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# He@lth Information on the Internet

- 1 Editorial: the invisible Web  
*Sue Childs*
- 3 View from the front line –  
off duty  
*Harry Brown*
- 4 Tuberculosis information  
on the Web  
*Khaled Abu-Amero*
- 6 ReproMED: reproductive  
medicine on the Internet  
*Julian M. Jenkins*
- 9 Bookmarks: diabetes  
mellitus – interrelationship  
between health and  
information  
*Mandy Hall*
- 10 The Pilot NeLH : new  
resources  
*Alison Turner*
- 12 What's new  
*Lisa Gray*

## Editorial: the invisible Web

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*He@lth Information on the Internet*

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More of the Web is invisible to general Web search tools than is visible.<sup>1-3</sup> Rather like icebergs, where the majority of the ice is underwater. The invisible or deep Web consists mainly of information inside databases, *i.e.* anything behind an interactive electronic form, which cannot be accessed by Web crawlers. Crawlers can record the address of the search front page but can tell you nothing about the content of the database. In addition, the invisible Web includes non-text items such as images and sounds and file formats like PDF (as crawlers are text-based), sections of Web sites not included by the search engine (not every page of a Web site is indexed) and sites that are deemed to be of interest only to a small number of Web users so that search engine companies don't include them in their listings (this may well include information of interest to professionals rather than the public). As technology develops, more and more Web content will be dynamically generated on individual demand. Such content will also reside in the invisible Web.

There are thousands and thousands of databases accessible

through the Web that contain high quality information. To access this content, you have to visit the Web site and use the purpose-designed search tools provided by that site. These search tools vary from site to site, and also differ in their functionality, efficiency and ease of use. It has been estimated that the invisible or deep Web is about 500 times larger than the usual, 'surface' Web.<sup>4</sup> What could these databases comprise? They could cover telephone directories, interactive maps, airline or train timetables, stock prices, census data, current news. In the health field, they could cover library catalogues, bibliographic information, genetic sequences and, in the future, patient records.

So how can we search the invisible Web? New technology is

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being developed to cope with this problem.<sup>4</sup> However, currently, the best and easiest way is to go to 'gateways' that compile lists of links to the search interfaces of such 'hidden' resources. Examples of some of these gateways are:

- Direct search, compiled by Gary Price of the George Washington University in the USA <<http://gwis2.circ.gwu.edu/~gprice/direct.htm>>. Look in the list of Categories under 'Science' – Medicine/ Health for health-specific links.
- InvisibleWeb.com <<http://www.invisibleWeb.com>> produced by Intelliseek. This is a Yahoo-like directory, human edited and indexed. Health is one of the categories.
- The UK Higher Education Resource Discovery Network (RDN) <<http://www.rdn.ac.uk>> gives access to gateways covering the disciplines of Arts & Creative Industries (in Development), Business, Computing (in Development), Engineering, Health & Medicine, Humanities, Law, Life Sciences, Mathematics (in Development), Physical Sciences, Reference, Social Sciences, Sport, Leisure & Tourism (in Development), as well as recent news stories in 'Behind the headlines'. OMNI and NMAP are part of RDN.

- BUBL, a national information service for the UK higher education community, has a list of Selected Internet resources covering all academic subject areas, including health studies <<http://www.bubl.ac.uk/link/>>.
- NISS (National Information Services and Systems) provides online information services for the UK education sector, and other government sectors including health, <<http://www.niss.ac.uk/>>.
- It helps to have a gateway to gateways such as Pinakes. A subject launchpad <<http://www.hw.ac.uk/libWWW/irn/pinakes/pinakes.html>> Pinakes is hosted by Heriot-Watt University.

The Internet, including the World Wide Web, is now so complex that it is difficult to comprehend. However, researchers have recently published conceptual maps of cyberspace. These visual representations help us to appreciate this new IT world, as well as being stunningly beautiful and fascinating. Look at the cybermaps on <<http://www.cybergeography.org/atlas/atlas.html>>, particularly the Topology section. These maps have been created by 'cyber-explorers' of many different disciplines, and from all corners of the world.

## References

[All accessed 22/10/01]

1. Sherman, C. Search for the invisible Web. *Guardian Online*, 06/09/2001. <<http://www.guardian.co.uk/online/story/0,3605,547140,00.html>>
2. Sherman C. The invisible Web. *Freepint* 08/06/2000, No.64. <<http://www.freepint.co.uk/issues/080600.htm#feature>>
3. Sullivan D. Invisible Web gets deeper. *Search Engine Report* 02/08/2000. <<http://searchenginewatch.com/sereport/00/08-deepweb.html>>
4. DeepPlanet. The 'deep' Web. <<http://www.brightplanet.com/deepcontent/index.asp>>

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