

Mapping and Environmental Public Health: Visualizing Health Disparities

Date: May 7, 2012
Time: 12 – 1:30 p.m. ET

Please register at http://bit.ly/PEPH_Mapping
(registration required)

Description: Geographic risk assessment is an increasingly viable methodology for visualizing and tracking factors that feed into health disparities such as access to care or proximity to Superfund or other known sources of pollution. GIS mapping, and other less sophisticated mapping tools, are also being used for establishing patterns of disease prevalence or the effects of air, water, or chemical pollution on susceptible populations, or for identifying populations at risk for the cumulative effects of ongoing exposures and disaster events (e.g., hurricanes, tornadoes, oil spills). This webinar will explore cases where mapping has been utilized to elucidate health disparities, disease prevalence, and their relation to geography and sources of pollution. Questions, insights, and suggestions from the webinar audience are welcome.

“Field kits for arsenic, hand-held GPS receivers, and Google Earth: key technologies for reducing exposure to arsenic contained in groundwater across South and Southeast Asia.” – Alexander van Geen, Ph.D.

The focus of this presentation will be what has been called by Allan Smith, a leading cancer epidemiologist at UC Berkeley, “the largest poisoning of a population in history”, which is due to naturally elevated arsenic (As) concentrations in groundwater pumped from tens of millions of shallow tubewells across South and Southeast Asia. On the basis of data from studies supported by the Superfund Research Program and other sources since 2000, van Geen will make the case that there is a sustainable solution that relies on private entrepreneurship and two simple technologies, (1) a field kit for measuring As, and (2) a hand-held GPS receiver for data entry in the field.

“The NPL Superfund Footprint: Site, Population, and Environmental Characteristics Mapper.” – Meredith Golden, M.Sc. and Tricia Chai-Onn, M.Sc.

This presentation is an overview of the NPL Superfund Footprint Mapper’s data layers and functions. The presenters will also discuss the technology used to create and make available the geographic information system (GIS) for the Mapper. Finally, they will suggest potential enhancements of the Mapper through additional collaborations with regulatory agencies, university researchers, private and non-profit sectors, and communities located near Superfund sites.

“The air we breathe in NYC and spatial variability”
Steven Chillrud, Ph.D.

Intercity variations in airborne particulate matter has been repeatedly associated with negative health outcomes within study populations, driving environmental policy for decades. However intracity spatial variability drives exposures and health outcomes for people living in cities. Chillrud will discuss spatial and temporal variations in specific particle-associated air pollutants in NYC from both regional and local sources, as well as provide evidence that certain components of fine particulate matter from combustion sources including soot and certain metals may be key constituents related to particulate matter’s toxicity. Reference to historical and current policy decisions made by NYC in its quest to improve its air quality will also be discussed.

Additional Resources:

SRP Superfund Footprint Mapper website URL: <http://superfund.ciesin.columbia.edu/sfmapper/>



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PEPH Webinar Series

The Partnerships for Environmental Public Health (PEPH) Program established the PEPH Webinar series to promote interactions among PEPH grantees and to increase awareness of common issues and approaches. The webinars facilitate consideration of emerging issues. While the primary audience is grantees within the PEPH network, anyone interested in environmental public health is welcome to register.

Upcoming PEPH Webinars

May: Health Impact Assessments and Community Engagement

June: Science-based Decision Making

July: Hydraulic Fracturing

If you have any questions about this webinar or future webinars please contact Justin Crane (cranej2@niehs.nih.gov, 919-794-4702).

Individuals with disabilities who need accommodation to participate in this event should contact Justin Crane at 919-794-4702 or cranej2@niehs.nih.gov. TTY users should contact the Federal TTY Relay Service at 800-877-8339. Requests should be made at least 5 business days in advance of the event.