

# Factors affecting implementation of evidence-based practices

## Colorado Public Health PBRN

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March 21, 2011



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# Overview

- Colorado PH PBRN
- PBRN Research Implementation Awards
- Colorado's project
  - Research Questions
  - Design and Methods
  - Coalition Network Analysis

# Colorado Public Health PBRN

*Building infrastructure to facilitate practice-based research*

*Building the evidence base for PH systems and services*

### *Partner Institutions*

- **Public Health Alliance of Colorado**
  - Colorado Association of Local Public Health Officials (CALPHO)
  - 9 additional member organizations
- **Colorado Department of Public Health and Environment**
  - Office of Planning and Partnership
- **Colorado School of Public Health**
  - Rocky Mountain Prevention Research Center
  - Center for Public Health Practice

# Background on Colorado PH PBRN

- Established in December 2008
  - Public Health Alliance created in 2006
  - PH Reauthorization Act passed June 2008
  - Colorado SPH opened July 2008
  - Network of primary care PBRNs in Colorado since 1970's
- Funded by RWJF to build infrastructure
- Housed at the Colorado Assoc of Local PH Officials
- Currently managing 5 research projects
- Seeking to grow the number of researchers and public health professionals involved and connecting through the network

# The “promise” of Public Health PBRNs

- Important public health practice questions linked with rigorous research methods
  - to produce externally valid evidence
  - that is more easily assimilated into practice
- Support of quality improvement activities
- Adoption of an evidence-based culture
  - Places of learning
  - Practitioners engaged in reflective practice inquiries
  - Collaboration in search of answers to improve delivery of public health services

Note: *If you want more EBP, where is the PBE?* (L Green, 2008)

# Research Implementation Award 2009

RWJF supports PH PBRNs with supplemental research funding

- Open to 5 initial PH PBRN grantees
- \$150,000 for 18-24 months
- Theme: *enhancing adoption and implementation of evidence-based public health practices for disease prevention*

## Colorado Research Question

- Program Coordinator from one of the 25 LiveWell funded communities in Colorado:
  - *What are the characteristics of those agencies or coalitions that successfully make environment or policy changes...?*
  - *What are the determinants of who became the fiscal agents or host agency for LiveWell in each community?*
- Reformulated :
  - *How does the PH system influence adoption and implementation of evidence-based public health practices in chronic disease prevention? More specifically,*
    - *How do coalitions find, select, and use evidence...? And,*
    - *What is the role of local public health agencies...?*

