## Guide to evidence-based prevention

### Part 2. How to navigate sources of evidence

There are numerous systematic reviews and online registries of evidence-based prevention strategies. Each has its benefits and drawbacks, and no one source is complete. It can therefore be challenging to sort out which of these sources has the most credible information and is the best fit for a decision-making process. Figure 5 below displays the types of sources where available evidence on prevention strategies can typically be found.

**Figure 5.**

**Sources of evidence-based strategies**

<table>
<thead>
<tr>
<th>Type of source</th>
<th>Examples</th>
<th>Rigor, credibility, and strength of evidence</th>
<th>Ease of use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systematic reviews</td>
<td>Guide to Community Preventive Services (Community Guide) • US Preventive Services Task Force recommendations (USPSTF) • The Cochrane Collaborative • The Campbell Collaboration Library of Systematic Reviews</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Peer-reviewed literature</td>
<td>Articles published in academic and scientific journals, such as the American Journal of Public Health, American Journal of Preventive Medicine or the New England Journal of Medicine. Many can be accessed online through PubMed, Medline, Google Scholar, etc.</td>
<td>Moderate to high</td>
<td>Low</td>
</tr>
<tr>
<td>Searchable databases and evidence registries</td>
<td>What Works for Health (County Health Rankings and Roadmaps)* • National Registry of Evidence-Based Programs and Practices (NREPP) • Research-tested Intervention Programs (RTIPs)* • Promising Practices Network — Programs That Work* • California Evidence-based Clearinghouse for Child Welfare* • What Works Clearinghouse* • Blueprints for Health Youth Development* • Public Health Law Research — Evidence briefs* • Crimessolutions.gov* • Office of Juvenile Justice and Delinquency Prevention (OJJDP) Model Programs Guide* (RTIPs)*</td>
<td>Moderate to high</td>
<td>High</td>
</tr>
<tr>
<td>Grey literature</td>
<td>Recommendations from expert panels, such as the Institute of Medicine (IOM) and the National Prevention, Health Promotion, and Public Health Council • Reports from federal agencies such as the US Centers for Disease Control (CDC) and Prevention or the US Department of Health and Human Services (HHS) • Reports from nonpartisan organizations, such as the Association of State and Territorial Health Officials (ASTHO), the RAND Corporation, Prevention Institute, PolicyLink, and Trust for America’s Health</td>
<td>Varies widely</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Where to start
When considering prevention strategies to implement in community settings (rather than clinical settings), including policy and environmental change approaches, as well as programs that are delivered to individuals, the following sources are excellent places to start (see Figure 6):
• The Community Guide (US Centers for Disease Control and Prevention)
• What Works for Health (County Health Rankings and Roadmaps)
• Topic-specific recommendations from expert panels and other “grey literature"
• Topic-specific evidence registries

As a rigorous systematic review, the US Centers for Disease Control and Prevention’s Community Guide is considered to be the “gold standard” source for evidence-based public health interventions in community settings. Not all topics, however, are covered by the Community Guide so it is useful to refer to multiple sources. The What Works for Health online evidence registry covers a broader range of topics and, along with other online evidence registries and recommendations from expert panels, makes an excellent supplement to the Community Guide. The Community Guide and What Works for Health stand out among sources of evidence for being comprehensive (addressing a wide range of health-related topics), including policy and environmental change approaches, and being easy to use. Starting with these sources and then supplementing them with additional materials, such as reports from expert panels and other grey literature, is an excellent first step.

Clarifying goals and narrowing scope
Defining the goals for a prevention strategy and the scope of the search will help to narrow down the types of sources to consult. Key considerations include:
1. **Time and expertise.** It can be time-consuming to comb through peer-reviewed literature or through some of the systematic review databases such as the Cochrane Collaborative and Campbell Collaborative. Websites such as the Community Guide and What Works for Health, however, are designed to be user-friendly and do not require a great deal of time or expertise to use.
2. **Desired outcomes and goals.** Is the aim to reduce risk factors or increase protective factors, or to decrease the prevalence of a disease or condition? Being clear about specific desired outcomes will help to guide the search for evidence. For example, the Community Guide includes sections on obesity and cardiovascular disease (health conditions), but also has recommendations for physical activity and nutrition which address the risk and protective factors, behaviors, and community conditions that affect obesity and cardiovascular disease.
3. **Type of health issue to be addressed.** Many grey literature reports and searchable databases focus on specific diseases or health conditions, such as cancer, asthma, violence, or drug and alcohol use. Some sources address the social determinants of health. For example, the Campbell Collaboration specializes in crime, justice, education, and social welfare, and the Promising Practices Network reviews programs that address school readiness and poverty. The Community Guide includes recommendations for health equity and What Works for Health reviews a comprehensive set of programs and policies designed to address social and economic factors.
4. **Type of approach and setting.** Some sources, such as the USPSTF recommendations, only include preventive services for clinical settings, such as screening, counseling, and preventive medications. The Community Guide and What Works for Health include a wide range of approaches, including behavioral and educational programs delivered in community and health care settings, and policy, system, and environmental change strategies.

