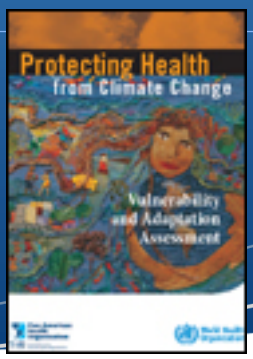
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Climate Information for Public Health Action Summer Institute

News From the Ground

This newsletter provides updates on the latest developments within the CIPHA network, including the activities of alumni and facilitators, meeting reports, news from the health and climate community and opportunities for collaboration



Editorial

The vulnerability of human health to climate conditions depends on several determinants of health but primarily social risk factors, such as poverty and public health programmes. The World Health Assembly has recently passed resolutions on health protection from climate change (WHA61.19), and on strengthening national health emergency and disaster management capacities for managing the risk of meteorological and other extreme events (WHA64.10). The UN Framework Convention on Climate Change (UNFCCC) specifies damage to human health as one of the three sets of "adverse effects" that the UNFCCC aims to avoid, and the Intergovernmental Panel on Climate Change has both highlighted multiple climate risks to health, and described the potential for meteorological information to improve early warning systems for meteorological risks.

Until recently, there has been no coherent global approach to support the management of climate risks to health. Climate variability and change has been seen mainly as an environmental rather than a health issue, and there has been very little investment in climate and health connections. The projects that have occurred have been isolated, and mainly "supply driven", by the interests and products of meteorological agencies or research institutions, rather than "demand driven", by the decision-support needs of health actors in developing countries. Although, climate-related projects have begun in almost all world regions, the health community has also not organized itself to systematically use meteorological information in its

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operations nor integrate climatic conditions into health operations and monitoring and evaluation mechanisms. This represents a missed opportunity to improve health operations and risk assessment and monitoring, and to promote a more integrated approach to sustainable development.

However, the World Meteorological Organization has recently placed a much greater emphasis on providing a service to society, building on the data or forecasts it typically provides. The Third World Climate Conference in 2009, and the World Meteorological Congress in 2011 mandated a Global Framework for Climate Services (GFCS), identifying health as a priority alongside disaster risk reduction, agriculture, and water resources. The GFCS is now an overarching strategic priority for WMO, guiding all of its work with national meteorological agencies. It therefore provides an important opportunity for the health sector to establish a comprehensive and stable approach to better understand impacts and support health protection, through better management of climate risks.

The User Interface Platform (UIP) is the pillar of the Framework, which provides a structured means for users, user representatives, climate researchers and climate service providers to interface at global, regional, and national and community levels. The objective of the UIP is to ensure that the GFCS is an initiative that meets user needs for climate services.

In turn, WMO has worked with WHO and other health partners, via consultations and expert networks, to define how WHO and the health community can contribute to the Global Framework, through the Health Exemplar of the UIP. This Exemplar will be out soon and we are happy to share in this issue that the leading person on this effort is one of our alumni Joy Guillemot.

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Updates

Alumni

SI08 alum Michelle Stanton completed her PhD in Statistics and Epidemiology at Lancaster University, UK in January 2012. Her thesis included several chapters on research activities relating to the Meningitis Environmental Risk Information Technologies (MERIT) project that in part was undertaken in collaboration with members of the IRI, NASA Goddard Institute for Space Studies and WHO.

On completing her PhD, she began a Postdoctoral Researcher position with the Centre for Neglected Tropical Diseases (CNTD), Liverpool School of Tropical Medicine under the supervision of SI08 Louise Kelly-Hope. Michelle's primary role in CNTD is to undertake operations research activities relating to the elimination of the neglected tropical disease, lymphatic filariasis.

