

Task Number: HE-09-03a

Task Title: Implementation of a Meningitis Decision-Support Tool

Overarching Task: End to End Projects for Health

Area: HEALTH

Related Community of Practice: Air Quality & Health and Atmospheric Chemistry (former IGACO)

Relevant Committee: TBD

Related Targets: (to be included in 2009)

Task Definition (as given in the 2009-2011 Work Plan):

Support the Meningitis Environmental Risk Information Technologies project (MERIT) which aims to extend current capabilities to more effectively combine environmental information with knowledge of epidemic meningococcal meningitis. MERIT implementation will have an immediate impact on public health decision-making and outcomes in Africa through increasing the effectiveness of prevention and response control strategies, and ongoing surveillance of meningitis epidemics. Priorities include the implementation of an operational decision-support tool for testing the 2009 meningitis epidemic season in Africa.

Leads (GEO Member or PO, Entity carrying out the work, Contact: e-mail):

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Motivation/Background

Meningococcal meningitis is a disease that afflicts people throughout sub-Saharan Africa. About 350 million people are at risk. A new vaccine offers a solution and its implementation over the next ten years will be targeted to those most at risk using latest surveillance and decision support tools. Reducing this burden will have a substantial impact on the social and economic well-being of people throughout the region.

Outputs (e.g. products and services which result from the activities of the Task/sub-task; outlined in the form of deliverables with timelines)

Environmental forecasts of dust and rainfall help decision makers identify districts where the risk of meningitis outbreaks is high and will inform the deployment of vaccines.

Produced (current status): Currently the MERIT program is testing a decision-support tool in Niger.

Activities (operations or work processes through which resources are mobilized to produce specific outputs; outlined in the form of milestones including timelines)

MERIT is the coordinating body for approximately 30 organizations involved in meningitis research and solutions development. MERIT is organized through an institutional steering committee led by WHO with members drawn from national and international governmental and non governmental organizations and academia.

Progress (current status): In 2008, nationally focused MERIT activities were initiated starting with MERIT Ethiopia, which is currently developing its own work plan. Led by the Ministry of Health, through the

Ethiopian Climate and Health Working Group, MERIT Ethiopia aims to increase the national capacity and capability to reduce the impact of meningitis in regions where frequent outbreaks of the disease occur.

Resources (*indication of resources – e.g. financial, human – contributed by GEO Members or Participating Organizations to produce outputs*)

MERIT is sponsored through the individual efforts of its partners contributing both financial and human resources

Capacity Building Component

(*capacity building is defined to include the development of capacity related to: (i) Infrastructure and technology transfer (Hardware, Software and other technology required to develop, access and use EO); (ii) Individuals (education and training of individuals to be aware of, access, use and develop EO) and (iii) Institutions – building policies, programs & organizational structures to enhance the value of EO data and products*).

1) *In accordance with the above definition does this Task have a capacity-building component? If so, please provide a short description of this component including a description of end users.*

MERIT aims to build national capacity to reduce the burden of meningitis. It brings together health and climate professionals to enhance their capacity to work together on this problem. MERIT organizes capacity building workshops as part of its international meetings to improve national skills in all of the relevant sectors.

2) *Have any additional CB needs for this Task been identified? Please provide a short description.*

None

User Engagement Component

(*please briefly describe to what extent end users are engaged in this Task and influence the nature of the outputs produced*)

This project is run by users in the health sector.

Science and Technology (S&T) Component

1) *Please briefly describe the elements of scientific research or technological development contained in this Task*

Improving forecasts of dust and other relevant environmental conditions. Improve the understanding of the environmental factors in disease outbreaks.

2) *In relation to the S&T component(s) of this task, please describe gaps, priorities, continuity needs, barriers, scientific expertise and additional resource needs (this information will be used for developing a gaps and needs assessment in Task ST-09-01)*

Operational capacity in the environmental community to support meningitis decisions is not currently available and needs to be developed

Members and POs' Contributions to Outputs and Activities above:

(*Input is optional. This section gives the chance to Members and POs to provide more details (3-5 lines) on their individual activities, making a clear connection with the Outputs and Activities outlined above*).

All of the Members, POs and organizations cited are members of the MERIT Steering Committee and responsible for its overall outcomes.

USA

Work on time series analyses of Meningococcal Meningitis cases in three African countries (Mali, Niger, Burkina Faso). The goal of the studies is to better understand the spatial distribution and propagation of

cases between districts and establish epidemiological patterns. The final goal is to improve the current alert system that leads the reactive vaccine strategy for Meningococcal Meningitis in the region of Africa where seasonal cases and epidemics occur.

CEOS

CNES: Develop long-term architecture plans among CEOS agencies to support the measurement of coastal water color (300-meter accuracy) and near-surface (<100-meters) pollutants, pollens and dust for the forecasting and monitoring of health hazards.

Participation (Table to be filled in 2009):

Type	Member or PO	Representing	Contact Name	EmailAddress
Lead(PoC)	USA	HCF	David Rogers	drogers@hc-foundation.org
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