

GUIDE TO

**COMMUNITY**

Preventive Services

The Community Guide

What works to promote health



# **Taking a Critical Look at the Evidence Base for Community Health Improvement: The US Preventive Services Task Force and the Task Force on Community Preventive Services**

**Shawna L. Mercer, MSc, PhD, Director**

The Guide to Community Preventive Services (The Community Guide),  
Centers for Disease Control and Prevention (CDC)

June 2011

Office of Surveillance, Epidemiology, and Laboratory Services  
Epidemiology and Analysis Program Office



## Structure for My Presentation



- ❑ Overview of the US Preventive Services Task Force and the Task Force on Community Preventive Services
- ❑ Challenges in Evaluating the Evidence Base for Community Health Improvement
- ❑ Addressing the Challenges

# Community Health Improvement 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?

# Complementarity of the US Preventive Services Task Force and Community Preventive Services Task Force

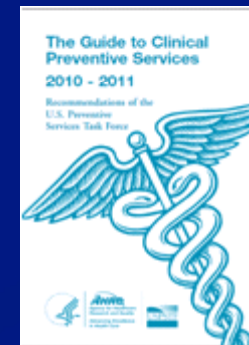
Topics of Intervention

Policy/Environment			<b>CPSTF</b> Public Health Perspective
Organization/System			
Information/Education			
Behavior Change Counseling			
Preventive Medications	<b>USPSTF</b> Clinical Perspective		
Screening Tests			
	Primary Care Offices	Health System Community- based Programs	Worksites Schools Communities States/Nation
		<b>Settings</b>	

# U.S. Preventive Services Task Force (USPSTF)

## Aims:

- ❑ To evaluate the benefits of individually-based clinical preventive services
  - Based on age, gender, and risk factors for disease
- ❑ To make recommendations about which clinical preventive services should be incorporated routinely into primary medical care and for which populations
- ❑ To identify a research agenda for clinical preventive care
- ☞ Recommendations, findings are compiled in the **Guide to Clinical Preventive Services (Clinical Guide)**



# Clinical Preventive Services

Evaluating the effectiveness of interventions that are typically delivered:

- ❑ At the level of the individual patient
- ❑ By a doctor, nurse, or other health care clinician
- ❑ Usually in a clinical setting
- ❑ Intervention types:
  - ❑ Screening tests
  - ❑ Preventive medications
  - ❑ Behavior change counseling

## Clinical Preventive Services: Examples

What is the effectiveness of...

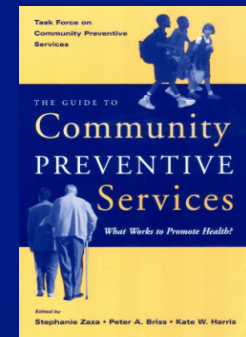
- ❑ Colorectal cancer screening for reducing colon cancer morbidity and mortality?
- ❑ Screening adult patients for obesity and offering counseling and behavioral interventions to promote sustained weight loss?
- ❑ Screening adults for depression?

» All from the Clinical Guide

# Task Force on Community Preventive Services (CPSTF)

## Aims:

- ❑ To evaluate the effectiveness and economic efficiency of community-based preventive services
  - ❑ To make recommendations for use of these interventions in policy and practice
  - ❑ To identify research gaps
- ➔ Recommendations, findings are found in the **Guide to Community Preventive Services (Community Guide)**





# Community Preventive Services

Evaluating the effectiveness of interventions that are typically delivered:

- ❑ At the group level
- ❑ Community or population-based
  - Demographic
    - State/province, city, neighborhood
    - Age, gender, race/ethnicity, economic status
  - Organization
    - Health care system
    - Schools
    - Worksites
- ❑ By a wide range of “providers”

# Community Preventive Services: Examples

What is the effectiveness of interventions...

- ❑ To increase colon cancer screening:
  - Client incentives?
  - Small media (e.g., pamphlets)?
  - Provider assessment and feedback?
  
- ❑ To prevent, control obesity:
  - Worksite programs?
  - Behavioral interventions to reduce screen-time (TV, computer, video games, etc.)?
  
- ❑ To prevent/control depression:
  - Collaborative care interventions?
  - Community-based exercise interventions?