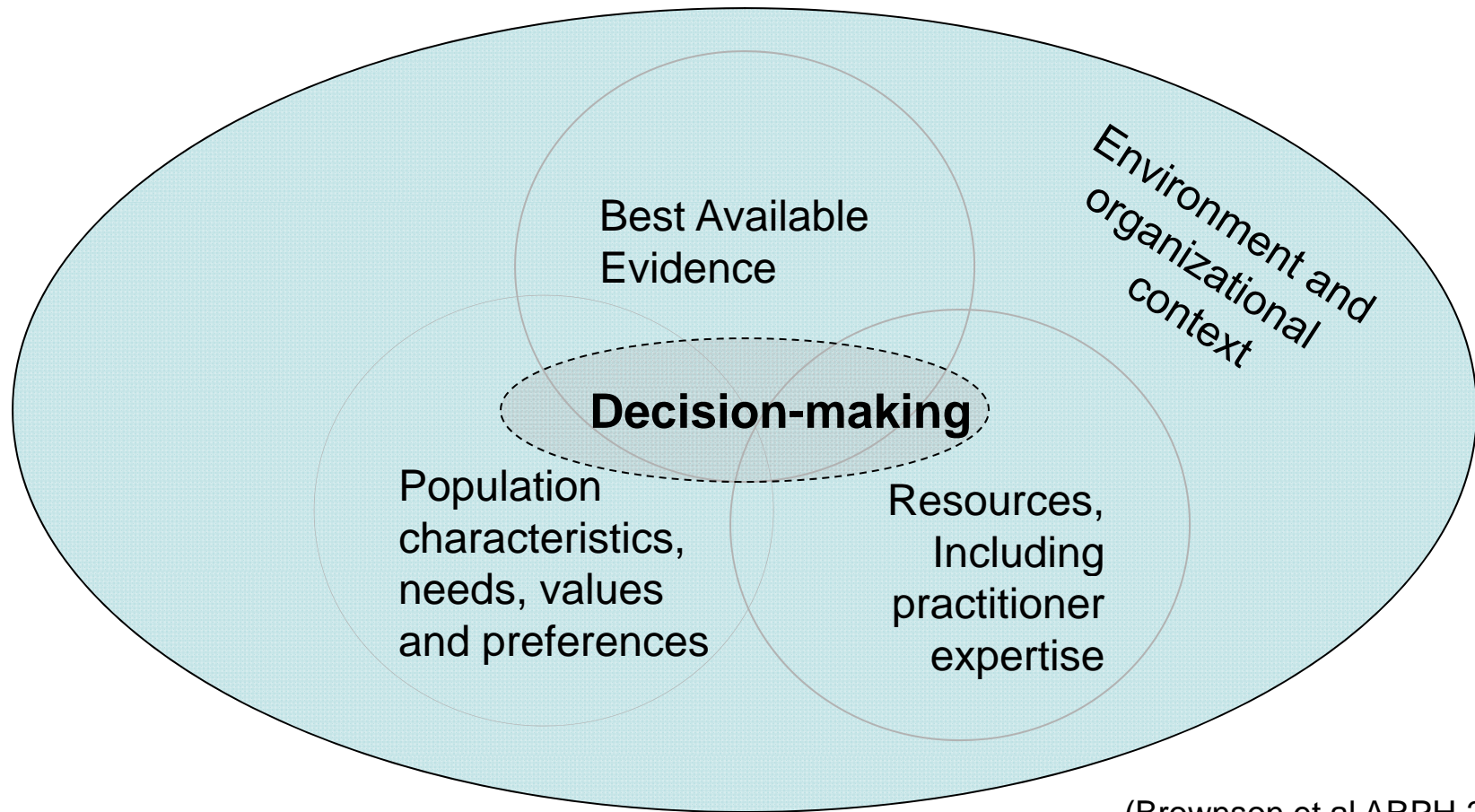
## Research Design and Methods

- **Project Advisory Committee (PAC)**
- **Phase 1:** *Chronic Disease Coalitions and their use of evidence-based practice in Colorado (54 LHDs).*
  - Survey to establish and characterize sampling frame for phase 2
  - Map of community coalitions for sharing best practices
- **Phase 2:** *Detailed assessment of prevention strategies and coalition network (8-10 coalitions).*
  - Document review and key informant interviews
  - Network analysis and key informant interviews
  - Consultation on network analysis & developing action plan

# PHASE 1: Collaborations Survey

- Target all chronic disease prevention coalitions with local public health involvement
  - All LHD Directors
  - All CALPHO and PAC contacts
  - Secondary data on LHD characteristics
- Internet survey
  - Coalition vision/mission, membership, staffing, oversight, funding, communication, planning, activities and upload of workplan, budget, and dissemination materials
  - Use of evidence-based practice

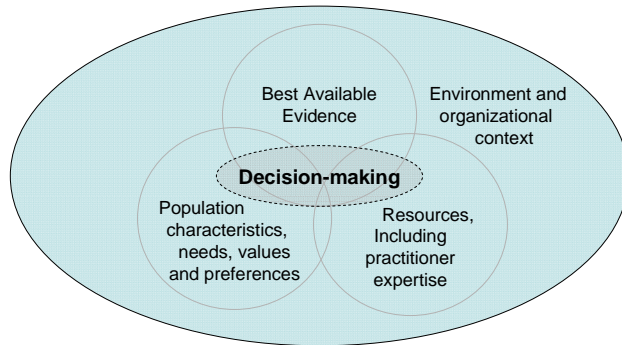
# Domains that influence evidence-based decision making



(Brownson et al ARPH 2009)

