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Improving Access to Credible and Relevant Information for Public Health Professionals: A Qualitative Study of Information Needs in Communicable Disease Control

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Improving Access to Credible and Relevant Information for Public Health Professionals: A Qualitative Study of Information Needs in Communicable Disease Control

Authors

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Keywords

public health practice, public health workforce, state health departments, communicable disease control, information needs



Improving Access to Credible and Relevant Information for Public Health Professionals

A Qualitative Study of information Needs in Communicable Disease Control

November 8, 2004

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Association of Teachers of Preventive Medicine

Project TS-0734



Project Staff

Principal Investigator:

- *Elaine Martin*

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- *E. Hatheway Simpson*

Consultants:

- *Nancy La Pelle, PhD*
- *Roger Luckmann, MD*



Outline

- **Project Background & Purpose**
- **Study Detail/Findings**
- **Future Project Directions**



Project Background

- Evidence can be applied to solve public health problems if readily accessible
- Improved access may be needed to high quality, evidence-based public health practice information
- Evidence-Based Practice for Public Health Project Website:
<http://library.umassmed.edu/ebpph>



Project Purpose

- **Use qualitative method to determine evidence-based practice information needs of public health (PH) workers**
 - Find out how PH professionals currently access information and what enhancements they need
- **Make recommendations to the CDC to improve access to PH information**



Qualitative Study Detail

Sample:

- 12 State level public health (PH) professionals
- Bureau of Communicable Disease Control
- Those with strongest info accessing needs

Data Collection & Analysis:

- Taped/transcribed key informant interviews
- Taped/transcribed follow-up focus group
- Thematic analysis of all data



Focus of Individual Interview

- **Type of work tasks performed requiring access to critical external information?**
- **Current used and preferred info sources (online and offline)?**
- **Preferred format for research reports (abstracts, full text, reviews/commentaries)?**
- **Current barriers to information access?**
- **Desired enhancements for access?**



Findings Related to Context

- **All DPH staff have PCs, access to internet**
- **Large sophisticated DPH website**
- **Multiple DPH sites and more than one library site**
- **Urgency of information need differs widely**
- **Electronic information access differs widely**



Findings/Information Needs Continuum Emerged

Formal Research Support for Information

None  Some

Emerging disease
Outbreaks

Emerging practices

Established diseases
Reference info

Policies and
guidelines

Published research
reports

Different sources for different info needs



Findings/Information Needs Continuum Emerged

Info Focus

Example

Access

Emerging disease	SARS	Alerts
Emerging practices	STD	Solicited info/conferences
Established diseases	TB	Website search
Policies and guidelines	Immunization	Website search
Published research	Effective Interventions	Journal search engines



Findings/PH Info Access Needs Not Currently Met

- Organizing/filtering requested and unsolicited information
- Access to relevant journals/full text of articles
- One portal access with good search engine
- Access to practice info in all sub-domains of interest (information gaps)
- Training re: how to access info electronically
- Real time access to info at home & in the field



Public Health Information Models

1. Research Reports:

- Simple or predefined searches of research report collections
- Alerts & archiving
- Summaries/commentaries/critiques

2. Evidence-based reviews and resources

3. Comprehensive knowledge sources

[PubMed](#) [Nucleotide](#) [Protein](#) [Genome](#) [Structure](#) [PopSet](#) [Taxonomy](#) [OMIM](#) [Books](#)

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Related Resources

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<http://www.pubmed.gov>

PubMed, a service of the National Library of Medicine, provides access to over 12 million MEDLINE citations back to the mid-1960's and additional life science journals. PubMed includes links to many sites providing full text articles and other related resources.

Bookshelf Additions

Developmental Biology, 6th ed.
by SF Gilbert

Surgical Treatments - Evidence Based and Problem-Oriented
edited by RA Holzheimer & JA Mannick

New Journals Database

NCBI has created a new Entrez database, [Journals](#), which replaces the Journal Browser.

Journals provides additional search and display features, and

A collaboration of U.S. government agencies, public health organizations and health sciences libraries

Search:

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HP2010 Information Access Project

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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](#)
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- [Food Safety](#)
- [Health Communication](#)
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- [Vision](#)





PubMed Search on Drug Resistant Salmonella

united states[mh] AND (salmonella infections[majr] OR salmonella[majr]) AND drug resistance[majr] AND (prevention and control[subheading] OR prevention OR public health OR disease outbreaks OR population surveillance OR risk factors OR prospective studies OR case-control studies OR follow-up studies OR comparative study OR pilot projects OR retrospective studies OR longitudinal studies OR infection control) AND english[lang] AND human[mh]

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Welcome to SafetyLit, the online source for recent research about injury prevention.

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In addition to this Web-based SafetyLit update, we also provide a free email announcement of the titles, authors, and publishers of the abstracts included in each weekly update. An **online form**

www.safetylit.org

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Feature

Some Answers to Smallpox Vaccination Questions

The progress of the U.S. smallpox vaccination effort has been difficult to follow in the media. Now, reports from both military and civilian programs answer many of the questions that physicians and patients might have about this controversial endeavor.

