

Diseases Don't Respect Borders

Cross-Border Response and Collaboration in the Pacific Northwest

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On March 7, 2003, a 55-year-old man who had recently traveled to Hong Kong was admitted to a Vancouver, British Columbia, hospital with pneumonia. Emergency room staff immediately placed a facial mask on the patient, and he was quickly admitted to a respiratory isolation room in the intensive care unit. This heightened attention to infection control was prompted by recent health alerts issued by the British Columbia Centre for Disease Control (BCCDC) about human cases of avian influenza reported in Hong Kong. On March 12, 2003, the World Health Organization issued a global alert regarding an outbreak of severe acute respiratory illness of unknown cause in China and Southeast Asia, and BCCDC followed this alert with one of its own reminding provincial health care providers to carefully screen patients with respiratory symptoms for recent travel to Southeast Asia.

When the Vancouver patient's condition deteriorated the following day, the hospital informed BCCDC that they suspected their patient was connected to the outbreak of respiratory disease in Asia. Rapid action by health care and public health agencies in British Columbia in response to a suspected case of a highly contagious disease was critical in preventing the spread of severe acute respiratory syndrome (SARS) in the Pacific Northwest. A routine after-hours heads-up call from BCCDC to the Washington State Department of Health about the suspected Vancouver case enabled the department to rapidly prepare and distribute information about this emerging disease to local health jurisdictions in Washington.

Recent events such as the international outbreaks of SARS, salmonella, and the cases of bovine spongiform encephalopathy (mad cow disease) in Canadian and American cattle have clearly demonstrated that communicable diseases do not respect international borders. Public health partners on both sides of the US-Canada border must be ready to quickly and effectively respond to events such as these. A key step in developing this capability is establishing collaborative relationships among the agencies most likely to be called on to respond to a public health emergency.

Forming a cross-border partnership

In the summer of 2004, the Washington State Department of Health, with funding from the US Department of Health and Human Services, held the first of a series of Pacific Northwest cross-border workshops in

Bellingham, Washington. The goal of the first workshop (*Emerging Public Health Threats: Tracking Infectious Disease Across Borders*) was to formalize relationships between US and Canadian public health and emergency management agencies responsible for control of communicable diseases and response to public health emergencies in the region. More than 200 participants attended the workshop, including epidemiologists, laboratorians, emergency managers, and public health lawyers. They represented Alaska, Alberta, British Columbia, Idaho, Montana, North Dakota, Oregon, Washington, and the Yukon Territories, as well as Canadian and US federal governments and tribes. Participants formed a plan for building and strengthening relationships across the US-Canadian borders; developed a framework for formal agreements to track communicable diseases that cross jurisdictions; and developed a work plan describing the steps needed to complete and execute those agreements.

In the best of times, understanding the intricacies of a government agency may be trying—and the onset of a pandemic is not the time to Google “Health Canada” to see what pops up. Effective cross-border response in a public health emergency will require planned, coordinated activities by multiple agencies. Barriers to effectiveness include lack of familiarity with the roles and identities of appropriate responders, lack of established lines of intra- and interagency communications and data sharing, lack of planning and agreements for sharing scarce resources, and failure to address legal or jurisdictional issues that may restrict international cooperation. To explore these barriers, four priority issues were identified for discussion during the workshop: establishing and maintaining 24/7 communication between agencies, enhancing the ability to share data about cross-border health threats, establishing agreements for sharing regional resources, and understanding jurisdictional and legal barriers that might prevent us from achieving our goal of creating a system for cross-border tracking and control of regional public health threats.

To maintain momentum, participants committed to formalizing workgroups, updating existing contact lists and directories, planning and executing cross-border exercises, advocating for support of preparedness at appropriate policy levels, and planning the next conference on cross-border preparedness.

Workgroup members from Washington, Oregon, Alaska, Idaho, and British Columbia updated and

distributed a contact list for 24/7 communicable disease emergency response in their jurisdictions. Partners from British Columbia Centre for Disease Control signed on to the US Centers for Disease Control and Prevention's Epi-X electronic alert system and are also working to develop connectivity between Epi-X and the Canadian Network for Public Health Information as an enhancement to cross-border communication. Work was begun on a public health annex to the Pacific Northwest Emergency Management Arrangement—a compact that will allow sharing of materials, supplies, and staff between regional agencies in the US and Canada.