# Colorado Public Health Practice-Based Research Network

## Domains that influence evidence-based decision making



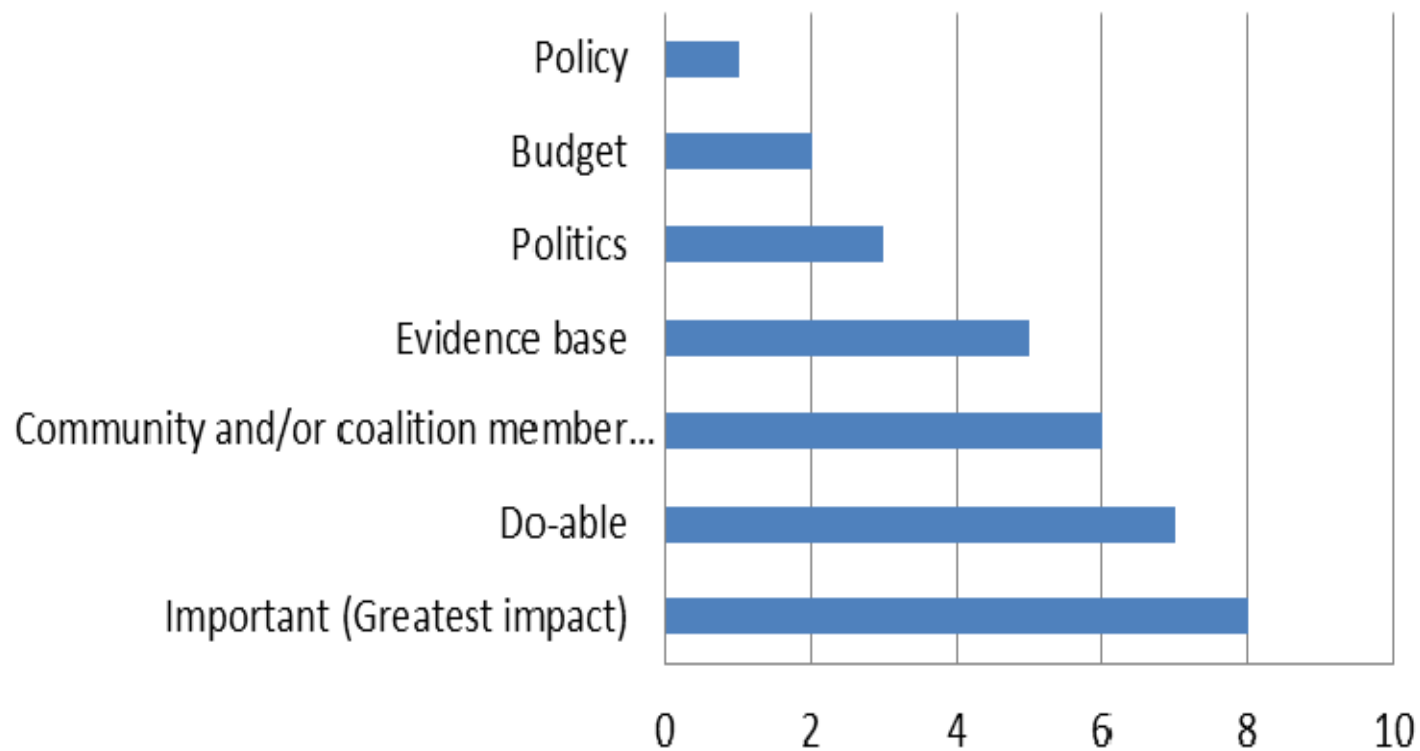
## Key characteristics

- Making decisions using best available peer-reviewed evidence
- Using data & information systems systematically
- Applying program planning frameworks
- Engaging the community in assessment & decision making
- Conducting sound evaluation
- Disseminating what is learned to key stakeholders & decision makers

(Brownson et al ARPH 2009)

# A few preliminary findings (n=10)

## Why were activities chosen (all that apply)?



Other options not selected: already existed; required by funder; by statute; other, DK

# A few preliminary findings (n=10)

- 3/10 required to use EBP by funder or LHD
- 0/10 receive incentives for EBP work
- **Barriers:** cost, time, lack of evidence, not aligned with community passion/interests
- 4/10 identified areas/activities where it was difficult to use EBP: policy, social media, solving transportation barriers

