

Selected Public Health Tools:

finding, organizing, using, retrieving, disseminating, and communicating using tools of various kinds

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Public health is in the business of information. Its primary function involves the use of knowledge management. It uses hardware and information management tools to accomplish this business.

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A. Finding/Collecting Information & Data Tools

Online Databases

PubMed. National Library of Medicine.

<http://pubmed.gov>.

A new, simpler format is being designed for the PubMed Website. The PubMed database “comprises more than 19 million citations for biomedical articles from MEDLINE and life science journals. Citations may include links to full-text articles from PubMed Central or publisher web sites. Use this large database to find bibliographic citations for key public health and medical journals”. It’s especially important if you are doing research on a health topic. Always helpful is the “Related Articles” section for locating other citations similar to the ones you find useful. [Site accessed: 10/13/2009].

Medline Plus. National Library of Medicine.

<http://medlineplus.gov/>.

MedlinePlus “brings together authoritative information from NLM, the National Institutes of Health (NIH), and other government agencies and health-related organizations. Preformulated MEDLINE searches are included in MedlinePlus and give easy access to medical journal articles. MedlinePlus also has extensive information about drugs, an illustrated medical encyclopedia, interactive patient tutorials, and latest health news”. [Site accessed: 10/13/2009].

Other Databases. National Library of Medicine.

<http://www.nlm.nih.gov/medlineplus/databases.html>

Databases include glossaries, drug information, clinical trials, household products, genetics, Healthfinder, guidelines, chemical hazards and food safety to mention a few of the databases found at this site. [Site accessed: 10/13/2009].

Electronic Journals

Most academic libraries have purchased digital copies of key public health journals that can be used by faculty, staff and students of that institution. For example, the University of Washington Libraries provides this service. Individuals can also go to journal publisher's Web sites, locate a search on a topic of interest and view the article or articles after prepaying.

Pre-scripted Searches

Sites run by librarians often offer pre-scripted searches. These are searches that trained searchers have developed to extract specific citations on topics of common interest. A good example of such a search strategy can be found at the Research Guide for Public Health Preparedness. Just click the link to be taken to a search already entered into the PubMed database.

CDCynergy. Centers for Disease Control and Prevention, June 27, 2006.

<http://www.cdc.gov/healthmarketing/cdcynergy/>

CDCynergy "is a multimedia CD-ROM used for planning, managing, and evaluating public health communication programs." [Site Accessed: 10/14/09].

Claritas, Inc.

<http://www.claritas.com/Default.jsp>

The Internet is a good source of demographic and other types of information. Claritas's Web site summarizes lifestyle groups for 5-digit zip code areas. [Site Accessed: 10/14/09].

Science and Public Health Practice Preparedness Planning Tools. Centers for Disease Control and Prevention, July 8, 2009.

<http://emergency.cdc.gov/cotper/science/planningtools.asp>

Site lists two tools, one that estimates the pre-event population at risk of medical consequences in a disaster and the second, VacStockpile, a tool to estimate the potential impacts for stockpiling vaccines for vaccine-preventable diseases of children. MedCon:Pre-Event – A Tool to Estimate the Pre-Event Population at Risk of Medical Consequences in a Disaster is also featured on this site. [Site Accessed: 10/15/09].

Online Tools. Alcohol-Related Disease Impact (ARDI) Software. Centers for Disease Control and Prevention, August 6, 2008.

<http://www.cdc.gov/alcohol/ardi.htm>

Excessive alcohol use is "the 3rd leading life-style related cause of death in the United States. To assist professionals in state and local public health departments to estimate the impact of alcohol-related deaths and years of potential life lost (YPLL)—a measure of premature death—the Centers for Disease Control and Prevention (CDC) funded the development of the Alcohol-Related Disease Impact (ARDI) software." [Site Accessed: 10/15/09].

Sites with Aggregated Secondary Data

Sites like the Kaiser Family Foundation have collected public health data from a variety of sources and present it in an easy-to-use format.

Kaiser Family Foundation

<http://www.kff.org/>

The Kaiser Family Foundation site presents often unique public health data in great detail at the State Health Facts site. Topics with data include health status, health coverage and uninsured, Medicaid and CHIP, Minority Health, HIV/AIDS to list a few topics. The featured topic in September 2009 was Health Reform. [Site accessed: 10/13/2009].