SI 08 alum Joy Guillemot successfully defended her PhD in Environmental Health Science at Johns Hopkins on Approaches in Climate Adaptation for Health in Developing Countries. She is currently working for WMO on the health aspects of the Global Framework for Climate Services. At WHO in November, she helped organize the WHO/WMO/ISDR/RC consultation on Climate Services for Health and DRR http://www.who.int/globalchange/mediacentre/events/2011/health_disaster_risk_reduction_consultation/en/index.html

She is currently writing the WMO/WHO led Health implementation plan within the GFCS User Interface Platform.

SI09 alum Rachel Lowe just had begun a new position as a Postdoctoral Scientist at the Institut Català de Ciències del Clima - IC3, in Barcelona (http://www.ic3.cat/).

She will be involved in a project called DENFREE (see press release attached) with the aim to identify the key factors determining dengue transmission and to develop of novel diagnostic prediction tools. This is a very ambitious project that aims at studying dengue from many different angles: from epidemiology to immunology, through climatology and geography

More information available online at: http://www.pasteur.fr/ip/easysite/pasteur/en/press/press-releases/2012/denfree

SI10 alum Moussa Mouhaïmouni attended a WHO workshop to discuss and validate the National Public Health Adaptation Plan to face the climate change impacts**.** He was there as the representative of the National Meteorological Office of Niger

SI08 alum Adugna Woyessa and SI10 Wakgari Deressa published an article entitled Prevalence of malaria infection in Butajira area, south-central Ethiopia in the *Malaria Journal*.

This study documented a low prevalence of malaria that varied with season and altitudinal zone in a highland-fringe area of Ethiopia. Most of the malaria infections were attributable to Plasmodium vivax.

Paper is available online at: http://www.malariajournal.com/content/11/1/84/abstract

Facilitators

SI 08-11 Facilitator Mark Becker gave an overview of some CIESIN projects to a group of approximately twenty five representatives from the State Department, the United States Geological Survey, the National Geospatial Intelligence Agency, and other government agencies, at the U.S. State Department headquarters in Washington, D.C. last March. While in the D.C. area, Mark also participated in the first meeting of the World-Wide Human Geography Data Working Group, a group designed to build voluntary partnerships around human geography data and mapping focused on the general principle of making appropriate information available to promote human security.

Meetings

In November 2011, **SI 2008 alum Laurence Cibrelus, SI 2010-2011 facilitator Wayne Elliott, SI 2011 alum Emily Firth, SI 2010 facilitator Stéphane Hugonnet, SI 2008 alum Michelle Stanton and SI 2008-2011 facilitator Madeleine Thomson** (in alphabetical order) participated in a strategic review of MERIT, the Meningitis Environmental Risk Information Technologies. Chaired by the World Health Organization (WHO), MERIT aims to improve public health decision-making by using climate (and other) variables and to translate research outputs into operational activities.

The strategic review enabled a critical appraisal of the progress, relevance and contribution of current research and results to inform public health needs, and clarified the contribution of MERIT towards improving the public health strategy for meningitis. It also defined a clear set of priorities and research agendas, to help filling the gap created by the expected change in epidemiology of meningitis associated with the widespread introduction of a new conjugate vaccine against meningitis A, the predominant serogroup of the disease.

A group of external advisors participated to the review and identified the following as strengths of MERIT: (i) MERIT is a dynamic initiative whose members have a high level of commitment, flexibility and openness to suggestions; (ii) It brings different disciplines together (climate research and public health), and addresses real public health problems; (iii) The results of research to date suggest that MERIT has made research more relevant. The models presented at the meeting aim at the prediction of epidemic force and of the end of epidemics; both points are important in the decision making around reactive vaccination; (iv) MERIT is a good example of defined user group, that could link with the global framework for climate services to keep relevance. The report from the MERIT Strategic Review and recommendations from the advisory group is available on the MERIT website at http://merit.hc-foundation.org/.

