

The Emerging Pathogens Institute Seminar Series

Presents

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The Malaria Atlas Project (MAP): mapping endemicity, burden and movement

Thursday, May 1, 2008

4:00pm - Room G-112, HPNP Building

Over 2 billion people are estimated to be exposed to the threat of the dangerous *Plasmodium falciparum* strain of malaria, resulting in around 500 million clinical episodes and 1-3 million deaths a year. In allocating public health resources for control, the guiding principle should be an evidence-based quantification of need. The evidence base for allocating resources for malaria control on a global scale is poor, however, with endemicity levels often unknown or ignored. Endemicity is a measure of the level of malaria challenge in a human population, and determines the average age of first exposure, the rate of development of immunity, and thus, the expected clinical spectrum of disease. Therefore, suites of relevant interventions to control malaria should be tailored to these basic epidemiological foundations. The primary goal of the Malaria Atlas Project (MAP, www.map.ox.ac.uk) is to develop the science of malaria cartography, aiming primarily to produce the first empirically-derived global maps of transmission limits and endemicity levels within these limits. The work of MAP will provide the focus to my talk, detailing how community surveys, satellite imagery and a wealth of other spatiotemporal data layers are being used to understand and model mosquito distributions, malaria transmission, burdens and movement risks spatially.

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