Electronic Data Resources

Large datasets

Health Data Tools and Statistics. Public Health Partners. 11-SEP-2009.

http://phpartners.org/health_stats.html

This National Library of Medicine effort aggregates information under the following topics: Health Information Technology and Standards; Health Statistics; National Public Health Data Sets; State and Local Public Health Data Sets; Public Health Infrastructure

Data; Search for Other Tools; and Tools for Data Collection and Planning. [Site Accessed: 09/17/2009].

Organizing Tools

Citation Managers

Reference management software, citation management software or personal bibliographic management software is software for scholars and authors to use for recording and utilizing bibliographic citations (references). Once a citation has been recorded, it can be used time and again in generating bibliographies, such as lists of references in scholarly books, articles and essays. The development of reference management packages has been driven by the rapid expansion of scientific literature. (Wikipedia).

EndNote. Thompson-Reuters.

<http://www.endnote.com/>

Use this tool to organize bibliographic citations. Tools such as this one accept citations in digital format from databases such as PubMed or information that is hand entered and will output the data in the citation format required by the journal. You determine which format you want to use by selecting it. EndNote is very popular among academics. [Site accessed: 10/13/2009].

Other popular reference managers include: ProCite and Reference Manager. Free reference managers are also available for downloading. A few are Web-based.

Mind Mapping Tools

A mind map is a diagram used to represent words, ideas, tasks, or other items linked to and arranged around a central key word or idea. Mind maps are used to generate, visualize, structure, and classify ideas, and as an aid in study, organization, problem solving, decision making, and writing. (Wikipedia). Mind mapping tools are useful for showing relationships and decision-making in public health.

H1N1 Swine Flu Interactive Mind Map. September 22, 2009.

http://www.gogeometry.com/swine_flu_h1n1/swine_flu_h1n1_mind_map.htm

Mind map of all things H1N1. Helps the viewer to visualize how the disease and our responses are organized. Hover over the red arrows to see additional information, often a URL. This mind map was designed using MindMap software. [Site Accessed: 10/15/2009]

List of Mind Mapping Software. Wikipedia, October 14, 2009.

http://en.wikipedia.org/wiki/List_of_mind_mapping_software.

Lists free and commercial mind mapping software applications.

Analysis of Data/Information

Statistical and Surveillance Tools

Epi Info. Centers for Disease Control and Prevention.

<http://www.cdc.gov/EpiInfo/>

Epi Info is public domain statistical software for epidemiology developed by Centers for Disease Control and Prevention to enable public health and medical professionals to “rapidly develop a questionnaire or form, customize the data entry process, and enter and analyze data.” The software includes Epi Map for displaying the data. [Site accessed: 10/13/2009].

RODS. The RODS Open Source Project. 2003.

<http://openrods.sourceforge.net/>

Real-time Outbreak and Disease Surveillance (RODS) is Open Source public health surveillance software. It collects and analyzes disease surveillance data in real time. Under development since 1999 by the RODS Laboratory—a collaboration of the University of Pittsburgh and Carnegie Mellon University. The software was used by the Utah Department of Health during the Olympic games for monitoring purposes. [Site accessed: 10/13/2009].

HealthMap. Global Disease Alert Map, October 15, 2009.

<http://healthmap.org/en>.

HealthMap is “a freely available Web site that aggregates, categorizes, filters and displays real-time information on emerging infectious diseases – in tracking the current H1N1 swine flu outbreak”. Locate H1N1 information by feeds (news/media, community communications, official sources, and scientific reports); category (international significance, new & ongoing outbreaks, and warnings); diseases, last 30

days; and alerts by country. [Site Accessed: October 14, 2009].

Data Visualization

Data Visualization/Data Mining in a Visual Format

<http://www.cdc.gov/healthmarketing/ehm/data-visualization.html>

The CDC “has started developing improved techniques for visualizing health data. Some of these techniques include creating interactive or dynamic images, diagrams and displays. Currently, CDC is developing improved ways to display public health data, such as the interactive map below, to give users the ability to interact with and better understand CDC’s public health science.” “By providing dynamic, interactive and visually appealing ways for users to interact with this data, CDC aims to increase the impact of this research”. [Site Accessed: 10/13/2009].

50 Great Examples of Data Visualization

<http://www.webdesignerdepot.com/2009/06/50-great-examples-of-data-visualization/>.

Not all the examples given at the 50 Great Examples of Data Visualization site are currently being used in public health but some of the tools might be relevant in the future. Many of the tools deal with visualizing music but several tools that show relationships between individuals might have potential use in public health. An example from this Web site is Twittearth. (Note: you must be able to login to Twitter to get the visualization). [Site Accessed: 10/13/2009].