Continuing progress

The second Pacific Northwest cross-border workshop (*Emerging Public Health Threats: Pandemic Influenza Preparedness—a Public Health Perspective*) focused collaborative efforts of the workgroups on preparation and response to pandemic influenza. The British Columbia Ministry of Health Services hosted the workshop in Vancouver, BC, in April 2005. Again, more than 200 participants attended from Canadian and US Pacific Northwest jurisdictions and federal agencies.

During the two-day workshop, topics ranged from the state of vaccine manufacturing and vaccine supplies to British Columbia's response to the 2004 outbreak of avian influenza in the Fraser Valley. To explore each nation's approach to pandemic planning and response, break-out groups examined the Washington and British Columbia plans in order to compare methods for disease tracking (surveillance), containing the spread of infection in the community and health care settings, identifying surge capacity, and developing risk communications. Additional dimensions of these themes were identified in tabletop exercise scenarios that focused on response to the introduction of a pandemic influenza strain into the Pacific Northwest.

The discussions again identified potential obstacles to our goal of creating a system for cross-border tracking and control of regional public health threats: lack of clarity on the legal challenges of sharing data and resources across the border; lack of consistent recommendations and procedures for disease control in health care settings, in communities, and at the borders; and lack of consistent public messages from both nations that will inspire trust and appropriate actions to prevent the spread of infection.

Because international disease tracking requires sharing confidential information across international borders, the most significant barriers are legal and jurisdictional. Although sharing identified medical information among public health agencies in the US is allowed by the Health Insurance Portability and Accountability Act (HIPAA), there is no equivalent document regarding data sharing between the US and Canada. In particular, some Canadian participants expressed concern about the potential effect of the US Patriot Act on the confidentiality of identified medical information, particularly in the event of a cross-border outbreak that could represent a bioter-

rorism incident. The workgroup concluded that it may be difficult to resolve this regionally, but they will explore the issue of regional data sharing with the legal and policy staff who are developing and reviewing the public health annex of the Pacific Northwest Emergency Management Arrangement compact.

Workshop participants emphasized the importance of establishing formal collaboration among US and Canadian public health and emergency management partners. Commitment to continue that work is evidenced by progress on developing the emergency management assistance compact and the continued collaboration of workgroups focused on epidemiology, disease surveillance

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and laboratory issues, infection control, surge capacity, risk communications, legal/jurisdictional issues, and US-Canadian border and port quarantine. When avian influenza or another equally serious pathogen arrives by plane in Seattle or Vancouver, we believe our collaborations will pay off. ■

Authors

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Resources

Patrick DM. The race to outpace severe acute respiratory syndrome (SARS). *CMAJ* 2003; 168:1265-6.

World Health Organization. Cases of severe respiratory illness may spread to hospital staff. (Press release) 12 March 2003. www.who.int/csr/sars/archive/2003_03_12/en/ (accessed August 26, 2005).

World Health Organization. Severe Acute Respiratory Syndrome (SARS) Epidemiology Working Group. Consensus document on the epidemiology of severe acute respiratory syndrome (SARS). Global Meeting on the Epidemiology of SARS. WHO/CDS/CSR/GAR/2003.11. May 2003. www.who.int/csr/sars/en/WHOconsensus.pdf (accessed August 26, 2005).

Public Health Agency of Canada. *Learning from SARS. Renewal of Public Health in Canada*. A report of the National Advisory Committee on SARS and Public Health. October 2003. www.phac-aspc.gc.ca/publicat/sars-sras/naylor/index.html (accessed August 26, 2005).

CDC. Multistate outbreaks of Salmonella serotype poona infections associated with eating cantaloupe from Mexico—United States and Canada, 2000-2002. *MMWR* 2002;251:1044-7.

CDC. Outbreak of Salmonella serotype enteritidis infections associated with raw almonds—United States and Canada, 2003-2004. *MMWR* 2004 53:484-7.

CDC. Bovine spongiform encephalopathy in a dairy cow—Washington, 2003. *MMWR*. 2004;52:1280-5.

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