Building on this review, a pilot exercise is being conducted in Benin, Chad, Nigeria and Togo since January 2012 to predict meningitis outbreaks using statistical modeling and climate variables such as relative humidity and dust as the epidemic season is progressing. Conducted by the members from the WHO (headquarters, inter-country support team for West Africa and country offices), the School of Health and Medicine of the University of Lancaster, the University Corporation for Atmospheric Research (UCAR) and the Goddard Institute for Space Studies (GISS) at the National Aeronautics and Space Administration (NASA), this effort has several SI alumni and facilitators on board, including SI 2008-2010 facilitator Peter Diggle. More on the outputs of the exercise should be available soon.

For information, see: http://merit.hc-foundation.org/ or contact Stéphane Hugonnet at hugonnets@who.int

In February 2012 an informal expert consultation on **Adaptation to Social, Environmental and Climate**

Change Impacts on Vector-Borne Diseases" was convened by the UNICEF/UNDP/World

Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) in collaboration with Canada's International Development Research Centre (IDRC) and the International Research Institute for Climate and Society (IRI) and hosted by the Ethiopian Climate and Health Working Group (CHWG) in Addis Ababa.

For more information contact Madeleine Thomson at mthomson@iri.columbia.edu

Upcoming Courses

Workshop on Uncertainty and Climate Change Adaptation. Lisbon, Portugal. November 8th- 9th, 2012.

The main goals of this event are to promote discussion and contribute with scientific insight by calling for the submission of abstracts that respond to the following question: How do decision-making processes on climate change adaptation, at the multi-decadal timescale, envision the future and deal with related uncertainties?

Participation is open to all actors (e.g., scientific and communication experts; policy analysts; decision-makers; modelers; economists; etc.) working in the field of uncertainties in climate and climate change adaptation.

The Workshop will be conducted in English and will be held in the Faculty of Sciences of the University of Lisbon.

More information available online at: http://www.circleera.eu/np4/WS_UNCERT.html.

Upcoming Events

The Second Nordic International Conference on Climate Change Adaptation: "Adaptation Research Meets Adaptation Decision-Making" .Helsinki, Finland. 29-31 August 2012.

This is organised jointly by two networks operating as part of the NordForsk TFI Network initiative on Effect Studies and Adaptation to Climate Change (NORDCLAD-Net and NONAM), with major co-funding from the Swedish Mistra-SWECIA research programme and supplementary funding from the Academy of Finland's Finnish Research Programme on Climate Change (FICCA) and the City of Helsinki. More information available online at:

http://www.nordicadaptation2012.net

Science Symposium on Climate and Health . Atlanta , Georgia. September 12-13, 2012

The CDC , Climate and Health Program within the National Center for Environmental Health (NCEH), and the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) will

host a Science Symposium on Climate and Health in collaboration with the National Oceanic and Atmospheric Administration (NOAA).

The purpose of the Symposium is to facilitate information exchange on the state of science related to climate change and variability; and to identify data, tools and partnerships that support improved climate-related public health decision-making.

The two- day symposium will feature both oral presentations and poster displays intended to highlight climate science research and programs and collaborative projects and activities between CDC and NOAA, with a focus on prevention of, and adaptation to the current and anticipated impacts of climate and weather on human and animal health.

Publications

Protecting Health from Climate Change - Vulnerability and Adaptation Assessment. Pan American Health Organization/WHO 2012. Coordinating lead author: Kristie Ebi. Lead authors: Peter Berry, Diarmid Campbell-Lendrum, Carlos Corvalan, Joy Guillemot

This document is the result of a process initiated in 2009 by the Pan American Health Organization (PAHO) and WHO and representatives of ministries of health from 15 countries came together in Costa Rica with WHO and subject area experts to share their experiences and provide feedback on how to improve the guidance for the conduct of vulnerability assessments. . It is intended not as a final, definitive guide but as an important part of an evolving set of resources that will support effective and evidence-base action to protect health from climate change.