Animated Data

Infovis.com.

<http://www.infovis.info/>.

Examples of how maps and cartograms can be used to display public health and other information in a visually pleasing way. [Site Accessed: 10/13/2009].

Hans Rosling’s new insights on poverty. [video]. TED. March 2007.

http://www.ted.com/talks/hans_rosling_reveals_new_insights_on_poverty.html

Video demonstrates animated data relating to international poverty statistics. This video gives terrific examples of visual displays of various types of health and socioeconomic factors. [Site accessed: 10/13/2009].

Hans Rosling Shows the Best Stats You’ve Ever Seen. [video]. TED. March 2007.

http://www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen.html

Another Hans Rosling video that contains animations that dramatically enhance his presentation that “debunks myths about the so-called “developing world.” This is a great video for explaining population, income and GDP and child survival, [Site Accessed: 10/13/2009].

Maps of Science.

<http://mapofscience.com/>.

Maps of Science presents information on disciplinary maps, competency maps, and paradigm maps. The most interesting link is to the NIH disciplinary map. Disciplinary Maps “are used to provide a basic understanding of how science is organized”. Competency Maps “allow one to identify the interdisciplinary strengths of a research, lab, institution, region, or nation” and Paradigm Maps “are used for planning research efforts in a specific area of research”. [Site Accessed: 10/13/2009].

Mind Mapping

Mind Mapping is another technique for displaying information. It is a tool used for organizing information and clarifying thoughts. A mind map is a diagram used to represent words, ideas, tasks, or other items linked to and arranged around a central key word or idea. Mind maps are used to generate, visualize, structure, and classify ideas, and as an aid in study, organization, problem solving, decision making, and writing. (Wikipedia).

Disseminating/Communicating Information

Social Media/Networking

In their report titled. “Expert Round Table on Social Media and Risk Communication During Times of Crisis: Strategic Challenges and Opportunities, the American Public Health Association defines Social Media as “the various electronic tools, technologies and applications that facilitate interactive communication and content exchange, allowing the user to move back and forth easily between the roles of audience and author. These tools are underscored by a significant cultural shift towards more open, transparent and collaborative

user experiences.” It goes on to list the following tools that can be used by public health practitioners. These include: blogs (Weblogs), podcasts, social networking sites such as Facebook, MySpace, Microblogs including Twitter, Plurk, mobile text messaging, Wikis, Widgets, social bookmarking (Digg, Delicious), RSS feeds, image or video sharing sites (Flickr, YouTube), Virtual Worlds (Second Life, Whyville), Internet forums, and mobile Web sites. Definitions of these tools are available in the Round Table document.

YouTube videos on public health are available from this link. For additional, more specific topics, use the more specific keyword. Videos on YouTube help to educate/raise awareness in the public about public health and help to promote the work done by public health practitioners as well as promoting healthy lifestyles. See below for more information on YouTube.

The Centers for Disease Prevention and Control (CDC) is using social media in its marketing efforts. In its site called eHealth Marketing CDC uses the site “to develop and market the CDC.gov Web site and interactive media projects to increase the impact of CDC science”. It defines interactive media as “Interactive communication technologies to facilitate electronic communities, networks, and interactivity, and to encourage information sharing, collaboration and creativity.” For more information about how CDC is using interactive media visit their Interactive Media – eHealth Marketing Web site.

The CDC’s list of interactive media tools includes Blogs, Social Networks, eGames, Podcasts, Health-e-Cards, Virtual Worlds, Mobile Applications, Data Visualization, RSS Feeds, Widgets, Public Engagement, and eHealth Data Briefs. Visit the active links in this paragraph to get additional information.

Blogs

A blog (a contraction of the term “weblog”)[1] is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. “Blog” can also be used as a verb, meaning to maintain or add content to a blog. (Wikipedia)

The Pump Handle. A water cooler for the public health crowd. [updated daily].

<http://thepumphandle.wordpress.com/>.

The Pump Handle “is a place for people interested in public health and the environment to discuss the issues that interest us.” Most of the blog’s founding members are epidemiologists from the US but the site is open to writers from other disciplines and place. Recent topics include: Burning Coal and Contaminating Water; Why the epidemiology of swine flu matters; and Getting Smart About Antibiotics . [Site Accessed: 10/13/2009].

Public Health Matters. Centers for Disease Control and Prevention. September 15, 2009.

<http://www.cdc.gov/nczved/blog/>.

