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Providing Evidence-Based Public Health Resources: The Librarian’s Role

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Providing Evidence-Based Public Health Resources: The Librarian's Role

Elaine Martin
Hathy Simpson
Nancy Peterson

NAHSL September 27, 2005
Evidence-Based Practice for Public Health Project
http://library.umassmed.edu/ebpph

Partners in Information Access for the Public Health Workforce Project
http://PHPartners.org
The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of communities and populations in the domain of health protection, disease prevention, health maintenance and improvement.

Source:
The Public Health Workforce

- Epidemiologists
- Statisticians
- Environmental Engineers
- Animal Control Officers
- Sanitarians
- Food Scientists
- Industrial Hygienists
- Health Care Administrators
- Health Economists
- Politicians
- Social Workers
- Mental Health Workers
- Substance Abuse Counselors
- Doctors
- Nurses
- Teachers
- Disaster Relief Workers
- Nutritionists
- Lab Technicians
- Librarians
Evidence-Based Public Health

Best Evidence from Research

Social values, Politics, Economics

$ 

Expertise, Knowledge

Decisions for Public Health Practice
- Interventions
- Programs
- Policies
Evidence-Based Public Health Process

1. Define the public health problem.
2. Search and find the best evidence.
3. Critically appraise the evidence for validity and relevance.
4. Apply the evidence to practice.
5. Evaluate the results.

1. Define the public health problem

Convert the information needs into answerable questions
Forming a Searchable Public Health Question

PICO

P - Population
I - Intervention
C - Comparison
O - Outcome
2. Search and find the best evidence

3. Critically appraise the evidence for validity and relevance
Evidence-Based Resources for Public Health Practice

- Evidence-Based Guidelines
- Systematic Reviews
- Pre-formulated & Filtered Searches
- Best & Model Practices
- Public Health Bibliographic Databases
- Public Health Journals

Project Web Site: http://library.umassmed.edu/ebpph
Evidence-Based Guidelines
http://www.thecommunityguide.org

In The Spotlight:
The Guide to Community Preventive Services is now available in book form.
Get your copy at a 15% discount.
Or read individual chapters here

America’s Health: State Health Rankings – 2004 Edition

The Community Guide at a Glance

Recommendations by Topic

Changing Health Risk Behaviors
- Physical Activity
- Tobacco Product Use
- Nutrition
- Sexual Behavior
- Alcohol Abuse

Addressing Specific Health Conditions
- Cancer
- Diabetes
- Mental Health
- Motor Vehicle Occupant Injury
- Obesity
- Oral Health
- Vaccine Preventable Diseases
- Violence

Addressing the Environment
- Social Environment

Información en Español
## Tobacco Use Prevention & Control

### Interventions

<table>
<thead>
<tr>
<th>Strength of Evidence</th>
<th>Smoking bans and restrictions</th>
<th>Community education</th>
<th>Increasing the unit price for tobacco</th>
<th>Media campaigns with interventions</th>
<th>Smoking cessation series</th>
<th>Smoking cessation contests</th>
<th>Provider education systems alone</th>
<th>Provider reminder systems alone</th>
<th>Provider reminder systems with provider ed</th>
<th>Provider feedback system</th>
<th>Reducing patient costs for treatments</th>
<th>Quitter telephone support with interventions</th>
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</thead>
<tbody>
<tr>
<td>Recommended (Strong Evidence)</td>
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<td>Recommended (Sufficient Evidence)</td>
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<td>Insufficient Evidence to Determine Effectiveness</td>
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<td>Reducing Environmental Tobacco Smoke</td>
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<td>Reducing Initiation</td>
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<td>Increasing Cessation</td>
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</tbody>
</table>

- **Smoking bans and restrictions**: Highly recommended (3 blue dots)
- **Community education**: Insufficient evidence to determine effectiveness (1 blue dot)
- **Increasing the unit price for tobacco**: Highly recommended (3 blue dots)
- **Media campaigns with interventions**: Highly recommended (3 blue dots)
- **Smoking cessation series**: Insufficient evidence to determine effectiveness (1 blue dot)
- **Smoking cessation contests**: Insufficient evidence to determine effectiveness (1 blue dot)
- **Provider education systems alone**: Insufficient evidence to determine effectiveness (1 blue dot)
- **Provider reminder systems alone**: Sufficient evidence (2 blue dots)
- **Provider reminder systems with provider ed**: Highly recommended (3 blue dots)
- **Provider feedback system**: Insufficient evidence to determine effectiveness (1 blue dot)
- **Reducing patient costs for treatments**: Sufficient evidence (2 blue dots)
- **Quitter telephone support with interventions**: Highly recommended (3 blue dots)
Reviews of Evidence Regarding Interventions to Reduce Tobacco Use and Exposure to Environmental Tobacco Smoke

