



# Using Evidence for Public Health Decision Making:

## Assessment of Health Risks with Feedback to Change Employees' Health

# Community Guide Slide Modules

- This presentation is designed to be used with overview slide sets available at: [www.thecommunityguide.org](http://www.thecommunityguide.org)
  1. The Community Guide: A Brief Overview
    - How the Community Guide is developed under guidance of the Task Force on Community Preventive Services
  2. The Community Guide: Systematic Reviews to Inform Task Force Recommendations
    - Description of the Community Guide methods and how the Task Force uses information to form recommendations
- The focus of this presentation is “Using Evidence for Public Health Decision Making: Assessment of Health Risks with Feedback to Change Employees’ Health”

# Introduction

This slide presentation summarizes findings of the Task Force on Community Preventive Services (Task Force) for a set of systematic reviews to evaluate the effectiveness of Assessment of Health Risks with Feedback to change employees' health in worksite settings.

# Why Does the Community Guide Address Health Risk Assessments?

- Health risk assessments are frequently used without full understanding of effectiveness
- Modifiable behaviors are related to five of the twenty most costly physical health conditions for U.S. employers and may be addressed in worksite settings
- A majority of *Healthy People 2010* goals and objectives are relevant to the working population

# What Interventions were Reviewed?

- Assessment of Health Risks with Feedback (AHRF) - When used alone without other interventions
- Assessment of Health Risks with Feedback Plus Health Education (AHRF Plus) -With or without other health-related interventions

# Introduction to ARHF and AHRF Plus Interventions

- For this review, the term “assessment of health risks with feedback” (AHRF) refers to a process that includes three elements
- Although AHRF Plus can be offered as an independent intervention, it is often used as a gateway intervention to a broader worksite health promotion program (AHRF Plus)
- The required elements for AHRF and AHRF Plus are described in the following slides

# Required Elements of AHRF

- Assessment of personal health habits and risk factors
  - ◆ Collection of information:
    - At least two personal health behaviors or physiologic indicators
    - Formats: Person-to-person, Web-based, phone interviews, self-administered questionnaires
    - Content may include: blood pressure, cholesterol, weight, BMI, smoking status, alcohol use, seatbelt use

# Required Elements of AHRF

- Quantitative or qualitative assessment of health risk
  - ◆ Sample Calculations
    - Health risk score, health age, other summary risk result
  - ◆ Categorical description of risk status
    - For example: “you smoke and therefore are at increased risk for getting cancer”

# Required Elements of AHRF

- Feedback to participant to motivate individual action
  - ◆ Written or verbal report to employee
    - Statement or estimate of health risk
    - More detailed information may be included
      - ▶ Specific to individual responses
      - ▶ Tailored to employee risk
      - ▶ Focused on behaviors or chronic diseases of interest to employer
  - ◆ Delivery of feedback
    - Mail, one-on-one counseling, group session for individuals in same risk category

# Required Elements of AHRF Plus

- AHRF used as a gateway intervention
  - ◆ AHRF used one or more times
  - ◆ Feedback to participant plus options for addressing identified health risks
    - Information about programs directed towards prevention or treatment of health risks
    - Referrals to programs or providers addressing health risks

# Required Elements of AHRF Plus

- Health Education
  - ◆ Repeated sessions over time, or
  - ◆ Single session lasting one hour or longer
- Additional Interventional Components
  - ◆ Enhanced access to:
    - Physical activity (e.g., classes or on-site gym)
    - Nutrition (e.g., healthy food choices in cafeteria or health eating class)
    - Medical care (e.g., blood pressure checks)
  - ◆ Reduced out-of-pocket costs (e.g., gym vouchers)
  - ◆ Tobacco cessation classes or supports

# Background Information

# Who Makes Recommendations?

## Task Force on Community Preventive Services

- The Task Force is an independent, nonfederal, volunteer body of experts in public health and prevention research, practice and policy, appointed by the CDC Director to:
  - ◆ Prioritize topics for systematic review
  - ◆ Oversee systematic reviews done for the Community Guide
  - ◆ Develop evidence-based recommendations using the systematic review results
  - ◆ Identify areas that need further research

# What Questions Does the Task Force Ask about Interventions?

- Does it work?
  - ◆ How well?
  - ◆ For whom?
  - ◆ Under what circumstances is it appropriate?
- What does it cost?
- Are there barriers to its use?
- Are there any harms?
- Are there any unanticipated outcomes?