The site enables public health practitioners to share their “perspective and personal experiences working on the front lines of emerging infectious diseases and public health action.” Topics range from wildlife health and human health to specific conditions in specific areas to advanced lab techniques for pinpointing outbreaks. This is a very useful site for keeping up with the latest news and information from the field, especially if you want the technical details. [Site Accessed: 10/13/2009].

50 Excellent Public Health Blogs. RNCentral.com. [no date].

http://www.rncentral.com/nursing-library/careplans/50_excellent_public_health_blogs.

Listing of public health blogs from a nursing blog called RNCentral.com. Intended for nurses. [Site Accessed: 10/13/2009].

eGames

Electronic games, or eGames, are interactive games that are played through an electronic application such as the Internet, a video game console, or a mobile phone. (CDC).

eGames – eHealth Marketing. Centers for Disease Control and Prevention. April 14, 2008

<http://www.cdc.gov/healthmarketing/ehm/eGames.html>

The CDC has linked to Partner’s sites that are using eGames that encourage good health practices. [Site Accessed: 10/13/2009].

Podcasts/ Podcasting

A podcast is a series of digital media files (either audio or video) that are released episodically and downloaded through web syndication. (Wikipedia).

Generally the files are downloaded onto a subscriber’s computer or other viewing device and are held till viewed and/or deleted by

the subscriber.

Podcasts - eHealth Marketing. Centers for Disease Control and Prevention. April 14, 2008
<http://www.cdc.gov/healthmarketing/ehm/podcasts.html>.

Learn more about podcasts featured at CDC and subscribe to the top podcasting series. Also useful are the Top Ten CDC Podcasts in 2007. [Site Accessed: 10/13/2009].

Health-e-Cards.

Digital postcards/fliers that you can send to a friend or family member on a health topic of interest.

Health-e-Cards. Centers for Disease Control and Prevention. [no date].
<http://www2c.cdc.gov/ecards/browse.asp?act=brs>.

Health e-Cards are “sent via e-mail to encourage healthy living, promote safe activities, or celebrate a health- and safety-related event.” (CDC) These electronic health e-cards cover a wide variety of topics listed on this page in a drop-down box. Some of the topics include cancer, college health, nutrition, parenting, rabies shots, preventing flu and pneumonia. [Site Accessed: 10/13/2009].

Virtual Worlds

A virtual world is “an online environment where users can create a virtual persona, or avatar, and interact with other avatars”. Virtual worlds “provide an immersive experience where users can get health information and practice healthy behaviors.” (CDC).

Two Examples of Virtual Worlds.

Whyville and Second Life are two of the sites listed by the CDC as incorporating virtual worlds. [Site Accessed: 10/13/2009].

Virtual World Public Health Planning. University of Illinois at Chicago, School of Public Health CADE (Center for the Advancement of Distance Education). 2009.
<http://www.virtualpublichealth.com/>.

The University of Illinois at Chicago, School of Public Health CADE (Center for the Advancement of Distance Education) has created a group of Public Health Preparedness Islands in the virtual world called “Second Life”. The virtual island chain offers a variety of urban and rural environments with customized buildings, objects, and scripting tailored to emergency scenarios ranging from pandemic influenza to bio-terrorism and dirty bombs. [Site Accessed: 10/13/2009].

Public health lessons from virtual game worlds. Laura H. Kahn, January 13, 2008.
<http://www.thebulletin.org/web-edition/columnists/laura-h-kahn/public-health-lessons-virtual-game-worlds>.

Brief article from the Bulletin of the Atomic Scientists on what public health can learn from online virtual worlds and the games that are played online. [Site Accessed: 10/13/2009].

RSS Feeds

CDC empowers individuals to access and utilize the health information they view as most valuable. RSS feeds capitalize on this personalization of information by allowing users to select the topics that are most interesting to them. This increases the impact of CDC’s science by ensuring that timely and relevant health information is delivered to users when, where, and how they want it. (CDC). Agencies, public health journals and other publishers, and schools of public health are a few of the groups providing RSS.

RSS (most commonly translated as “Really Simple Syndication” but sometimes “Rich Site Summary”) is a family of web feed formats used to publish frequently updated works—such as blog entries, news headlines, audio, and video—in a standardized format.[2] An RSS document (which is called a “feed”, “web feed”, [3] or “channel”) includes full or summarized text, plus metadata such as publishing dates and authorship. (Wikipedia).

Public Health (RSS Feeds). New York University Libraries, [no date].
<http://nyu.libguides.com/content.php?pid=23805&sid=247925>.