David P. Hopkins, MD, MPH, Peter A. Briss, MD, Connie J. Ricard, MPH, Corinne G. Husten, MD, MPH, Vilma G. Carande-Kulis, MS, PhD, Jonathan E. Fielding, MD, MPH, MBA, Mary O. Alao, MA, Jeffrey W. McKenna, MS, Donald J. Sharp, MD, DTM&H, Jeffrey R. Harris, MD, MPH, Trevor A. Woollery, PhD, Kate W. Harris, BA, The Task Force on Community Preventive Services

Overview: This report presents the results of systematic reviews of effectiveness, applicability, other effects, economic evaluations, and barriers to use of selected population-based interventions intended to reduce tobacco use and exposure to environmental tobacco smoke. The related systematic reviews are linked by a common conceptual approach. These reviews form the basis of recommendations by the Task Force on Community Preventive Services (TFCPS) regarding the use of these selected interventions. The TFCPS recommendations are presented on page 67 of this supplement.

Cochrane Health Promotion and Public Health Field

Cochrane reviews (and protocols) of relevance to health promotion and public health

The Cochrane reviews and protocols (reviews in progress) below are available in The Cochrane Library. Abstracts of the reviews can be viewed at no charge at the Collaboration’s website (http://www.cochrane.org/cochrane/revabstr/mainindex.htm).

Full text of reviews and protocols are only available through The Cochrane Library (http://www3.interscience.wiley.com/cgi-bin/mrwhome/106568753/HOME).

(new) indicates new entry as at Issue 3, 2005 of The Cochrane Library

For a list of current titles (topics registered with a Review Group, for progress to a Cochrane protocol) of health promotion/public health interventions, click here.

Cardiovascular health

REVIEWs
- Smoking cessation for the secondary prevention of coronary heart disease
- Interventions for promoting physical activity
- Home versus center based physical activity programs for older adults
- Reduced dietary salt for prevention of cardiovascular disease
- Effects of low sodium diet versus high sodium diet on blood pressure, renin, aldosterone, catecholamines, cholesterol, and triglyceride
- Multiple-risk factor interventions for primary prevention of coronary heart
Cochrane Systematic Review

Helmets for preventing injury in motorcycle riders

B Liu, R Ivers, R Norton, S Blows, SK Lo

Search strategy

Databases including the Cochrane Injuries Group Specialised Register, Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, CINAHL, IRRD (International Road Research Documentation), TRANSDOC, TRIS (Transport Research Information Service), ATRI, Science Citation Index were searched for relevant articles. Web sites of traffic and road accident research bodies including government agencies were also searched. Reference lists from topic reviews, identified studies and bibliographies were examined for relevant articles.
Systemic Reviews

http://health-evidence.ca

[Screen shot of a health evidence website with categories and a search bar.]
Pre-formulated PubMed Searches
http://phpartners.org/hp

HP2010 Information Access Project

Search by Focus Area
This site lets you search for published literature related to the Healthy People 2010 focus areas.

- Access to Quality Health Services
- Arthritis, Osteoporosis, and Chronic Back Conditions
- Cancer
- Chronic Kidney Disease
- Diabetes
- Disability and Secondary Conditions
- Educational and Community-Based Programs
- Environmental Health
- Family Planning
- Food Safety
- Health Communication
- Hearing Objectives
- Heart Disease and Stroke
- HIV
- Immunization and Infectious Diseases
Healthy People 2010 Information Access Project

http://phpartners.org/hp

Food Safety

Search by Focus Area | About this Project | Tips on Searching | Give Us Feedback | Contributors

Click the PubMed button to run the search in PubMed.

Link to the complete Healthy People 2010 Chapter.

