abuse and Mental Health Services Administration:
- Programs related to substance abuse prevention and treatment and mental health.

https://www.public-health.uiowa.edu/prc/
Follow-Up

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319-335-6867

barbara-baquero@uiowa.edu
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Questions & Discussion