



Toronto's Dance With SARS

By Paul Webber

Several days after her Continental Airlines flight from Hong Kong touched down in Toronto, family matriarch Kwan Sui-Chu died quietly from flu-like symptoms at her suburban home. She had not been to a hospital, and once symptomatic, she had not circulated in the general population — her cause of death was listed as “heart attack.” “Nobody knew about SARS at the time; her death did not trigger anything in the coroner’s mind,” said Dr. Jim Cairns, Ontario’s deputy chief coroner. If SARS had been limited to Sui-Chu, Toronto’s first SARS outbreak might never have happened. Unfortunately, it wasn’t limited, and through a series of events, it was about to get legs.

By the time Tsi Chi Kwai buried his mother, he too was symptomatic, and a highly infectious “super-spreader.”

Seeking relief at a local hospital, he lay coughing on an ER gurney for 12 hours, exposing more than 200 patients, nurses and doctors to this unknown pathogen. Patients who shared the hospital ER with Kwai were transferred to other hospitals all over the city, transferred by emergency response personnel who didn’t know to take precautions and who often carried more than one patient at a time. Cautious about overstating the risk and causing panic, the Toronto Public Health Department issued an underwhelming statement that SARS was “confined to a family who had recently traveled to Hong Kong.” One day after this lukewarm warning, Tsi Chi Kwai died.

As the magnitude of the problem became unavoidable, waves of e-mails and faxes with updated (sometimes contradictory) information crashed into healthcare facilities from every direction. Every hospital in Ontario — a land mass more than twice the size of Texas—was ordered to bar all visitors, volunteers and non-critical appointments. Hospitals screened everyone as they entered — even staff members who just stepped outside for a smoke. Double gloves, double gowns, masks and face shields were mandatory for contacts. First responders were gowned, gloved and masked for all transfers and were instructed to clean their equipment and vehicles with a special “accelerated hydrogen peroxide” disinfectant. Alcohol hand sanitizers and N95 respirators became hot commodities and were quickly in very short supply.

In the media, news of SARS pushed the pending assault on Baghdad off the front pages. Thousands of people, including healthcare workers, were quarantined in their homes, and many people self-quarantined after suspected or known exposure. Toronto nurses were often avoided by friends and family, afraid of what might be incubating in their lungs. One Hewlett-Packard employee went to work with SARS-like symptoms after having been warned to stay home. Consequently the entire HP plant was shut down and 300 of his workmates quarantined. As a travel destination, for business or pleasure, Toronto was a pariah. Huge conferences were cancelled, as were many flights into Toronto’s Pearson International Airport. Community functions and sporting events were postponed.

Chinese restaurants closed and the Asian districts of Toronto and other major cities looked abandoned.

No one in Toronto was unaffected by the spring 2003 SARS outbreak. Dozens died (all traceable to the index cases). Paranoia-like fear of infectious disease ran rampant. The direct and indirect costs to Canadian government, business and society will never be fully known—certainly billions of dollars.

As with most outbreaks though, some good things came out of the SARS experience. Canadian health officials at all levels are better prepared and aware of what level of coordinated effort will be required to battle SARS again, an influenza pandemic or biological terrorism. Dramatic budget cuts to public health agencies in recent years were exposed and reversed. Proper hand hygiene was advertised so widely and aggressively during the outbreak that it evolved into a societal norm. And as Canadian hospitals settle into the “new normal,” infection control practitioners will continue to reap the rewards of their deservedly higher profile—a very good thing indeed.