Reduce infections caused by key foodborne pathogens. (Objective 10-01)

Prevent an increase in the proportion of isolates of Salmonella species from humans and from animals at slaughter that are resistant to antimicrobial drugs. (Objective 10-03)

Increase the proportion of consumers who follow key food safety practices. (Objective 10-05)

Improve food employee behaviors and food preparation practices that directly relate to foodborne illnesses in retail food establishments. (Objective 10-06)

Reduce human exposure to organophosphate pesticides from food. (Objective 10-07)

Related Resources

- MEDLINEplus - Food Poisoning
- MEDLINEplus - Food Safety
- MEDLINEplus - Salmonella Infections
Items 1 - 20 of 68

1. Food and Drug Administration, HHS.
   Irradiation in the production, processing, and handling of food. Final rule.
   PMID: 16104072 [PubMed - indexed for MEDLINE]

2. Taylor M.
   Securing the hospital food chain. Food safety emerges as another homeland-security challenge as hospitals, vendors update disaster plans and tighten procedures.
   PMID: 16047706 [PubMed - indexed for MEDLINE]

   Associations between on-farm and slaughter plant detection of Salmonella in market-weight pigs.
   PMID: 15726964 [PubMed - indexed for MEDLINE]

4. Pallaske GA.
   Why are inspections necessary?
   PMID: 15690906 [PubMed - indexed for MEDLINE]
Model Practices Database
http://archive.naccho.org/modelPractices

Click on states highlighted in red to view practices in that state.

To view practices by topic, click on one of the categories below.

<table>
<thead>
<tr>
<th>Community Health</th>
<th>Environmental Health</th>
<th>Public Health Infrastructure and Preparedness</th>
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</thead>
<tbody>
<tr>
<td>Access to Care</td>
<td>Air Quality</td>
<td>Bioterrorism and Emergency Preparedness</td>
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<td>Chronic Disease</td>
<td>Animal Control</td>
<td>Cultural Competence</td>
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<td>Community Assessment</td>
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<td>Information Technology</td>
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<td>Community Involvement</td>
<td>Health</td>
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<td>Health Disparities</td>
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<td>Land Use Planning</td>
<td>Workforce Development</td>
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<tr>
<td>Injury Prevention</td>
<td>Vector Control</td>
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<tr>
<td>Maternal and Child Health</td>
<td>Water Quality</td>
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<tr>
<td>Primary Care</td>
<td>Waste Water</td>
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<tr>
<td>Tobacco</td>
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</tbody>
</table>
Examples of Public Health Bibliographic Databases
Available by Subscription Only:

- CINAHL
- EconLit
- EMBBASE
- PsycINFO
- Science Citation Index
- Social Science Citation Index
- Sociological Abstracts
Free Online Public Health Databases

Free Public Health Databases

- ADOLEC, Literature on Adolescence Health
- AEGIS (AIDS Education Global Information System)
- African Index Medicus
- AgeLine
- AGRICOLA
- Alcohol and Alcohol Problems Science Database (ETOH)
- Alcohol Studies Database
- Annual Review of Population Law
- ARIV (Alcohol-Related Injury & Violence Literature Database)
- BCERF, Environmental Risk Factor Database
- BiblioMap: Health Promotion References
- Cancer Prevention and Control Database
- CancerLit
- Catalog of U.S. Government Publications
- CDC Recommends: The Prevention Guidelines System
- CDC Wonder
- CHID (Combined Health Information Database)
- CPDB (Carcinogenic Potency Database)
- DESASTRES, Disaster Documentation Center Collection
- Developmental & Reproductive Toxicology (DART/ETIC)
- Dissertation Abstracts
- DOE Information Bridge
- DoPHER, Database of Promoting Health Effectiveness Reviews
- ECOTOX
- EMIC (Environmental Mutagen Information Center)
- Epilepsy Education, Management and Prevention Activities Database
- ERIC
- EthnoMed
- EurasiaHealth Knowledge Network Multilingual Library
- GPO Access
- Health Communication Materials Database
Public Health Journals

Knowledge Domain: Environmental Health

Applied Occupational and Environmental Hygiene
Knowledge Domain(s): Occupational Health; Environmental Health

Archives of Environmental Contamination and Toxicology
Knowledge Domain(s): Environmental Health

Archives of Environmental Health
Knowledge Domain(s): Environmental Health

Archives of Toxicology
Knowledge Domain(s): Environmental Health

ATSDR Toxicological Profiles
Knowledge Domain(s): Environmental Health

Bulletin of Environmental Contamination and Toxicology
Knowledge Domain(s): Environmental Health

Contact Dermatitis
Knowledge Domain(s): Environmental Health; Occupational Health; Chronic Diseases & Conditions