This library site provides links to key public health aggregators. [Site Accessed: 10/15/2009].

PHPartners.org - News and Updates. Public Health Partners, October 13, 2009.
http://phpartners.org/rss_phpartners.xml.

Aggregated documents from various agencies and publishers on topics of interest to public health. [Site Accessed: 10/13/2009].

Widgets

Widgets, also sometimes referred to as gadgets, are small tools that users can add to a blog, social network profile or other Web page. CDC is currently developing widgets that contain information related to a specific CDC.gov topic and allow users to perform interactive functions within the tool. (CDC).

CDC Widgets and Gadgets. Centers for Disease Control and Prevention, May 1, 2009.

<http://www.cdc.gov/Widgets/>.

A widget is a CDC.gov application that “displays the featured content directly on your web page. You can embed content in personalized home pages, blogs, and other sites. Once you’ve added the widget, there’s no technical maintenance. CDC.gov will update the content automatically.” Download these currently available widgets:

- HHS 2009 Flu Info
- Adult BMI Calculator
- H1N1 (Swine Flu)
- H1N1 Higher Education
- H1N1 School Guidance
- Five Minutes or Less for Health
- Smoking and Tobacco Use
- Flu IQ
- Everyday Health
- Salud al día (Everyday Health)
- Seasonal Flu Updates
- CDC Public Health Data and Statistics
- FDA Peanut-Containing Product Recall
- FluView National Flu Activity Map
- National Environmental Public Health Tracking Program
- CDC Text Messages

[Site Accessed: 10/13/2009].

Public Health Widget (for Macs).

<http://www.cdc.gov/healthmarketing/ehm/widgets.html>.

Download and install this widget from the Johns Hopkins Bloomberg School of Public Health on your Mac computer to get access to research that addresses the most pressing health concerns of today from infectious diseases to cancer prevention and environmental health. [Site Accessed: 10/13/2009].

Social Networks

Social networks are interactive websites in which users create a profile that may contain photos, blogs, music, messages from friends, and other information. MySpace and Facebook are two examples of social networks. (CDC).

CDC MySpace page. Centers for Disease Control and Prevention, 2003-2009.

[Site Accessed: 10/13/2009].

This page “boasts a CDC Blog entry, as well as promotional information, health information, comments from users and much more. Using this as a channel to direct MySpace users to consumer health information on CDC.gov, CDC is expanding the reach of its health impact”. [Site Accessed: 10/15/2009].

Polling

Polling asks questions from the public on one or many topics in order to assess their opinions on the topic being polled.

Kaiser Polls. Kaiser Family Foundation. 2009.

<http://www.kff.org/kaiserpolls/index2.cfm>. [Site Accessed: 09/17/2009].

The Kaiser Family Foundation staff use polls to track public opinion on various aspects of health care including politics, health insurance, cost, Medicare/Medicaid/SCHIP, the public's experiences in the health care system and related topics.

Webcasting

A webcast is a media file distributed over the Internet using streaming media technology. A webcast may either be distributed live or on demand. Essentially, webcasting is “broadcasting” over the Internet. (Wikipedia)

Video Screencasting for Teaching and Learning

Video screencasting, a recent method of teaching complex information and concepts by recording your digital presentation, a view of the room, and your voice. This method has a huge potential to educate many public health practitioners quickly.

Video Screencasting. Classroom Support Services. University of Washington.

<http://www.css.washington.edu/streaming>

An example of a university using video screencasting to meet its educational mission. [Site Accessed: 10/13/2009].

Online Video

Social Media at CDC. Centers for Disease Control and Prevention, August 11, 2009.

<http://www.cdc.gov/SocialMedia/>.

CDC-TV, videos and YouTube are highlighted. Social Media Campaigns Using Online Video include Novel H1N1 and Peanut-Related Recalls. [Site Accessed: 10/14/09].

YouTube.

<http://www.youtube.com/>.

In September 2008 YouTube announced that its users had watched over 5 billion video views in July 2008. (Source). Do a search using the terms, public health or related, more specific terms to locate videos on your topics of interest. For those interested in what public health is, look for videos from the Association of Schools of Public Health and the Schools of Public Health themselves. [Site Accessed: 10/13/2009].

B. Research Tools

Geographic Information Systems

EpiSPIDER.

<http://www.epispider.net/>

Geographic information systems for emerging diseases and links to articles on public health topics as displayed on a map. [Site Accessed: 10/13/2009].

InstantAtlas.com.

