

# The leishmaniasis e-compendium: a geo-referenced bibliographic tool

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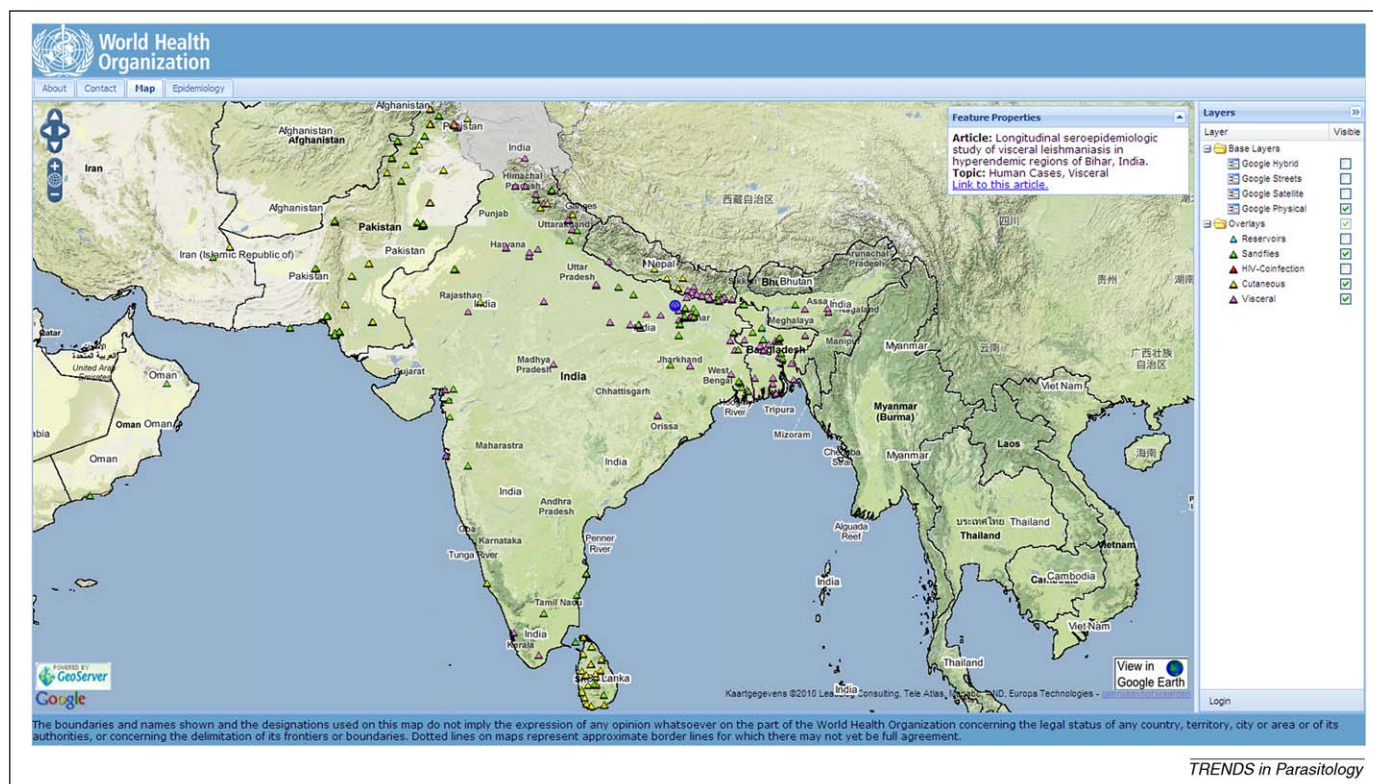
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Access to bibliographic data on the epidemiology of infectious diseases is essential for researchers, health professionals and students. With the e-compendium concept (<http://apps.who.int/tools/geoserver/www/ecomp/index.html>; <http://www.who.int/leishmaniasis/en/>; and <http://www.leishrisk.net>) we aim to add a visual, map-based geographic dimension to the way such data can be presented and queried online. Currently the application contains bibliographic data on the epidemiology of leishmaniasis, a neglected parasitic disease. However, the same concept could be applied to any other disease.

The e-compendium presents a simple interface which enables interaction with an online map and the bibliographic data contained therein. It lets users visually search for articles in relation to specific topics (e.g. human

cases, vectors or reservoirs) and geographic areas (Figure 1). The menu system enables the selection of preferred mapping formats and topical data overlays. Articles are visualised on the map as colour-coded icons at the geographic location(s) they refer to. Clicking an icon provides the user with the full name of the article, a hyperlink to the article abstract, or where freely available, the full article.

The e-compendium is not a risk map. It records the regions in which research efforts were undertaken and for which peer reviewed articles were identified. However, both sources of information are complementary, highlighting gaps in scientific research or pointing out discrepancies in health policy (e.g. the number of publications on leishmaniasis in Europe contrasts with the disease



**Figure 1.** Screen capture of the e-compendium on epidemiology of leishmaniasis, showing the different data that can be consulted: here, localisation in the Indian sub-continent of all publications made on sandflies, cutaneous leishmaniasis or visceral leishmaniasis. After clicking on an icon (blue circle), the user automatically gets the title of the paper and the link with the PubMed abstract.

burden at a European level). Furthermore, the e-compedium offers detailed information on leishmaniasis epidemiology by country, making it not only a useful tool for policy makers, but also for health professionals working in travel medicine and the general public. Importantly, the e-compedium is built on a standardised format which allows the data to be imported in various GIS applications. Another key feature of the e-compedium is the possibility for users to update or add bibliographic data through their internet browser, thereby enabling straightforward data entry and collaboration with multiple content providers.

The e-compedium currently contains data on the Mediterranean basin, the African continent, Central America, South America, the Indian subcontinent and Southeast

Asia. In order to maintain its relevance, efforts for improving the quality and expanding the content to include more regions are continuous. The e-compedium should therefore be seen as a work in progress in which technical and content related updates (e.g. revision of outdated epidemiological data) will regularly take place.

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