» All from the Community Guide

## Community Preventive Services can be

### □ Informational

- Education programs when used alone for increasing use of child safety seats
- Mass media campaigns for reducing alcohol impaired driving

### □ Behavioral, Social

- Behavioral interventions to reduce risky sexual behavior and HIV, other sexually transmitted infections, and pregnancy among youth
- Cognitive behavior therapy in reducing psychological harm among children and adolescents following traumatic events

# Community Preventive Services can be

## □ Environmental, Policy

- Street scale urban design (lighting, improved safety, ease of walking) in increasing physical activity
- Smoking bans and restrictions in reducing exposure to environmental tobacco smoke

## □ Health System

- Disease management programs for diabetes control
- Client reminder and recall systems in increasing vaccination coverage

## Why were the Task Forces created?

To obtain and distill the best available evidence to support decision making through a process that is:

- ❑ Independent
- ❑ Transparent
- ❑ Systematic
- ❑ Credible
- ❑ Well-vetted
- ❑ Useful

## Brief History

- ❑ 1984:
  - First release of Clinical Guide
- ❑ Late 1980s – Mid 1990s:
  - Could there be a comparable guide for population-based public health?
- ❑ 1996:
  - U.S. Department of Health and Human Services established the Community Guide
    - As a resource for all of public health
    - Staff support (scientists, infrastructure) provided by CDC
    - Established the Task Force to direct its work

## **Both Task Forces use a rigorous, transparent process:**

- ❑ Use state-of-the-art systematic reviews
  - To evaluate the best available scientific evidence about the effectiveness of interventions and policies
- ❑ Make evidence-based recommendations:
  - For practice (programs and services)
  - For policy
- ❑ Highlight research gaps
  - Areas needing further study

## Both Task Forces have similar structures

- ❑ Independent, non-federal, rotating panels of experts that:
  - Oversee priority setting and selection of topics and interventions for review
  - Oversee conduct of individual systematic reviews
  - Make evidence-based recommendations for a wide range of US decision makers
- 👉 Serve without payment
- ❑ Federal Agencies provide administrative, research, and technical support to the Task Forces:
  - USPSTF: Agency for Healthcare Research and Quality (AHRQ)
  - CPSTF: CDC



## Groupings of Systematic Reviews

1. Systematic reviews whose intent is to be used to inform policy and practice decisions
  - Cochrane Collaboration
  - Campbell Collaboration
2. Systematic reviews conducted with the express goal of making formal recommendations for action for one or more specific user groups
  - Guide to Clinical Preventive Services
  - Guide to Community Preventive Services
  - NICE, UK
  - GRADE, International

# The Community Guide

The Community Guide Home Page

**GUIDE TO COMMUNITY Preventive Services** The Community Guide  
What works to promote health

SEARCH

## What is the Community Guide?

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. Systematic reviews are used to answer these questions:

- Which program and policy interventions have been proven effective?
- Are there effective interventions that are right for my community?
- What might effective interventions cost; what is the likely return on investment?

More than 200 interventions have been reviewed and the Task Force on Community Preventive Services has issued recommendations for their use. Learn more about the guide, our systematic review methods, and the Community Guide team.

### All Community Guide Topics

- Adolescent Health
- Alcohol
- Asthma
- Birth Defects
- Cancer
- Diabetes
- HIV/AIDS, STIs & Pregnancy
- Mental Health
- Motor Vehicle
- Nutrition
- Obesity
- Oral Health
- Physical Activity
- Social Environment
- Tobacco
- Vaccines
- Violence
- Worksite

### News & Announcements

**Cognitive Behavioral Therapy Can Benefit Youth Exposed to Traumatic Events**  
Individual and group cognitive behavior therapy reduces harm to youth who show psychological symptoms following exposure to traumatic events. [More »](#)

**Cancer Screening Reviews Updated**  
If everyone who should be screened for cancer got screened, many of the 17,175 leading cancer deaths per year could be prevented! [More »](#)

**Did You Know?**  
World No Tobacco Day is May 31. [More »](#)

### Other Key Information

- About the Community Guide
- Message from the Community Guide Director
- Task Force Findings
- Systematic Review Methods
- Community Guide Publications
- Community Guide Team
- The Guide to Clinical Preventive Services

Text size: [S](#) [M](#) [L](#) [XL](#)