<http://www.instantatlas.com/>

InstantAtlas™ “enables information analysts and researchers to create highly-interactive online reporting solutions that combine statistics and map data to improve data visualization, enhance communication, and engage people in more informed decision making.” This looks like a potentially useful tool for local health jurisdictions. Areas of public health interest include: public health reporting, cancer registries, community information systems, local information systems, area profiling, public safety (crime), survey reporting, and government reporting to name a few. [Site Accessed: 10/13/2009].

Public Health Mapping and GIS. Tools. World Health Organization, 2009.

http://www.who.int/health_mapping/tools/en/.

The Public Health Mapping and GIS programme is “developing tools and applications to respond to critical information needs of infectious disease and public health programmes. These tools are based on recent advances in GIS technologies, mapping and remote field data collection tools such as hand-held global positioning systems, mobile mapping units and Internet connectivity”. Three main links are available: The HealthMapper; The Global Health Atlas; and The remote field data collection tools. [Site Accessed: 10/14/09].

Simulations

Sisspread: Simulation of Infectious Spreading

<http://sisspread.sourceforge.net/>

Sisspread is “intended to help people concerned by public health to easily perform epidemic simulations and to analyze their results”. [Site Accessed: 10/13/2009].

Online Learning/eLearning Tools/Self Assessment

Council on Linkages: Core Competencies for Public Health Professionals. Public Health Foundation, 2008. <http://www.phf.org/link/corecompetencies.htm>.

The Public Health Foundation site keeps public health practitioners up to date on important changes in core public health competencies. The most current version is located at: <http://www.phf.org/link/core-061109.htm>. [Site Accessed: 09/17/2009].

Improving Health/Health Promotion Tools

Health promotion tools are critical to keeping down health care costs and for improving health status of the population.

Stairway to Health. Public Health Agency of Canada. 2007-02-26.

<http://stairway.hc-sc.gc.ca/calcalc.aro>.

Enter your weight; enter the time you spent climbing and descending stairs (in minutes) and the site will tell you how many extra calories you burned in your efforts. Site Accessed: 09/17/2009].

Flu Self-Assessment.

<https://h1n1.cloudapp.net/fluquiz.aspx>

This Emory University-based site enables the public to determine if they have the H1N1 flu. [Site Accessed: 10/13/2009].

Family Healthware™. Centers for Disease Control and Prevention, July 21, 2009.

<http://www.cdc.gov/genomics/famhistory/famhx.htm>.

Family Healthware™ is “a Web-based research tool that can be used to assess a person’s familial risk for six diseases (coronary heart disease, stroke, diabetes, and colorectal, breast, and ovarian cancer). It provides users in research studies with a “prevention plan” containing personalized recommendations for lifestyle changes and screening. For each person, the tool collects data about the following: Health behaviors (e.g., smoking and exercise), Screening tests (e.g., blood cholesterol and mammography), and Health history among his or her first- and second-degree relatives”. [Site Accessed: 10/14/09].

Family History Collection Tools. Centers for Disease Control and Prevention, July 21, 2009.

<http://www.cdc.gov/genomics/famhistory/resources/tools.htm>.

This inventory is a compilation of Family History Collection Tools. The list includes “tools that were developed for the general public and are accessible through the Internet”. [Site Accessed: 10/14/09].

Expert Round Table on Social Media and Risk Communication during Times of Crisis. American Public Health Association, [n.d.].

http://www.apha.org/about/news/socialmediariskcomm_roundtable.htm.

The site offers information on how social media is being used in public health. [Site Accessed: 09/17/2009].

Get the full report at this link: Expert Round Table on Social Media and Risk Communication During Times of Crisis: Strategic Challenges and Opportunities

GapMinder. Hans Rosling. [no date].

<http://www.gapminder.org/>.

Find videos and links to data presented visually. [Site Accessed: 10/13/2009].

Data Search Engines

Article Level Metrics PLOS (Public Library of Science)

<http://tinyurl.com/ph85db>

Seven PLoS journals will now provide “online usage data for published articles in addition to citations from the scholarly literature; social bookmarks; blog coverage; and the Comments, Notes and ‘Star’ ratings that have been made on the article”. PLoS plans to “aggregate a range of available data about an article and place that data on the article itself. The data are found on the new tab called ‘Metrics’, available on all articles. A reader can now scan the various metrics to determine the extent to which the article has been viewed, cited, covered in the media and so forth. With the addition of usage data to the article-level metrics we have taken another step towards providing the community with valuable data that can be used and analyzed”. Links to a zipped downloadable spreadsheet of the entire dataset, summary of tTables indicating the average usage of categories of articles grouped by age, journal and topic Area), FAQ, And a background posting, Etc. [Site Accessed: 10/15/2009].

