Cross Border Syndromic Surveillance – Overview and Recommendations from an ISDS Consultation held in Kingston, Ontario Canada June 11-12th, 2007

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OBJECTIVE
The objectives of the two day International Society for Disease Surveillance (ISDS) funded consultation were to develop expert, consensus-based recommendations that address specific, unanswered questions that hinder advances in cross border syndromic surveillance. The consultation included a discussion of the details of existing Canadian (Can) and United States (US) syndromic surveillance systems and the opportunities and challenges for new developments. Particular focus was placed on the ability to detect and respond to a bioterrorism event or infectious disease outbreak across borders.

BACKGROUND
Infectious diseases do not respect geo-political borders. As has been a hot topic lately with foodborne illness and multi-drug resistant Tuberculosis across borders, the likelihood of shared health hazards is high. In addition, the ever-present threat of bioterrorism, such as the intentional release of a highly infectious biological agent, could impose widespread morbidity and mortality, thus requiring timely response and coordination across borders.

Much of the work of existing cross border surveillance programs such as the Centers for Disease Control and Prevention’s (CDC) Early Warning Infectious Disease Surveillance (EWIDS) program have focused on data sharing of notifiable/reportable disease reports. The consultation objective was to build upon this work while focusing specifically on the research and practice of syndromic surveillance across Canadian/US borders.

The targeted objectives were as follows:

• Identify and understand the systems in place for syndromic surveillance on each side of the border
• Clarify how these systems are integrated into public health surveillance and emergency response
• Highlight existing cross border activities and how this work can provide a foundation for syndromic surveillance and cross border communication/collaboration
• Identify how syndromic surveillance alerts may be shared across borders and how to address the barriers of sharing alerts/data
• Outline opportunities for collaboration around research and practice
• Enhance infectious disease syndromic surveillance at international borders

METHODS
The syndromic surveillance team based out of Kingston, Frontenac and Lennox & Addington (KFL&A) Public Health in Kingston, Ontario submitted a formal proposal to host a consultation on cross border syndromic surveillance to the ISDS Sponsored Activities committee on March 1st, 2007. Upon notification of approval in April 2007, we began the process of acquiring key representation from local, provincial/state and federal levels of public health, academic researchers and others with an interest and expertise in syndromic surveillance. KFL&A Public Health was chosen as the venue to host the consultation June 11-12th 2007. The agenda and speakers were planned with input from ISDS to ensure all project deliverables would be met through the consultation process.

RESULTS
Participation from US border States included representatives from Michigan and New York. Additional representatives were from Johns Hopkins University, Emory University, CDC and ISDS. From Canada, representatives from the Ontario Ministry of Health and Long-Term Care, the Public Health Agency of Canada, several local public health units, Queen’s University, McMaster University and McGill University were in attendance. Attendee disciplines included medicine, legal, public health, epidemiology, geography/GIS, statistics, laboratory medicine, microbiology and infectious disease, and policy.

Over the two-day consultation, participants had the opportunity to learn about respective systems and public health capacity on both sides of the border. Discussions focused on alert/data sharing, scenario investigations, spatial analysis and mapping, representativeness of systems, and emergency preparedness and response protocols for cross border syndromic surveillance. The final recommendations are a direct reflection of the attendees’ perspectives and are intended for local, state/provincial and federal level public health professionals. Participants were provided with one-page overviews of respective systems, a CD of all presentations and a list of contact information for all attendees.

CONCLUSIONS
Participant feedback was very positive and future plans for US/Can collaboration were considered, including US/Can participation in respective electronic surveillance alerting systems, the formation of an ISDS sub-committee, and a cross border focus in future conferences. Finally, a possible cross border tabletop on pandemic influenza and research projects involving mapping of influenza across borders are already underway.

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