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### Task Force Meetings

**2009**  
June 17-18  
October 14-15

**2010**  
February 17-18  
June 16-17  
October 20-21


**2011**  
February 16-17  
June 15-16  
October 19-20

Contact Us:


### Ways To Use The Community Guide

<b>Policies</b> Legislation, organizational policies...	<b>Research</b> Identifying gaps, setting priorities...
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**Task Force on Community Preventive Services**



THE GUIDE TO  
**Community PREVENTIVE Services**  
*What Works to Promote Health?*



*Edited by*  
**Stephanie Zaza • Peter A. Briss • Kate W. Harris**

[www.thecommunityguide.org](http://www.thecommunityguide.org)

## CPSTF Members

- ❑ Internationally renowned experts in public health research, practice, policy
- ❑ Chair – Director of Public Health, Health Officer, County of Los Angeles
- ❑ Vice Chair – Dean, School of Public Health, UNC, Chapel Hill
- ❑ Current members include:
  - State Medical Officer
  - Deans, Schools of Public Health, Medicine
  - Associate, full professors
  - Health policy experts
  - Worksite health experts
  - Health maintenance organization scientists
  - Foundation scientists

# Over 220 Task Force Recommendations

## The Environment

**Social Environment**

**Health Equity**

## Settings

**States  
Communities**

**Worksites  
Schools**

**Healthcare system  
Organizations**

## Risk Behaviors

## Specific Conditions

**Tobacco Use**  
**Alcohol Abuse/Misuse**  
**Other Substance Abuse**  
**Poor Nutrition**  
**Inadequate Physical Activity**  
**Unhealthy Sexual Behaviors**

**Vaccine-Preventable Disease**  
**Pregnancy Outcomes**  
**Violence**  
**Motor Vehicle Injuries**  
**Depression/Mental Health**  
**Cancer**  
**Diabetes**  
**Oral Health**  
**Obesity**  
**Asthma**  
**Cardiovascular disease**

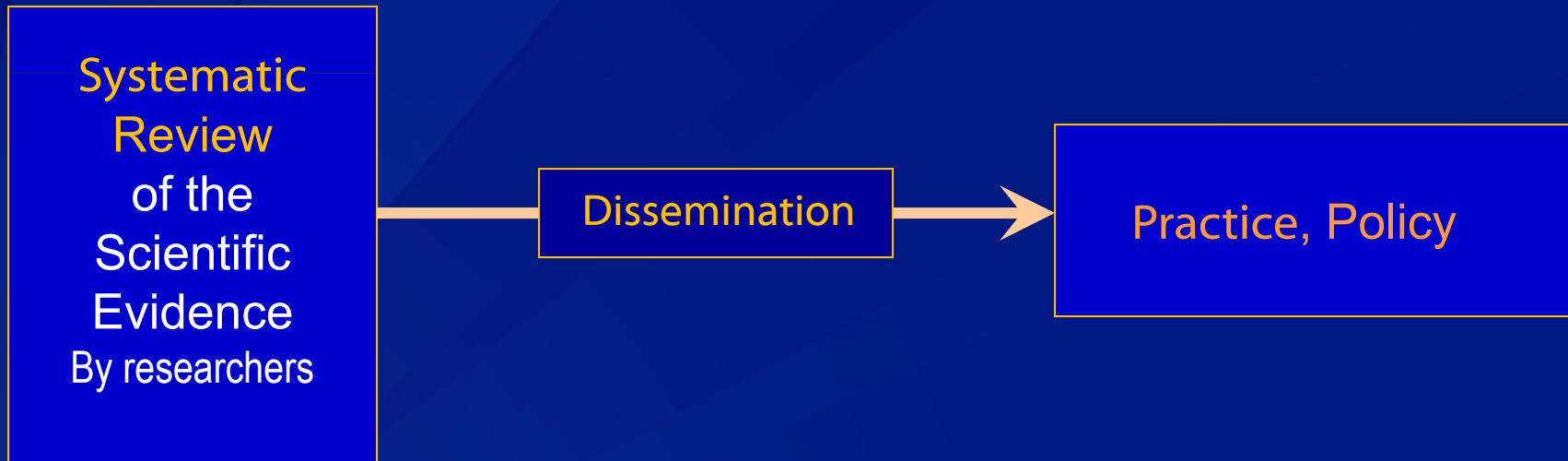
**Current reviews**

## Community Guide: How is it Used?

- To inform decision making around:
  - Practice (initiatives, programs)
  - Policy
  - Research
  - Funding for research and programs



