HealthMap Newsletter
February 2009

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User Survey

We are inviting HealthMap users to complete our 10-question survey located at:
http://www.surveymonkey.com/s.aspx?sm=lqyyMakcL3VeJ2DXVxCu_2bA_3d_3d
The information obtained from the survey will be utilized to enhance HealthMap.
Your participation is greatly appreciated.

New Features

(1) Languages: We are now monitoring outbreak news in Chinese in addition to English, Spanish, French, and Russian. Look for Arabic, Hindi and Portuguese later this year.

(2) Google Translate: To support accessibility of all HealthMap alerts, we have implemented Google Translate on each of the 5 language maps. So now when you are on the English HealthMap, for example, you will see all alert titles from the 4 other supported languages and the original article source translated into English.

(3) E-mail Alerts: We are now offering an email list for health alerts of potential international significance, as determined by interpretation of the WHO Interim Guidance for the use of Annex 2 of the International Health Regulations (2005). If you are interested in signing up for this list, please contact us at info@healthmap.org.

(4) Data Sources: We have added key new data sources including the Wildlife Disease Information Node from the USGS. In addition, we are working closely with the Wildlife Conservation Society GAINS project, the Canadian GPHIN system, and the CDC's GeoSentinel Project on future data collaborations.

(5) Alert Categories: New categories of alerts have been added, and are now visible on the HealthMap interface:

- Alerts of potential international significance (as described above)
- Warnings - - Events such as natural disasters, conflict, or other instabilities where public health infrastructure is at risk and threat of infectious disease is high

(6) Disease Blog: In our new HealthMap Blog, an entry is posted each week highlighting a disease outbreak or alert currently making headlines. Sign-up to receive RSS updates when new posts are added, or comment on an existing entry at: http://healthmapblog.blogspot.com/

Updates

(1) Statistics:

- HealthMap is now a direct source of information for approximately 50,000 unique visitors each month.
- The system collects reports from 17 sources, which extract information from over 20,000 websites, every hour, 24 hours a day. The system collects an average of 300 reports per day.
- 89.7% of reports are acquired from news media sources
- With a 30-day moving time window, the system may display over 800 breaking news alerts on any given day.
- We have developed key collaborations with a number of local health departments, government agencies (US Department of Health and Human Services, US Centers for Disease Control and Prevention, the US Department of Defense, the European Centers for Disease Control, the Health Protection Agency of the UK), and multi-national agencies (World Health Organization), all which use the HealthMap data stream for day-to-day surveillance activities.

(2) Donations: Individual donations made via our secure website at: https://giving.childrenshospital.org/NetCommunity/SSLPage.aspx?pid=901 are critical to the success and improvement of HealthMap. Your donation of any amount makes you a vital supporter of our day-to-day operations and pays for expenses relating to:

- Costs of servers, hosting, bandwidth, and staff
- Continued development and improvements to HealthMap, such as the addition of new languages and improvement of our precise-place mapping abilities among many other items

- Research conducted on the usefulness of informal data sources in monitoring the current global state of infectious diseases and their effect on human and animal health
- Outreach events where our staff may teach others to use the open-source tools available through HealthMap

Thank you for helping to keep HealthMap a free resource for public health officials, physicians, researchers, and many others. Your support is greatly appreciated.

(3) <u>HealthMap Store</u>: By popular demand, HealthMap logo t-shirts and other items are now available! Visit http://www.cafepress.com/healthmap for more information on pricing, colors, and sizes.

(4) <u>New Staff</u>: The HealthMap team has grown, bringing on three new staff members since October 2008, including: Sue Aman, Senior Software Developer, Amy Sonricker, MPH, HealthMap Project Coordinator, and Emily Chan, MSc, Research Assistant.