# What Do the Findings Mean?

- **Recommended**— strong or sufficient evidence that the intervention is effective
- **Recommended Against**— strong or sufficient evidence that the intervention is harmful or not effective
- **Insufficient Evidence** – the available studies do not provide sufficient evidence to determine if the intervention is, or is not, effective

# What Do the Findings Mean?

Strong and sufficient evidence judgments reflect:

- The number of available studies
- The research design of those studies
- The quality with which those studies were executed, and
- The overall magnitude of the effects (size of the outcome)

# What Does “Insufficient Evidence” Mean?

- 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
- This does **NOT** mean that the intervention does not work

# Systematic Review Questions

1. Does AHRF, when used alone, lead to behavior change or change in health outcomes among employees?
2. Does AHRF, when used with other worksite-based intervention components (AHRF Plus), result in change?
3. What types of behaviors or health outcomes are affected by these interventions?

# Categories of Outcomes Considered in AHRF Reviews

Behavioral	Physiologic	Other
Alcohol Use	Blood Pressure	Healthcare Service Use
Diet	Body Composition	Absenteeism
Physical Activity	Cholesterol	Health Risk Estimate
Seatbelt Use	Fitness	_____
Tobacco Use	_____	_____



# AHRF Used Alone: Recommendation & Findings

The Task Force found *insufficient evidence* to determine the effectiveness of Assessments of Health Risks with Feedback when implemented as the primary intervention.

# AHRF Plus: Recommendations & Findings

The Task Force **recommends** the use of Assessments of Health Risk with Feedback plus health education programs, with or without additional interventions based on strong evidence of effectiveness in improving one or more health behaviors or conditions in populations of workers.

# AHRF Plus: Outcomes with Strong or Sufficient Evidence of Effects

Outcome	Finding
Reducing tobacco use	Strong Evidence
Reducing at risk alcohol use	Sufficient Evidence
Improving measures of physical activity	Sufficient Evidence
Decreasing seat belt non-use	Sufficient Evidence
Reducing dietary fat intake	Strong Evidence
Reducing overall measures of blood pressure	Strong Evidence
Reducing measures of total cholesterol	Strong Evidence
Reducing number of days lost from work due to illness or disability	Strong Evidence
Improving summary health risk estimates	Sufficient Evidence
Improving various measures of healthcare services use	Sufficient Evidence

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# AHRF Plus: Outcomes with Insufficient Evidence of Effects

Outcome	Finding
Increasing dietary intake of fruits and vegetables	Insufficient Evidence
Improving body composition (i.e., Body Weight, BMI, Percent Body Fat)	Insufficient Evidence
Improving physical fitness	Insufficient Evidence

# Implementation of AHRF Plus: Potential Challenges for Employers

- Preserving confidentiality
- Attracting “worried well” employees
- Maintaining (high or satisfactory) levels of employee participation
  - ◆ Results of this review suggest even with low participation employees reap benefits

# Implementation of AHRF Plus: Potential Challenges for Employees

- Concerns about privacy protection
- Information received during feedback may cause anxiety
- False positives are likely, particularly with biometric screening
  - ◆ May experience “white coat” syndrome during check of blood pressure
  - ◆ May not follow fasting guidelines for check of cholesterol

# Where to Find More Information

- Task Force findings and recommendations on Assessment of Health Risks with Feedback to Change Employees' Health:

[www.thecommunityguide.org/worksites/ahrf.html](http://www.thecommunityguide.org/worksites/ahrf.html)

# References

- Soler RE, Leeks KD, Sima Razi, Hopkins DP, Griffith M, Aten A, Chattopadhyay SK, Smith SC, Habarta N, Goetzel RZ, Pronk NP, Richling DE, Bauer DR, Ramsey Buchanan LR, Florence CS, Koonin L, MacLean D, Rosenthal A, Koffman DM, Grizzell JV, Walker AM, Task Force on Community Preventive Services. A systematic review of selected interventions for worksite health promotion: the assessment of health risks with feedback. *Am J Prev Med* 2010;38(2S):237-262.
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- Guide to Community Preventive Services. Assessment of health risks with feedback to change employees' health. [www.thecommunityguide.org/worksite/ahrf.html](http://www.thecommunityguide.org/worksite/ahrf.html). Last Updated: March 9, 2010.

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Visit the Community Guide Web site and find out what works to promote health and safety in your community. Learn about:

- Evidence-based Task Force findings and recommendations
- Systematic review methods
- Interventions on 18 public health topic areas
- How to use the Community Guide
- And more!

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