# Challenge #1: A Typical Approach to Developing and Disseminating Evidence Based Recommendations: A Push Model



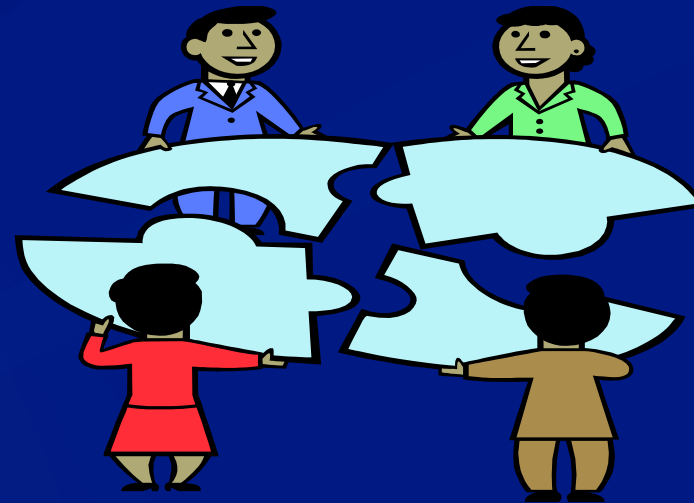
## Addressing Challenge #1

- By actively engaging in conducting and disseminating the systematic review 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



## Community Guide Places Equal Weight on

- The quality of the systematic review methods and analysis
- The group processes
  - Participation and collaboration





## **Intended Users Participation: Are we...**

- ❑ Prioritizing the right topics and interventions for review?
- ❑ Asking the right questions?
- ❑ Staying true to the important questions over the course of the review?
- ❑ Appropriately considering context, other issues of applicability to different settings, populations?
- ❑ Thinking proactively about interpretability, relevance, usefulness, use?
- ❑ Planning for and undertaking dissemination and translation into action from the outset?

## So Whose Participation Do We Seek in our Systematic Reviews?

- Who is to be affected by the recommendations and findings? Who are the intended users?
  - Practitioners
  - Policy makers
  - Health departments
  - Professional and Non-Governmental Organizations
  - Community-based organizations
  - Employers, employees
  - Minority or special populations
  - Researchers
  - Research funders
  - Educators



# User Involvement in the Community Guide

## □ Official Liaisons

- 30 federal agency and organizational
  - NIH, AHRQ, VA, all US Armed Forces, etc.
  - ASTHO, NACCHO, NALBOH, PHF, DHPE
  - Public health, physician, nurse, other organizations
    - APHA, AMA, Quad Council, ASPH
- Roles
  - Provide input into prioritization of topics, reviews, Task Force findings and recommendations
  - Serve on, recommend participants for review teams
  - Participate in dissemination and translation of Task Force findings, especially to their constituents



## Participants in Individual Reviews

- **Coordination Team (n=~10-15)**
  - Coordinating scientist (typically Community Guide)
  - Fellows, abstractors (Community Guide)
  - Subject matter experts
    - From CDC, other federal agencies, academia, practice, policy settings
  - Task Force member(s)
  - Liaison(s) to Task Force
- **Consultants, Consultation Team (n=~20-60)**
  - Subject matter experts