Critical Reviews in Toxicology
Knowledge Domain(s): Environmental Health
SPECIAL THEME: ORAL HEALTH

Research: Visiting the dentist in Burkina Faso

Policy & Practice: Oral health promotion in schools

In focus: more oral health care for ageing populations

Volume 83, Number 9, September 2005, 641-720
Table of contents

SUBMIT A MANUSCRIPT
How to submit your manuscript
Guidelines for contributors [pdf 76kb]

MOST DOWNLOADED ARTICLES
The most downloaded articles of 2005

HAVE YOUR SAY
Additional Public Health Information Sources

- Grey literature
- News
- Listservs
- Government reports
- Statistics
- Meeting abstracts
- Organization websites
Discussion and E-mail Lists

Resources to support e-mail communication among public health colleagues. The News page also provides links to help you stay informed.

- **AHRQ Electronic Newsletter (Non-Media Only)** - (Agency for Healthcare Research and Quality) - An electronic newsletter is provided for people who are interested in receiving announcements and information by E-mail about Agency activities. The newsletter is sent out on a regular basis, as news warrants. It describes the results of AHRQ-funded studies, announces the availability of new print and electronic resources, gives updates on the status of current funding opportunities, and much more.

- **AHRQ's Bioterrorism Preparedness Listserv®** - (Agency for Healthcare Research and Quality) - For Discussion and E-mail Lists page Items of interest about the results of AHRQ’s bioterrorism preparedness research, planning, and response projects.

- **AHRQ's Patient Safety E-Newsletter** - The Agency for Healthcare Research and Quality (AHRQ) publishes the Patient Safety E-Newsletter to make available important patient safety news and information. The E-Newsletter is issued on a monthly basis.

- **Bringing Health Information to the Community** - Website contains many useful public health links with a description of the resource. A digest version is also available.

- **Centers for Public Health Preparedness Newsgroup** - (Centers for the Study of Bioterrorism and Emerging Infections)

- **EPA Lists** - (Environmental Protection Agency)

- **EPA Subscribe to E-mail Notification of News and Information** - (Environmental Protection Agency)

- **FDA & You, News for Health Educators and Students** - (Food and Drug Administration) - An educational newsletter intended for use by health educators, secondary school students and their parents. It contains news about medical products from each of FDA's five Centers

- **FDA E-mail Lists** - (U.S. Food and Drug Administration)

- **Join Online Discussion Groups** - (American Public Health Association) - Sections have discussion groups that are open to members of APHA

- **Listservs at NCHS** - (National Center for Health Statistics, Centers for Disease Control and Prevention) - List of over 10 subject electronic distribution lists set up by the National Center for Health Statistics

- **New Minority Grant Listserv** - (Centers for Disease Control and Prevention) - Subscribers will have a
Public Health Information and Data Tutorial provides instruction for members of the public health workforce on issues related to information access and management. This tutorial is based on Public Health Information and Data: A Training Manual. There are no copyright restrictions on the contents of this tutorial or the training manual, and users are free to adapt or duplicate any portion.

The contributors and authors of this tutorial’s content represent city, county, state and federal agencies. They establish clear connections to recognized competencies in public health and provide examples representing much of the diversity inherent in the practice of public health.

**Learning objectives:**

- Stay informed of developments and events related to public health;

- Find reliable and authoritative consumer-oriented materials to support health education;

- Retrieve statistical information and access data sets relevant to public health; and

- Retrieve and evaluate information in support of evidence-based practice.

Suggestions for improving this tutorial are encouraged. Please share your suggestions [here](http://phpartners.org/tutorial/index.html).
New England Public Health Resources
http://nnlm.gov/ner/publichealth.html

Public Health Resources

Information Resources

- Partners in Information Access for the Public Health Workforce
- Evidence-Based Public Health Project, Lamar Soutter Library, University of Massachusetts Medical School (Worcester, MA)
- Public Health and Epidemiology Web Sites, University of Connecticut Health Center (Farmington, CT)
- E-Roadmap to Evidence-Based Public Health, New Hampshire Institute for Health Policy and Practice (Durham, NH)

Training on Information Resources

- PubMed Point-Blank
- TOXNET Overview
- Public Health Information and Data: A Training Manual
- Evidence-Based Public Health: Finding and Appraising

State Resources

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont
Contact Information

Hathy Simpson, MPH
Public Health Project Coordinator

e.hatheway.simpson@umassmed.edu
508-856-3594