C. Hardware and Related Tools

Mobile/Handheld Devices and Some Useful Applications

Mobile Devices

Tools such as PDAs, iPhones/iTouch devices enable fast communication, information storage and retrieval and can be used in public health to promote healthy and safe behaviors.

Mobile Technologies – eHealth Marketing. Centers for Disease Control and Prevention, April 14, 2008.

<http://www.cdc.gov/healthmarketing/ehm/mobile.html>.

Access a mobile text application that was developed to locate HIV testing centers by zip code at HIVtest.org. Examine or subscribe a new kind of PSA, called a Personal Public Service Announcement or ‘PPSA’. The PPSA was “developed in recognition of the increasing need to reach target audiences, in particular youth, via personal media, like mobile phones and MP3 players”. [Site Accessed: 10/15/2009].

GPS. Global Positioning Systems

Global Positioning Systems can be used for many public health projects. They can be used to determine specifically where chemical spills/hazardous waste sites are located, can determine where potentially harmful shellfish are located along the Oregon or Washington coasts, for doing research that requires specific place location (e.g., sampling locations), assessing neighborhood environments, and so on.

Global Positioning System (GPS), Resources for Creating Public Health Maps. Centers for Disease Control and Prevention, May 13, 2009.

<http://www.cdc.gov/epiinfo/maps.htm#GPS>.

Site lists five GPS items on its Resources for Creating Public Health Maps. [Site Accessed: 10/15/2009].

Guidelines for data collection in the field using Global Positioning System (GPS) Technology, World Health Organization, July 2003.

http://www.who.int/health_mapping/resources/GIS_guidelines_data_collection.pdf.

The World Health Organization “has been routinely using the Global Positioning System (GPS) to map and track infectious diseases at community levels. GPS receivers are now commonly used by village outreach teams for onchocerciasis, guinea worm, African Trypanosomiasis (sleeping sickness), lymphatic filariasis among others”. This document “provides general guidelines for field data collection using the Global Positioning System (GPS) technology”. [Site Accessed: 10/15/2009].

Mobile Device Applications for Public Health

Epihandy. December 5, 2008.

http://www.epihandy.com/index.php/Main_Page.

Handheld survey/data collection application. Documentation and projects are listed as are other links. [Site Accessed: 10/15/2009].

The EpiSurveyor Project. Global Development 2.0. 2009.

<http://www.datadyne.org/episurveyor>.

This free, open-source software program enables public health workers to easily create handheld data entry forms, collect data on mobile devices. (Longish article from Mobile Marketer). [Site Accessed: 10/15/2009].

Pocket PC Health and Fitness Software. 2002-2009.

http://www.clickapps.com/catalogue.htm?section=PPC&cb=&set_device=&categoryfilter=Health+and+Fitness&phrase=Pocket%20PC%20Health%20And%20Fitness%20Software&pc=995.

Software site for health and fitness. Use of the mobile applications can help maintain good public health individual by individual. [Site Accessed: 10/15/2009].

Directories of Mobile Applications

Document viewers are also available for downloading as are simple database managers such as HandBase. The sites below list many public health and medical applications.

Health and Medical Mobile Software. Claude Moore Health Sciences Library, University of Virginia Health System, 2009.

<http://www.hsl.virginia.edu/services/computing/pda/medsoft.cfm>.

Links offer access to many mobile tools; links include: Software Collections | Drug Reference; Medical Calculators; Current Awareness; Clinical Tools; Bioterrorism; Viewing Documents and Web Pages; Miscellaneous; and Help and Support. [Site Accessed: 10/15/2009].

NLM Mobile. National Library of Medicine, May 05, 2009.

<http://www.nlm.nih.gov/mobile/>.

Site offers access to several of the National Library of Medicine's tools such as PubMed for Handhelds, AIDSinfo's PDA Tools, NCBI Bookshelf, and Wireless System for Emergency Responders (WISER).

CDC Mobile Web site. Centers for Disease Control and Prevention, September 23, 2009.

<http://www.cdc.gov/mobile/>.

CDC's health information has been made available on your mobile device. Visit m.cdc.gov on your mobile phone or PDA for information on seasonal flu, H1N1 flu, public health emergencies, and more. Easily access and navigate more than 16,000 CDC.gov Web pages available in a mobile-ready format. [Site Accessed: 10/14/09].