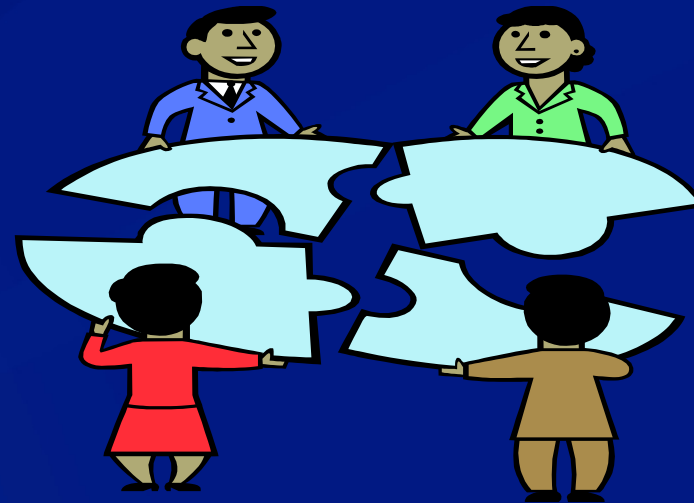


## Challenge #2: Will the intervention work for me?

- Always need to assess whether the intervention works under the conditions set forth in the study
  - Internal validity
  - When internal threats to validity are controlled, is the intervention effective?
- But most decision makers considering community preventive services want to know:
  - Are the findings **generalizable** across all the settings, situations and populations for which I am responsible?
  - Are the findings **applicable** to my *specific* setting, situation, or population?

## Community Guide Places Equal Weight on

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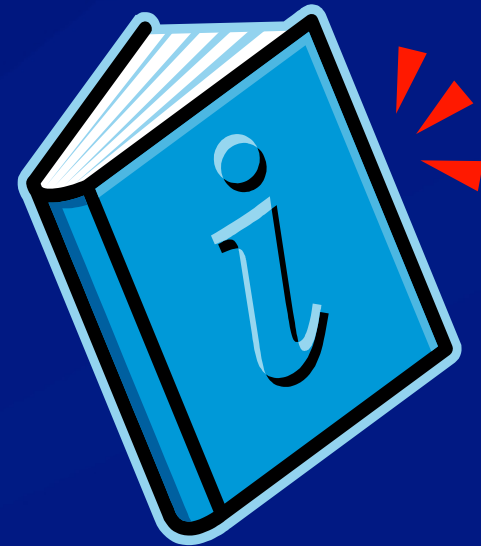


## Key Criteria Used in Prioritization of Review Topics

- ❑ Overall attributable burden
- ❑ Magnitude of preventable burden
  - Potential population reach, health benefit
  - Extent, feasibility, cost effectiveness of disease burden prevented
- ❑ Potential to reduce health disparities
- ❑ Degree and immediacy of interest expressed by major partners and stakeholders
- ❑ Alignment with strategic community prevention initiatives:
  - HP2020; National Prevention, Health Promotion Strategy
  - Communities Putting Prevention to Work; County Health Rankings
- ❑ Synergies with USPSTF, Advisory Committee on Immunization Practices
- ❑ Balance across topics, risk factors, settings, populations

## The CG Seeks to Answer Key Questions about Interventions

- ❑ Do they work?
- ❑ How well?
- ❑ For whom?
- ❑ Under what circumstance are they appropriate (applicability)?
- ❑ **What do they cost?**
- ❑ Do they provide value?
- ❑ Are there barriers to their use?
- ❑ Are there any harms?
- ❑ Are there any unanticipated outcomes?





## In General, a Conclusion About Effectiveness Requires....

A Body of Evidence

+

A Demonstration of Effectiveness

- Number of studies
- Quality of studies
  - Study limitations
- Suitability of study design

NB. Studies can be research-tested or practice-based

Consistency of Effect

+

Sufficient Magnitude of Effect

“Most” studies demonstrated an effect in the direction of the intervention

The effect demonstrated across the body of evidence is “meaningful”

## Formal Review of Applicability

- ❑ Information is explicitly provided to Task Force on applicability
  - Considered when they make recommendations
- ❑ Information is provided to users in a refined **Rationale Statement** accompanying the Task Force Recommendation Statement
- 👉 Remaining challenge: information is often limited
  - Critical role for program evaluation of real world programs, services, and policies!!!
  - Information can be incorporated into updates of CPSTF recommendations!

# Task Force Recommendation Options

## □ Recommend

- Strong Evidence
- Sufficient Evidence



## □ Recommend against

- Strong Evidence
- Sufficient Evidence



## □ Insufficient evidence to recommend for or against



## What Does Insufficient Evidence Mean?

- ❑ This does NOT mean that the intervention does not work
- ❑ Insufficient evidence means that additional research is needed to determine whether or not the intervention is effective
  - In some cases there are not enough studies to draw firm conclusions
  - In other cases, the available studies have inconsistent findings

## If “Insufficient Evidence,” then what?

- ❑ If the intervention is currently being used
  - May want to continue using it if there are no associated harms
  - May choose to stop due to issues such as cost
- ❑ If the intervention is not being used
  - May not want to begin using it
  - May choose to cite the IE finding in your funding proposal
- ❑ Consider:
  - Are there better documented alternatives for reaching the same goals?
  - If you undertake a practice-based innovation: Collect sufficient data so your experience can contribute to the evidence base!