Publications & Presentations

- Brownstein JS, Freifeld CC, Reis BY, Mandl KD (2008) HealthMap: Surveillance Sans Frontieres: Internet-Based Emerging Infectious Disease Intelligence and the HealthMap Project. PLoS Medicine Vol. 5, No. 7, e151 doi:10.1371/joural.pmed.0050151
http://dx.doi.org/10.1371/journal.pmed.0050151

- Google Tech Talks August 19, 2008; HealthMap: Digital Disease Detection. Speakers: John Brownstein PhD, Clark Freifeld, Mikaela Keller PhD
http://www.youtube.com/watch?v=J31z8_dzp54

- Georeferencing Workshop; Harvard University; March 21st 2008
https://cga-download.hmdc.harvard.edu/publish_web/georeferencing_workshop/georeferencing-08_brownstein.mov   (video)
http://gis.harvard.edu/icb/icb.do?keyword=k235&pageid=icb.page24711
(website to view PDF)

HealthMap in the News

- Lisa Mullins (2008). Google Tracking Global Health Problems. PRI's The World. http://www.theworld.org/?q=node/22517

- Miguel Helft (2008). Google Uses Searches to Track Flu's Spread. The New York Times.
http://www.nytimes.com/2008/11/12/technology/internet/12flu.html?_r=2&hp&oref=slogin

- Robert A. Guth (2008). Sniffly Surfing: Google Unveils Flu-Bug Tracker. The Wall Street Journal. http://online.wsj.com/article/SB122644309498518615.html?mod=googlenews_wsj

- Tim Ferguson (2008) Larry Brilliant: "Today is a good day to choose to save the world". silicon.com. http://management.silicon.com/itdirector/0,39024673,39338397,00.htm

- Martin Enserink (2008) Google Grants Fight Disease. Science 322: 517. http://www.healthmap.org/documents/science_healthmap.pdf

- Nelson R (2008). HealthMap: the future of infectious diseases surveillance? Lancet Infect Dis 8: 596. http://www.healthmap.org/documents/lancetid.pdf

- Barclay E (2008). Predicting the next pandemic. Lancet. http://www.healthmap.org/documents/lancethealthmap.pdf

- Mayor S (2008). Internet crawler uses new information sources to track disease outbreaks. BMJ. http://www.healthmap.org/documents/BMJhealthmap.pdf

- Hadhazy (2008). World Wide Wellness: Online Database Keeps Tabs on Emerging Health Threats, Scientific America. http://www.sciam.com/article.cfm?id=world-wide-wellness

- Bland E (2008). Web-Crawling Program ID's Disease Outbreaks. Discovery Channel. http://dsc.discovery.com/news/2008/07/18/disease-map-web.html

- Havenstein H (2008). Infectious disease surveillance 2.0: Crawling the Net to detect outbreaks. Computerworld. http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=9107758&intsrc=news_ts_head

- Drexler M (2008) Safety Net. The Journal of Life Sciences. http://www.tjols.com/article-611.html

Funding

HealthMap was awarded a second grant from Google.org in October 2008 to combine HealthMap's digital detection efforts with ProMED-mail's global network of human, animal, and ecosystem health specialists.

During the past two years, ProMED and HealthMap have worked together to produce a mapping system for ProMED reports. This system automatically parses ProMED reports, recognizing disease names and geographic locations, and places them on an interactive world map. The map may be customized by individual disease, time range and language of report. We are now working to take this

collaboration beyond a one-way flow of information for the purpose of mapping. We will be investigating the potential of combining ProMED's international network of infectious disease experts and global reach within the public health community with HealthMap's sophisticated searching and curation tools. By developing new tools, analyzing how officials, responders and others use outbreak information and outreach to key stakeholder organizations, we hope to create a common public platform where anyone may obtain comprehensive, timely information concerning emerging diseases outbreaks around the world.

Opportunities

We are seeking help from anyone with multi-lingual abilities and a background in epidemiology and/or public health. In particular, we are seeking individuals fluent in Arabic, Portuguese, Vietnamese, Cambodian, Thai, Lao, Burmese, and Mandarin. Please contact us at info@healthmap.org if you are interested in helping us monitor outbreak news in additional languages.

We hope you find the new design and features of HealthMap useful. Please continue to let us know how we might improve HealthMap.

Best regards,

John Brownstein and Clark Freifeld

For questions or comments, please send an email to info@healthmap.org
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