D. Directories of Interesting Online Resources

Complete Index of Tools. Turning Point, [no date].

<http://www.turningpointprogram.org/toolkit/content/tools.htm>.

Comprehensive list of Turning Point products, designed to place the latest innovations in public health right where you need them: in your hands, ready to use. You'll find everything from comprehensive planning tools to publications to curricula to Web sites filled with useful information and more. These tools were developed by experts and hands-on practitioners. For other ways of accessing the tools be sure to look at Tools by Focus Area; Tools by Current Health Challenges; Tools by Job, Role, or Task; Tools by Essential Health Services <<http://www.turningpointprogram.org/toolkit/content/essential.htm> and visit states that have successfully used one or more of the tools listed here. [Site Accessed: 10/14/09].

Disaster Estimating Tools from the CDC. Centers for Disease Prevention and Control, Monday, August 31st, 2009. <http://nnlm.gov/mcr/bhic?p=6035>.

Downloaded and install these free tools from <http://emergency.cdc.gov/>. [Site Accessed: 09/17/2009].

Mass Casualty Information for Health Professionals. Preparedness & Response Tools. Centers for Disease Control and Prevention, <http://emergency.cdc.gov/masscasualties/essentialpro.asp#tools>.

This subsection of a larger list of resources includes links to the following tools: Mass Trauma Casualty Predictor, Predicting Casualty Severity and Hospital Capacity, and Mental Health Survey Instrument. [Site Accessed: 10/14/09].

Public Health Information Systems Catalog. National Turning Point Collaborative, [no date].

<http://www.ph-toolbox.org/>.

This site is "an online catalog of software applications used by state and local public health agencies. It includes information about the software, the technical infrastructure or architecture required to use these applications, the specific public health purposes/activities for which the system is used, and the the community resources necessary to support the public health activities". Browse or search the site or use the category list to find specific tools. The category list also includes a number; this number is the number of tools available in the catalog. [Site Accessed: 10/14/09].

Public Health Tools from the Centers for Disease Control and Prevention, February 5, 2009.

<http://www.cdc.gov/ToolsResources/>.

Categories include: Featured Tools & Resources; Software & Downloads. and What's popular on CDC.gov. Look for tools for children, for educators and parents and for health professionals. The first link features growth charts, childhood immunization schedule and other tools that can be found in the alphabetical list at the top of the page. The latter link, CDC.gov, "is an alphabetized list of the most popular search topics on the CDC.gov Web site. The text size of the term shows its relative popularity: bigger terms are more popular than smaller ones. Click a term to view a page with more information on the topic". It is a great visual means of demonstrating what information visitors to the site want. [Site Accessed: 10/14/09].

Public Health Research Tools. University of Utah Library, [no date].
<http://library.med.utah.edu/ed/eduservices/researchtools/pubhealthtools.php>

This University of Utah site offers a listing of a variety of research tools for public health practitioners. The list includes getting started tools, top electronic resources, citation finding tools and provides a listing of selected online journals, statistical resources and important Websites and tutorials. [Site Accessed: 10/13/2009].

Related Tools. Resource Guide for Public Health Preparedness. New York Academy of Medicine. September 17, 2009.
<http://www.phpreparedness.info/tools.php>.

Another directory of related public health tools. [Site Accessed: 09/17/2009].

Simple online methods increase physician disease reporting. January 9, 2008.
http://www.temple.edu/newsroom/2007_2008/01/stories/diseasereport.htm.

A public health tool used for collecting disease data in a hurry. This press release describes the study and its outcomes. It was developed for the state of Pennsylvania and is called PA-NEDSS (<https://www.nedss.state.pa.us/nedss>). [Site Accessed: 09/17/2009].

Tools and Resources for Influenza Preparedness. AHRQ. April 2009.
<http://www.ahrq.gov/PREP/swineflu.htm>.

Useful site of tools for those involved in influenza preparedness. [Site Accessed: 10/13/2009].

Tools for Public Health Professionals. Center for Genomics and Public Health, University of Washington. 2007.
<http://depts.washington.edu/cgph/OnlineTools.htm>.

Provides links to three resources: Core Competencies for Public Health Workforce (Genomics competencies); Genomics: A Guide for Public Health; and Public Health Perspective Series. The latter link offers "[i]nformation and commentary on discoveries of genetic variants, related disease outcomes, and the complex social, legal, and ethical issues surrounding genetic discoveries. [Site Accessed: 09/17/2009].