Full document available online at: http://bit.ly/IRNV5X

The role of health in National Adaptation Plans to the United Nationals Framework Convention on Climate Change. WHO. 2012

This paper outlines the scale of the health risks posed by climate change, and the increasing engagement by the health sector in recent years, with activities in all regions of the world. At the same time, it notes weaknesses in coordination between health and climate policy, and the under-representation of health in the climate change support mechanisms, with funding currently covering only approximately 0.5% of the expected health damage costs.

The report makes a series of recommendations on how the new initiative on national adaptation planning can leverage the political mandates, technical and operational capacities of a newly engaged health community, to work with the international climate change mechanisms, to achieve shared health, climate change and sustainable development goals.

Full document available online at
http://www.who.int/globalchange/health_policy/who_submission_naps/en/index.html

Addressing Climate Change and Migration in Asia and the Pacific

The report was launched in Bangkok, Thailand at the 2nd Asia-Pacific Climate Change Adaptation Forum, attended by more than 700 persons. It is available on ADB's website at
http://beta.adb.org/publications/addressing-climate-change-and-migration-asia-and-pacific.

According to the Internal Displacement Monitoring Centre, during 2010 and 2011, more than 42 million people were displaced due to storms, floods, and heat and cold waves. While many dislocated people are able to return home as conditions improve, many others struggle to rebuild their lives in new places.

The report urges that climate-induced migration be addressed within a development framework and included in adaptation strategies. The report contains a series of recommendations for governments in Asia and the Pacific. .

Indicators to Assess the Effectiveness of Climate Change Projects. Impact-Evaluation Guidelines. McCarthyN , Winters P, Linares AM, Essam T.No. IDB-TN-398 April 2012.

Determining reasonable indicators for climate change projects is complicated by the long-term horizon of both mitigation and adaptation project impacts as well as the uncertainty associated with climate change impacts. Actions taken now are often designed to have an impact in the uncertain and distant future and may notdirectly mitigate or adapt to climate change, but be taken as a step to prepare for future actions. Further complicating identification of indicators is the fact that there is a spectrum of projects, from the pure climate change-focused projects to those that provide climate change benefits as one part of an overall development program, and finally to those with only incidental indirect effects. The objective of this document is to discuss SMART (Specific, Measurable, Achievable, Realistic and Timely) indicators that can be used for assessing the impact of climate change projects, including those that seek to adapt to the expected impacts of climate change and those that promote low carbon emissions growth strategies to mitigate greenhouse gases.

Read the full article here.

Community, Environment and Disaster Risk Management .Rajib Shaw, Phong Tran, 2012 .

This is the first book to focus on explicit linkages between the changing environment and disasters and suggests better approaches towards disaster management. A ready-reference for field practitioners it combines academic research and field practices and covers areas such as: elements of environmental entry (water-related disasters, desertification and land degradation, typhoon risk management, catastrophic flood and forest management, and coastal issues); impacts of environment and disaster (livelihoods impacts, human health: post-disaster waste management); and strategies, planning and the way forward (climate change adaptation as a planning tool, urban planning and land use planning, mangrove management as a coastal planning tool, and environment disaster education and risk communication).

The online table of contents can be viewed here: http://www.emeraldinsight.com/books.htm?issn=2040-7262&volume=9

Integrating Community and Ecosystem-Based Approaches in Climate Change Adaptation Responses

In this paper, the Ecosystem and Livelihoods Adaptation Network (ELAN) argues for a more truly "integrated approach" to adaptation that addresses and seeks to reconcile differences between Community-based Adaptation (CBA) and Ecosystem-based Adaptation (EBA).

More information available online at:

www.careclimatechange.org/files/adaptation/ELAN_IntegratedApproach_150412.pdf / (www.elanadapt.net)

Contact Information

Please contact ciph@iri.columbia.edu to send your comments or materials to be included in the next CIPHA newsletter. The deadline for documents to be included in the next issue is July 20th, 2012.

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International Research Institute for Climate and Society, The Earth Institute at Columbia University, Palisades, NY

Available from http://iri.columbia.edu/education/ciphnews



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