Ontario's hospitals surpass those of Quebec in *C. difficile* rates

At too many hospitals, infection control is given about as much attention as "a lump of sod on the front lawn," complains a frustrated infection control specialist.

Dr. Michael Gardam has investigated *Clostridium difficile* outbreaks that led to deaths at 4 Ontario hospitals, including the recent highly publicized case of 62 patient deaths at Joseph Brant Memorial Hospital in Burlington, Ontario.

"How many more outbreaks do we have to have in Ontario? And why are we having them — because people didn't know they were happening, or because they couldn't control them?" he asks.

Ontario has overtaken Quebec in hospital rates of the superbug, according to the latest figures from the Canadian Nosocomial Infection Surveillance program.

But the most virulent strain of *C. difficile* (NAP1/027) remains associated with Quebec, where outbreaks led to an estimated 2000 deaths earlier this decade.

Ontario Health Minister George Smitherman's pledge that public reporting of *C. difficile* rates will be mandatory for hospitals by 2009 will help "jump start" better control, says Gardam, director of the infection prevention and control unit at the University Health Network in Toronto, Ont. "But I really hope that, after publicity around Joseph Brant, hospital CEOs [chief executive officers] will say 'Gee, I wonder what our rates are'."

Getting the attention of chief executive officers is vital because at the average community hospital, infection control committees are "not well powered and are buried in the infrastructure," Gardam explains.

Many hospitals need help interpreting their *C. difficile* rate to know how serious it is. And just because the province has best practice guidelines for prevention "doesn't mean people use them."

Val Attanasio

A 20-month-long outbreak of *C. difficile* led to 62 deaths at Joseph Brant Hospital in Burlington, Ontario, in fiscal year 2006/07.

"There is a huge vacuum and a lot of places need a lot of help. We're not good at auditing cleaning, and the guidelines are not great about cleaning techniques," Gardam adds. At Joseph Brant, he recommended new testing and cleaning procedures. The hospital subsequently invested significantly in additional housekeeping.

As well, unless data is collected and analyzed on a timely basis, "it can be difficult to show that you are in an outbreak" because *C. difficile* cases are not necessarily geographically clustered on 1 unit or floor in a hospital, Gardam says. His investigation found that the outbreak at the Burlington hospital lasted 20 months.

Similar durations have been the norm at other facilities. A coroner's inquest found that 18 patient deaths were *C. difficile* related during a 7-month outbreak at the Sault Area Hospital in Sault Ste Marie, Ontario. A 7-month outbreak led to 26 patients deaths at the Trillium Health Centre in Mississauga, Ont., while 19 patients died during a 5-month outbreak at the Royal Victoria Hospital in Barrie, Ontario.

Mandatory reporting of *C. difficile* was recommended by the Canadian Medical Association in 2004 and by the Public Health Agency of Canada's national notifiable diseases working group in 2006. But Ontario will become just the third jurisdiction to do so. Quebec began requiring hospitals to report in 2004, while Manitoba made *C. difficile* lab reportable for all facilities within the province, not just hospitals, in April 2005.

Dr. Howard Njoo, who heads the public health agency's Centre for Infectious Disease Prevention and Control, says provincial requirements that hospitals report on *C. difficile* rates, and public reporting of those rates, would "be a driver to improve overall practices in a hospital setting."

The Auditor General of Canada's report, meanwhile, recently noted that the agency does not itself have clear legislative authorities for its own surveillance activities, and has a formal information sharing agreement only with Ontario (*CMAJ* 2008;178[12]:1534). In response, the agency acknowledged that long-overdue standardized case definitions for the list of national notifiable diseases, including *C. difficile*, will not be completed until December 2009.

The Ontario hospitals that experienced recent outbreaks are not among the 49 so-called "sentinel" hospitals in 9 provinces that now report to the national infection surveillance program, Gardam notes. — Ann Silversides, *CMAJ*

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