Department of Defense health officials reported that, in less than 6 months, 450,293 military personnel were vaccinated (70% for the first time) similar to those reported in past series; complications included vaccinia (36 cases), myopericarditis (37 cases), and 1 case of vaccination-related fatalities occurred. Ten HIV-infected patients were vaccinated inadvertently, with no complications; follow-up continues for those who were vaccinated inadvertently.

In a separate report on the military vaccination program, a vaccine-related myopericarditis cases. All were young men who had not been vaccinated previously. Characteristic symptoms began 10 days after vaccination, and patients either had recovered by the time of the report. All diagnoses were made by excluding other likely causes of

Related Links

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Comment: Editorialists call the observation that smallpox vaccine can be administered safely to military personnel "a critically important piece of new information," although they note that complication rates could be higher in older, less carefully screened, civilian populations. We don't know if long-term persistence of neutralizing antibody titers confers complete protection against disease, but the presence of even moderate titers in the previously vaccinated cohort ultimately could be helpful in constructing vaccine policies for older people.

— *Abigail Zuger, MD*

<http://www.harcourt-international.com/journals/ebhc>



Description

Evidence-based Healthcare and Public Health provides health managers and policy makers with the best evidence available about the financing, organization and management of healthcare.

For each issue of the Journal key articles are selected from over 70 of the most authoritative and respected journals in the field and reviewed in the form of a structured abstract and expert commentary. The concise and easy to read format presents the most essential, relevant and practical information, in a form easy to assimilate and understand.

EVIDENCE-BASED HEALTHCARE MANAGEMENT

Mammography screening in the USA has higher recall rates and lower cancer detection rates than in the UK ☆

Roger Luckmann, MD,MPH (Commentary Author)

Department of Family Medicine and Community Health, University of Massachusetts Medical School, 55 Lake Ave. N., Worcester, MA 01655, USA

KEYWORDS

Mass screening;
Mammography;
Breast cancer;
USA;
UK

Summary

Question Do mammography screening programmes in the UK and USA generate different recall and cancer detection rates?

Study design Outcomes analysis, international screening programme comparison.

Main results The incidence of breast cancers among women in the US and UK programmes was comparable. In all age groups, recall rates were significantly higher in both USA screening programmes for first and subsequent screens compared with the UK programme (see Table 1). Total cancers detected per 1000 were significantly higher in the UK in all age groups (see Table 2). In situ and invasive cancer detection rates were similar between programmes for first screen mammograms. In situ cancer detection rates were similar between programmes for subsequent screening mammograms.

- ▶ Search
- ▶ Browse
- ▶ Compare
- ▶ Resources



Search

20 Results

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Compare

- » [View My Collection](#)
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NGC Search Results

Your search criteria:

<http://www.guideline.gov/>

Keyword: *public health*

Your search found 474 related guidelines, which are listed below.

To view a guideline summary, click on a title. The default view is the Brief Summary, from which you can also view the Complete Summary, Guideline Synthesis and Full-Text, where available.

To prepare a Guideline Comparison, add any of the guidelines listed to "My Collection" by selecting that guideline (check the box) and clicking the "Add to My Collection" button. For additional help, see [Guideline Comparison Help](#).

Remember - Check the box next to a guideline to add it to "My Collection". Then click on the "Add to My Collection" button located on the page.

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| <input type="checkbox"/> Public health guidance for community-level preparedness and response to severe acute respiratory syndrome (SARS). Version 2. Supplement F: laboratory guidance. Centers for Disease Control and Prevention - Federal Government Agency [U.S.]. 2003 Nov 3 (revised 2004 Jan 8). 32 pages. NGC:003381 |
| <input type="checkbox"/> Public health guidance for community-level preparedness and response to severe acute respiratory syndrome (SARS). Version 2. Core document. Centers for Disease Control and Prevention - Federal Government Agency [U.S.]. 2003 Nov 3 (revised 2004 Jan 8). 26 pages. NGC:003375 |
| <input type="checkbox"/> Public health guidance for community-level preparedness and response to severe acute respiratory syndrome (SARS). Version 2. Supplement G: communication and education. Centers for Disease Control and Prevention - Federal Government Agency [U.S.]. 2003 Nov 3 (revised 2004 Jan 8). 26 pages. NGC:003376 |

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 - [Diabetes](#)
 - [Substance Abuse](#)
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 - [Nutrition](#)
 - [Oral Health](#)
 - [Physical Activity](#)
 - [Pregnancy](#)
 - [Tobacco](#)
 - [Sexual Behavior](#)
 - [Social Environment](#)
 - [Vaccines](#)
 - [Violence](#)
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OVERVIEW

The Community Guide's systematic review of the effectiveness of selected population based interventions aimed at improving vaccination coverage in children, adolescents and adults focused on strategies within three strategic areas:

1. Increasing community demand for vaccinations
2. Enhancing access to vaccination services
3. Provider-based interventions

- [One page summary of findings](#)
- [Economic Effectiveness Findings](#)

INTERVENTIONS

Strength of Evidence	
Recommended (Strong Evidence)	●●
Recommended (Sufficient Evidence)	●
Insufficient Evidence to Determine Effectiveness	?