## What to Do with a Recommendation

“Even if it is evidence-based,  
it is not certainty.”

McGinnis and Foege



- ❑ Not a cookbook or a one-size-fits-all solution
- ❑ Users must combine scientific information (e.g., effectiveness, cost) with other information (e.g., needs, values, capacities, resources)
- ❑ Community Guide aims to provide menus of options for decision makers

# How Can Public Health Agencies and their Partners Use the Community Guide in Support of Performance Improvement?

- In support of agency programmatic initiatives:
  - Plan and evaluate programs
  - Strengthen applications for programmatic funding
  - Justify program support/funding
  - Plan/modify systems
  - Learn what magnitude of effect might be possible from implementation of specific programs
  - Inform interface with the health care system to support delivery of effective clinical services

## How Can Public Health Agencies and their Partners Use the Community Guide in Support of Performance Improvement? (cont'd)

- In support of policy:
  - Identify policies, laws for which there is evidence of their effectiveness in achieving important public health outcomes
  - Learn what magnitude of effect might be possible from implementation of specific policies
  - Inform interface with governmental agencies, organizations, and other stakeholders in support of:
    - Health policies
    - Policies in other sectors with health implications



# Community Guide Web Site: Email Updates

The Community Guide Home Page

**GUIDE TO**  
**COMMUNITY**  
Preventive Services - **The Community Guide**  
What works to promote health

SEARCH

## What is the Community Guide?

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. Systematic reviews are used to answer these questions:

- Which program and policy interventions have been proven effective?
- Are there effective interventions that are right for my community?
- What might effective interventions cost; what is the likely return on investment?

Learn more [about the Community Guide](#), [collaborators](#) involved in its development and dissemination, and [methods](#) used to conduct the systematic reviews.

### All Community Guide Topics

- Adolescent Health
- Alcohol
- Asthma
- Birth Defects
- Cancer
- Diabetes
- HIV/AIDS, STIs & Pregnancy
- Mental Health
- Motor Vehicle
- Nutrition
- Obesity
- Oral Health
- Physical Activity
- Social Environment
- Tobacco
- Vaccines
- Violence
- Worksite

### News & Announcements

**Ignition Interlocks Recommended to Prevent Impaired Driving Re-Arrests**  
New publication features evidence-based recommendations to reduce alcohol-impaired driving. [More >>](#)

**Task Force Releases New Recommendations and Findings**  
Topics include excessive alcohol use, vaccination rates, and health communication campaigns. [More >>](#)

**Did You Know?**  
The Task Force recommends ways to improve sun-protective behaviors to prevent skin. [More >>](#)

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### Task Force Meetings

**2011**

- June 15-16
- October 3-4

**2012**

- February 22-23
- June 20-21
- October 10-11

**2013**

- February 20-21
- June 19-20
- October 22-24

### Ways To Use The Community Guide

<b>Policies</b> Legislation, organizational policies...	<b>Research</b> Identifying gaps, setting priorities, study quality...
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### Other Key Information

- [About the Community Guide](#)
- [Slides and Promotional Materials](#)
- [Collaborators](#)
  - [Task Force Members](#)
  - [Task Force Consultants](#)
  - [Liaisons to the Task Force](#)
  - [Community Guide Staff](#)
- [Systematic Review Methods](#)

Internet 100%

[www.thecommunityguide.org](http://www.thecommunityguide.org)



## Thank You!

For more information on the Clinical Guide:

Therese Miller, DrPH, AHRQ

[Therese.Miller@ahrq.hhs.gov](mailto:Therese.Miller@ahrq.hhs.gov)

[www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org)

Shawna Mercer, MSc, PhD, Community Guide, CDC

[smercercdc@cdc.gov](mailto:smercercdc@cdc.gov)

[www.thecommunityguide.org](http://www.thecommunityguide.org)

*The findings and conclusions in this presentation are those of the presenter and do not necessarily represent the views of CDC.*