Online registries, expert panels, and systematic reviews always address a specific scope of topics and intended uses; rather than including the universe of all prevention activities, they narrow the range of programs and strategies they will assess. Figure 7 displays a framework for
understanding how the scope and content of online evidence registries varies depending upon the types of outcomes being addressed, intervention approaches being used, and settings for the programs and strategies they include.

For more information about the steps involved in selecting prevention strategies, including an Ohio case study, view the following publication prepared by the Health Policy Institute of Ohio and the Ohio Department of Health: Evidence in Action: A guide to selecting effective prevention strategies.

Figure 6.
Where to start your search for evidence-based prevention strategies for community settings

1. The Community Guide
The Guide to Community Preventive Services, US Centers for Disease Control and Prevention

Systematic review of broad strategies and general types of interventions for the following topics:
- Asthma
- Birth defects
- Cancer
- Cardiovascular disease
- Diabetes
- HIV/AIDS, STIs, pregnancy
- Obesity
- Adolescent health
- Mental health
- Oral health
- Motor vehicle injury
- Violence
- Alcohol — Excessive consumption
- Nutrition
- Physical activity
- Tobacco
- Emergency preparedness
- Health communication
- Vaccination
- Worksite
- Health equity
- Social environment

2. What Works for Health
County Health Rankings and Roadmaps, Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute

Comprehensive rating database of strategies, programs, and policies for the following topics:

<table>
<thead>
<tr>
<th>Clinical Care</th>
<th>Health Behaviors</th>
<th>Social &amp; Economic Factors</th>
<th>Physical Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to care</td>
<td>Tobacco use</td>
<td>Education</td>
<td>Environmental quality</td>
</tr>
<tr>
<td>Quality of care</td>
<td>Diet &amp; exercise</td>
<td>Employment</td>
<td>Built environment</td>
</tr>
</tbody>
</table>

3. Topic-specific recommendations and evidence registries

Recommendations from expert panels
Such as reports from:
- Institute of Medicine (IOM)
- National Prevention, Health Promotion, and Public Health Council

Examples include:
- IOM report Accelerating Progress in Obesity Prevention
- IOM report Preventing Mental, Emotional, and Behavioral Disorders Among Young People
- National Prevention Strategy

Recommendations from other “grey literature”
From federal agencies/offices such as:
- CDC
- HHS
- US Surgeon General

From nonpartisan organizations such as:
- ASTHO
- RAND Corporation
- Prevention Institute
- PolicyLink
- ChangeLab Solutions
- Trust for America’s Health

Topic-specific database and evidence ratings
Examples include:
- What Works for Health (County Health Rankings and Roadmaps)*
- National Registry of Evidence-Based Programs and Practices (NREPP)
- Research-tested Intervention Programs (RTIPs)*
- Promising Practices Network — Programs That Work*
- California Evidence-based Clearinghouse for Child Welfare*
- What Works Clearinghouse*
- Blueprints for Healthy Youth Development*
- Public Health Law Research — Evidence briefs*
- Crimesolutions.gov*
- OJJDP Model Programs Guide*
*Provides evidence-of-effectiveness ratings
Figure 7.
Outcomes, approaches and settings addressed by online registries of evidence-based programs and strategies

**Online Registries of Evidence-Based Prevention Programs and Strategies**

**Social, Economic, and Physical Environment (Social Determinants of Health)**
- Promising Practices Network (school success, poverty, juvenile justice)
- Crime Solutions.gov
- OJJDP Model Programs Guide (juvenile justice, school success)
- What Works Clearinghouse (education)

**Risk and Protective Factors and Health Behaviors**
- National Registry of Evidence-Based Programs and Practices (NREPP)
- California Evidence-Based Clearinghouse for Child Welfare
- Blueprints for Healthy Child Development
- RTIps (Research-tested Intervention Programs)

**Clinical Outcomes**
- Guide to Clinical Preventive Services (USPSTF)

**Approach and Setting**

**Clinical Preventive Services**
Delivered to individual patients, clients, and consumers

**Settings:** Primary care office/clinic, hospital, mental health center, or other healthcare setting

**Examples:** Cancer screening, nutrition counseling

**Community-Based Prevention Programs and Strategies**
Delivered to program participants as individuals, families, or groups

**Settings:** Home, school, child care, workplace, local community

**Examples:** Home visiting programs for new parents, school-based violence or tobacco prevention programs, and workplace wellness programs

**Policy, System, and Environmental Change Strategies**
For all residents in a geographic area, or for all students or employees in a school or workplace

**Settings:** School, child care, workplace, neighborhood, city, county, state, or country

**Examples:** Smoke-free workplace laws, voucher reimbursement for farmer’s markets, and changes to the built environment (such as sidewalks, crosswalks, and bike lanes)

**Notes**