Public Health Informatics

January 1996 through December 2000

441 Citations

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>v</td>
</tr>
<tr>
<td>Sample Citations</td>
<td>vi</td>
</tr>
<tr>
<td><strong>Overview</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Surveillance</strong></td>
<td></td>
</tr>
<tr>
<td>Disease Surveillance</td>
<td>2</td>
</tr>
<tr>
<td>Registries</td>
<td>4</td>
</tr>
<tr>
<td>Injury/Trauma</td>
<td>5</td>
</tr>
<tr>
<td>Occupational Health Risks</td>
<td>6</td>
</tr>
<tr>
<td>Environmental Health Risks</td>
<td>8</td>
</tr>
<tr>
<td><strong>Community Health Services</strong></td>
<td>9</td>
</tr>
<tr>
<td>Population Screening Programs and Issues</td>
<td>10</td>
</tr>
<tr>
<td>Immunization Programs And Issues</td>
<td>11</td>
</tr>
<tr>
<td>Emergency, Disaster, and Bioterrorism</td>
<td></td>
</tr>
<tr>
<td>Preparedness and Response</td>
<td>13</td>
</tr>
<tr>
<td>Genetics Programs and Counseling</td>
<td>14</td>
</tr>
<tr>
<td>Health Promotion</td>
<td>14</td>
</tr>
<tr>
<td>Integrated Public Health Information Systems and Networks</td>
<td>15</td>
</tr>
<tr>
<td><strong>Information Methods And Tools</strong></td>
<td></td>
</tr>
<tr>
<td>GIS</td>
<td>17</td>
</tr>
<tr>
<td>Computer Models/Simulation</td>
<td>20</td>
</tr>
<tr>
<td>Other Methods and Tools</td>
<td>21</td>
</tr>
<tr>
<td><strong>Information Services And Sources</strong></td>
<td>22</td>
</tr>
<tr>
<td><strong>Data Linking and Mining</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>Workforce Education and Assessment</strong></td>
<td>25</td>
</tr>
<tr>
<td><strong>Appendix:</strong> Organization and Program Internet Resources</td>
<td></td>
</tr>
</tbody>
</table>
INTRODUCTION

Public Health Informatics is defined as the systematic application of information and computer sciences to public health practice, research, and learning. It is the discipline that integrates public health with information technology. The development of this field and dissemination of informatics knowledge and expertise to public health professionals is the key to unlocking the potential of information systems to improve the health of the nation.

In 1996 the National Library of Medicine (NLM) compiled a bibliography that provided a review of the literature of this newly emerging field. That work, *CBM* 96-4 Public Health Informatics (fully cited within), included 471 citations covering the time period of 1980 to 1995. The current bibliography includes 441 citations covering only five years --1996 through 2000. This reflects a nearly three-fold increase in the publication rate compared to the previous period.

The bibliography focuses on the use of computers and communications to support population-based public health functions. As in the prior bibliography, we have excluded the primary care services often provided by public health authorities. The literature on consumer health informatics issues is also excluded. However, we have included selected population-based health promotion material.

Topics covered reflect major public health functions: population surveillance, population screening, registries, health promotion, information systems and services, data linking and mining, and workforce education and assessment. Articles on all aspects of immunization (including immunization registries) are grouped together under Immunization Programs and Issues. Also, we added bioterrorism to the Emergency/Disaster category. Publications increased in this area after the public health community was given a mandate to develop emergency plans and treatment procedures in case of bioterrorist attacks. Finally, we added the new category of Genetics Programs and Counseling.

The selected references in the bibliography include journal titles and articles, books and book chapters, technical reports, dissertations, conference proceedings and papers, and CD-ROMs as well as Internet sites. In general, editorials and letters have been omitted. Both English and foreign language publications are cited. References are arranged by subject and appear under only one topic.

At the end of the references we have included a brief section of Internet resources. These include organizational and program homepages. Monographs, slide shows, and articles available on the Internet appear under the appropriate subject category.

The compilers wish to thank Dora Smith, NLM, for her production assistance.
SAMPLE CITATIONS

Citations are formatted according to the rules established for Index Medicus®*. Sample journal and monograph citations appear below. For journal articles written in a foreign language, the English translation of the title displays in brackets; for monographs, the title is given in the original language. In both cases the language of publication is shown by a three-letter abbreviation appearing at the end of the citation.

Note also for journal articles that an availability statement follows many citations. This statement contains the identification number (UI) for the citation in the PubMed retrieval system. The user may enter this number in PubMed on the NLM Web site (http://pubmed.gov/) to retrieve the record, which includes an abstract for most articles and may also provide a link to the publisher's Internet site.