Increasing Community Demand

- [Client Recall/Reminder](#) ●●
- [Multicomponent Interventions with Education](#) ●●
- [Require for Child Care & School Attendance](#) ●
- Community-wide education only ?
- Clinic-based education only ?
- Client or family incentives ?
- Client-held medical records ?

Enhancing Access to Vaccination Services

- [Reducing Out-of-Pocket Costs](#) ●●
- [Multicomponent Interventions for Expanding Access](#) ●●
- Expanding access only ?
- [Women, Infants, & Children \(WIC\) Programs](#) ●
- [Home Visits](#) ●

Site Search

You can contact us at:

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99 titles matching: **Osteoporosis**

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- [Medical consultation for patients with hip fracture](#)
- [Patient information: Calcium supplementation in osteoporosis](#)
- [Patient information: Overview of osteoporosis](#)
- [Patient information: Prevention and treatment of osteoporosis](#)
- [Use of selective estrogen receptor modulators in postmenopausal women](#)

Screening for osteoporosis

EPIDEMIOLOGY

RISK FACTORS

SCREENING TESTS

[Definition of osteoporosis](#)[Issues in children](#)[Bone density measurement](#)[Single-photon absorptiometry](#)[Dual-photon absorptiometry](#)[Dual x-ray absorptiometry](#)[Quantitative computed tomography](#)[Ultrasonography](#)[Radiographic absorptiometry](#)[Biochemical markers of bone turnover](#)

EFFECTIVENESS OF EARLY DETECTION

[Evidence supporting screening](#)[Arguments against screening](#)[Cost-effectiveness](#)

RECOMMENDATIONS BY EXPERT GROUPS

DECISION RULES

RECOMMENDED APPROACH

[Site of measurement](#)[Biochemical markers of bone turnover](#)[Management of women with low bone density](#)

REFERENCES

PHYSICS

[Fracture risk in women and men](#)[Low BMD with age in women](#)[Iron deficiency and osteoporosis](#)[Fracture risk by age BMD](#)[Methods to measure bone mass](#)[Parathyroid hormone excretion in osteoporosis](#)[Parathyroid hormone predicts bone loss](#)[Vitamin D dose and bone loss](#)[Summary of effects of ERT](#)[Treatment of osteoporosis](#)[Treatment of Rx of osteoporosis](#)[Bone density with raloxifene](#)[Raloxifene in osteoporosis](#)[Bone density and hip fracture](#)[Vitamin D and bisphosphonate dose osteoporosis](#)

RELATED TOPICS

[Epidemiology and causes of osteoporosis](#)[Clinical manifestations and diagnosis of osteoporosis](#)[Osteoporosis](#)[Normal skeletal development and regulation](#)

Screening for osteoporosis

[Hillel N Rosen, MD](#)[Denise S Basow, MD](#)

UpToDate performs a continuous review of over 270 journals and other resources. Updates are added as important new information is published. The literature review for version 10.2 is current through April 2002; this topic was last changed on April 24, 2002. The next version of UpToDate (10.3) will be released in October 2002.

Screening for osteoporosis may be justified based upon the following observations:

- The disease is common
- It is associated with high morbidity, mortality, and cost
- Accurate and safe diagnostic tests are available
- Treatment is effective

Nevertheless, a widespread approach to screening has not been universally adopted, in part due to cost and questions regarding the efficacy of a broad population screening policy [1]. The issues surrounding the screening for osteoporosis are reviewed here.

EPIDEMIOLOGY — The burden of suffering associated with osteoporosis is illustrated by the following observations ([see "Epidemiology and causes of osteoporosis"](#)):

- It is estimated that over 1.3 million osteoporotic fractures occur each year in the United States [2]. Pelvic and hip fractures are associated with increased mortality, although conditions other than the fracture itself may account for most of the deaths [3].
- The risk of all fractures increases with age ([show figure 1](#)); among persons who survive until age 90, 33 percent of women and 17 percent of men will have a hip fracture [4]. The estimated lifetime risk of hip fracture for white women at age 50 is about 16 percent (versus five percent for men), with similar risks for vertebral or forearm fractures.
- Using a strict definition of osteoporosis (bone mineral density [BMD] 2.5 SD below the mean of young women), a large survey in the United States found the prevalence was 13 to 18 percent in women above 50 years of age and 3 to 6 percent in men of the same age [5].



Focus Group Reactions to Models Presentation

- **Pre-formulated searches for search engines**
 - Need useful PH keyword categories
- **Pre-formulated Alerts/listserves & archival website**
 - CDC should expand services like TB Update to other diseases (summary and links)
 - Need useful PH keyword categories



Focus Group Reactions to Models Presentation

Less reaction to more sophisticated models

- **Research Reports:**
 - Simple or predefined searches of research report collections
 - Alerts & archiving
 - Summaries/commentaries/critiques
- **Evidence-based reviews and resources**
- **Comprehensive knowledge sources**

Need up-to-date list of free online resources



Future Project Directions

- **Repeat study with other PH professionals in other domains**
- **Compare and contrast information needs**
- **Make recommendations to CDC regarding evidence-based information resources for PH workers**
- **Enhance project website with resources related to findings**