

BC Environmental and Occupational Health Research Network GIS Group

Informal minutes: December 1, 2006

Attendees:

Mieke Buller (BCCDC, GIS)
Ruth Cridland (Fraser Health, GIS)
Sunny Mak (BCCDC, GIS)
Ian Parfitt (Selkirk College Geospatial Research Centre, GIS instructor/researcher)
Gen Prudhomme (Fraser Health, GIS)
Christine Ronning (Interior Health, GIS)
Eleanor Setton (UVIC PhD student)

Regrets:

Anders Erickson (UNBC, MSc student)
Meghan Winters (UBC, PhD student)
Mieke Koehoorn (UBC, Asst. Professor, Health Care and Epidemiology)

Upcoming Events:

Ongoing: Philip Abdelmalik, a researcher at PHAC is conducting a survey as part of a PhD program, looking for replies from public health data users and researchers re: accessing health data and barriers for applying spatial analyses. Anyone interested in taking the survey should contact Philip:

Philip_Abdelmalik@phac-aspc.gc.ca:

December 7, 2006 – Web seminar on GeoConnections Public Health Program – Overview and Opportunities

<https://giac.webex.com/mw02021/mywebex/default.do?siteurl=giac&service=6>

ACTION: Christine Ronning will attend and takes notes to circulate to those who cannot attend.

September 2007 – 1st Public Health Geomatics conference will be held, organized by PHAC (Public Health Agency of Canada). There will be an opportunity to send in abstracts for presentations. Sunny Mak will keep us up to date as the conference develops.

Topics of Interest:

We are starting a list of topics and will start finding speakers/presenters to address when demand/interest is sufficient. Please send ideas to Eleanor for inclusion on the list. So far we have:

- Methods for mapping/displaying confidential data
- Use of GIS for disaster planning (environmental/occupation health aspect?)

Discussion Topic for this meeting:

Health Vulnerability Mapping

- GIS is often used to map people's vulnerability to natural hazards, or to map socioeconomic conditions that make people more vulnerable to poor health
- Very little has been done in terms of mapping locations of people with particular illnesses or conditions in conjunction with environmental pollution that might affect their health, for example, people with respiratory or cardiac conditions and air pollution. This might be due to confidential nature of the data (need residential address of all people who have been treated for a specific illness).
- Health authorities could work with academic researchers to undertake mapping of vulnerable people and environmental pollution, toward developing or influencing environmental policy and reducing risk for vulnerable people.
- Emerging concepts of environmental equity and using environmental standards PLUS risk reduction strategies for improving population health require this kind of approach.
- The idea is similar to health risk assessment and exposure assessment in terms of identifying where people reside in relation to pollution sources. For example, in a health risk assessment, pollution levels would be estimated, the number of people exposed and their level of exposure would be quantified, and then conclusions would be made regarding the number of certain illnesses attributable to the pollution and exposure. For an epidemiological study (spatial or otherwise), healthy people are 'followed' for a certain period of time, their exposure to a particular pollutant is measured/estimated (sometimes by measuring proximity to sources), and the number of people who suffer a particular illness at different exposure levels are used to identify any association between increasing exposure and increasing cases of illness.
- The idea of vulnerability mapping for health as conceived of here is different from health risk assessment and epi studies in that the locations of people with a specific illness known to be impacted by pollution are mapped and compared to maps of pollution levels, with the specific goal of identifying targeted policies for risk reduction.

Based on the group's discussion, there is a lot of interest in this idea, particularly among the Health Authority members.

Other mappable information that might be of use includes locations of senior care facilities, schools and daycares. Interior Health has done some mapping of senior care facilities by geocoding addresses. Other Health Authorities have not progressed as far at this point. There is also interest in developing and mapping risk and deprivation indices. Sunny suggested we contact several Ministry of Health people who have been working on this idea as well.

ACTION: Eleanor to contact Weimin HU, Mike McFadden, and Esther Parker (thanks Sunny for the contact info), Christine Ronning may also contact re: Interior Health's ongoing work on derivation indices

ACTION: Group members to think about questions of interest and potential projects to discuss at next meeting. Based on ideas, we will start developing teams and identifying possible funding sources.

Technical Talk:

Gen Prudhomme was having trouble with projecting Local Health Area boundaries and Micro Health Area boundaries.

ACTION: Gen emailed files to Eleanor – problem was not projection, but different source scale for different boundary files, causing small discrepancies between the common boundaries between LHAs and MHAs. Worked out a procedure in MapInfo for reconciling boundaries to a common base.

Other:

Christine Ronning is looking for people to give 30 minute talks on GIS and health applications for staff at Interior Health. Topics should cover issues in BC. Previous talks have demonstrated the use of a health atlas, the use of distance measures to evaluate access to services, and a talk from ESRI rep Scott Stafford Veale.

Update on the application for Michael Smith Foundation funding for a Population Health Data Access and Analysis Platform. If successful, the platform would provide a 'one-stop' point for academic health researchers to apply for health data, and would also organize and coordinate a range of web seminars, online and summer institute courses, and web documents on all aspects of health data analysis. The initial focus will be on geomatics for health research. Education/training is meant to be post-academic program, and will be available to all in BC. Funding would begin in May 2007, with 2 years at \$500,000 confirmed, then potentially 3 more years with an increase in funding up to 1.5 million per year. Cross your fingers – if successful, this could really jumpstart health geomatics in BC and make us world leaders.....

THANKS TO ALL!!!

NEXT CALL: JANUARY 26th, 10:30 am to noon