**Journal Article:**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Article Title</th>
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<tbody>
<tr>
<td>Chute CG.</td>
<td>Public health, clinical data, and common cause: information standards as</td>
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</tbody>
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*Abbreviated Journal*  *Date*  *Volume*  *Issue*  *Pages*

**Monograph:**

<table>
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<tr>
<th>Authors/Editors</th>
<th>Title</th>
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</table>

*For details of the formats used for references, see* the following publication:

Overview


Surveillance

Disease Surveillance


Koo D, Wetterhall SF. History and current status of the National Notifiable Diseases Surveillance System.


**Registries**


Injury/Trauma


---

**Occupational Health Risks**


Environmental Health Risks


Rumiantsev GI, Novikov SM. [Problems in prediction of toxicity and risk of effects of chemical substances
Community Health Services


Population Screening Programs and Issues


Wright MC. Correlates of sentinel events in children with asthma in the medicaid population in Cook County (Illinois) [dissertation]. Chicago: University of Illinois at Chicago, Health Sciences Center; 1998. 138 p.

Immunization Programs and Issues

Adams WG, Conners WP, Mann AM, Palfrey S. Immunization entry at the point of service improves quality, saves time, and is well-accepted. Pediatrics 2000 Sep;106(3):489-92. Available from: PubMed; UI 20430127


LaVenture M, Wicklin N, Schillo T, Gatewood L. A decentralized, community-based design for statewide immunization registries in Minnesota. Proc AMIA


Niu MT, Davis DM, Ellenberg S. Recombinant hepatitis B vaccination of neonates and infants:


Emergency, Disaster, and Bioterrorism Preparedness and Response


Genetics Programs and Counseling


Health Promotion


Integrated Public Health Information Systems and Networks


School of Rural Public Health information system [homepage on Internet]. Temple (TX): Texas A & M University System, Health Science Center; c2000 [modified 2001 Apr 5; cited 2001 Apr 6]. Available from: http://srph.brc.tamus.edu/srphis/


Information Methods and Tools

GIS


Devasundaram JK. An automated geographic information system for local health departments. J


Rushton G. Improving public health through geographical information systems: an instructional guide to major concepts and their implementation [CD-ROM]. Version 2.0. Iowa City (IA): University of Iowa; 1997. 1 CD-ROM. System Requirements: 486 or higher processor (Pentium 100 or faster recommended); 16 megabytes RAM (32 megabytes recommended); Windows 3.1 and higher (Windows '95 or Windows NT 4.0 recommended); Quicktime 2.12 for Windows (available on CD); 2x CD-ROM drive (4x or faster recommended).


Computer Models/Simulation


Other Methods and Tools


Information Services and Sources


Tachinardi U. Internet and healthcare in Brazil: the role of the Working Group for Healthcare (GT Saude).
Data Linking and Mining


Workforce Education and Assessment

Abell MT, Kennedy ER. A computer program to promote understanding of the monitoring method evaluation guidelines used at NIOSH. Am Ind Hyg Assoc J 1997 Mar;58(3):236-41. Available from: PubMed; UI 97229399

Accessing HIV/AIDS information resources: a Public Health Training Network satellite broadcast [videorecording]. Atlanta: Centers for Disease Control and Prevention (US); 1999. 1 videocassette: 99 min., sound, color, 1/2 in.


Conference on Public Health Informatics and Distance Learning; 2000 Aug 8-10; New Orleans, L.A.


Hale PJ. Real world community health nursing: an interactive CD-ROM [CD-ROM]. St. Louis: Mosby, Inc.; 2000. 1 CD-ROM. System Requirements: Pentium or faster processor; 32 MB RAM; Windows 95 or later; 4X or faster CD-ROM drive; SVGA 640 x 480 with thousands of colors. System Requirements: Macintosh, PowerPC or faster processor; 32 MB RAM; Mac OS version 7.6.1 or later; 4X or faster CD-ROM drive; SVGA 640 x 480 with thousands of colors.


The MSPH in public health informatics [monograph on the Internet]. Atlanta: Emory University, Rollins School of Public Health; [modified 2001 Jan 31; cited 2001 Mar 26]. [3 p.]. Available from: http://www.sph.emory.edu/bios/phi.html


Overview of public health informatics [course on the Internet]. Dallas: University of Texas Southwestern Medical Center; [modified 2000 Sept 24; cited 2000 Nov 9]. Available from:


Public Health Informatics Laboratory (PHIL) [homepage on the Internet]. Columbus (OH): The Ohio State University School of Public Health; [2001 Feb 27; cited 2001 Mar 26]]. Available from: http://www.sph.ohio-state.edu/students/phil/

Richards J. Informatics training in schools and graduate programs of public health [masters thesis]. [Austin (TX)]: University of Texas; 1998.


Appendix: Organization and Program Internet Resources