## **PHASE 2: Network Analysis, Documents & Interviews: In-depth study of 8-10 coalitions**

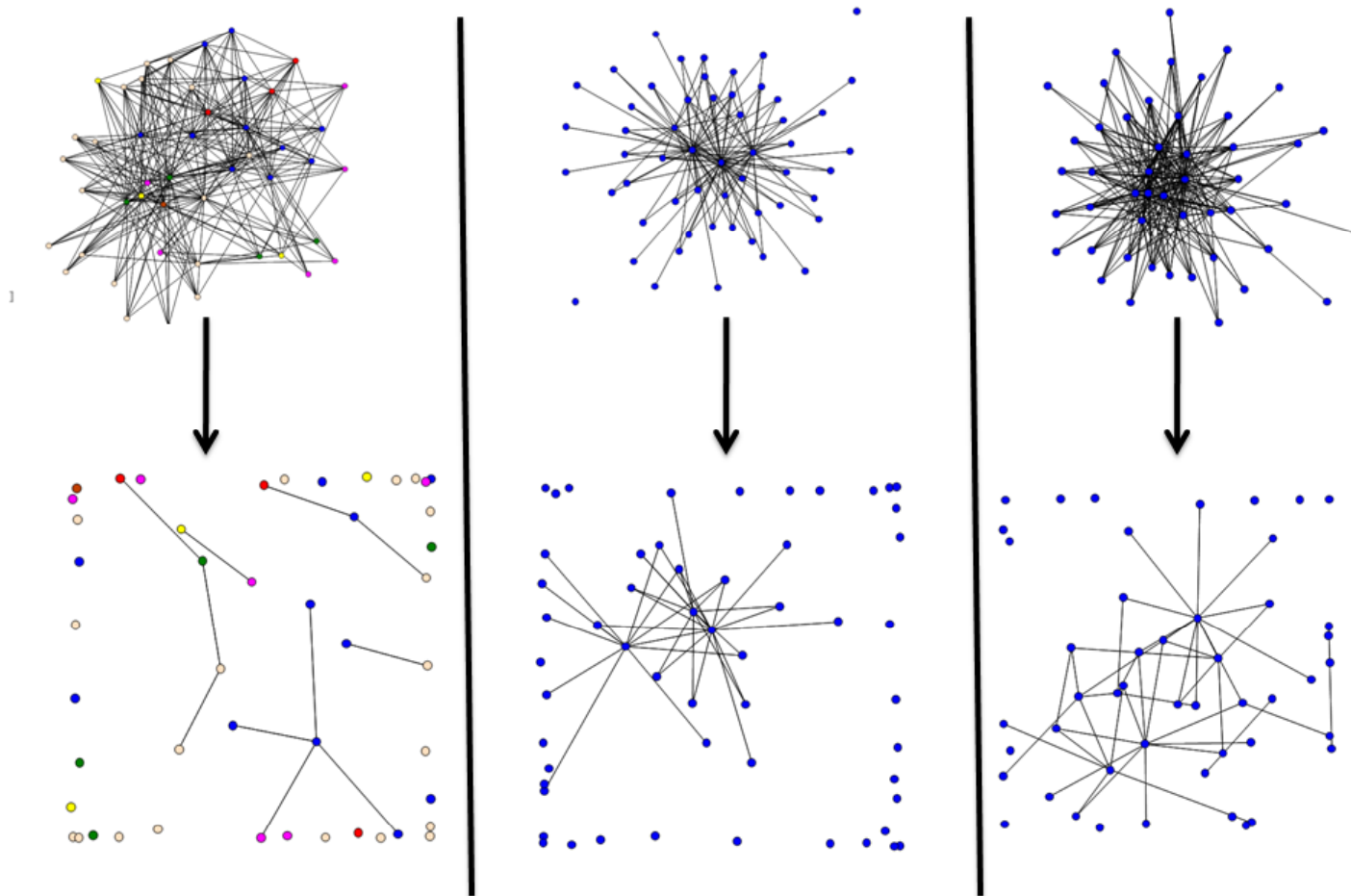
- Characterize use of local data on needs & resources
- Map prevention strategies onto best available evidence
- Characterize coalition network
  - Key players and their organization attributes
  - How information is shared
  - How resources are leveraged, shared, and coordinated
  - Role of early adopters, medium of message and leadership in information diffusion
- Characterize implementation of EB strategies

## Collecting Network Data

- PARTNER (Program to Analyze, Record, and Track Networks to Enhance Relationships) – [www.partnertool.net](http://www.partnertool.net)
- Coalitions provide a roster of members
- Coalition members answer survey questions:
  - Organizational Information; Relationships with Other Coalition Members; Perceptions of Their Relationships; Perceptions of Process and Outcomes

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# Comparing Network Structures Can Explain Differences in Process



## Concluding Remarks

- We're learning together
- Exploratory stage
  - Understanding questions
  - Understanding how methods will inform questions
    - Sampling frame
    - Network analysis
- Engaging research and practice partners

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