



US Centers for Disease Control and Prevention

The Canadian Nosocomial Infection Surveillance System is surveying 48 sentinel institutions to measure the incidence of a virulent strain of *C. difficile*.

“I think surgeons need to know their own infection rates,” says Brien, a neurosurgeon. “As part of the standard consent process they need to disclose what the infection rates are for the patient, so the patient can make the appropriate decision.”

Hospital boards are responsible for the quality of care within their organizations, so month-to-month updates would help them track improvements in infection rates by specialties and monitor high-risk infections like *C. difficile* and MRSA, she says.

Once institutions know what their infection rates are, they need to communicate that widely throughout the hospital to encourage infection control procedures, like hand-washing, Brien stresses.

Concern about the prevalence and virulence of *C. difficile* and MRSA has been rising, particularly since the so-called Quebec strain of *C. difficile* was credited with causing as many as 2000 deaths. Thus far, though, only Quebec and Manitoba have made *C. difficile* a reportable disease, even though the move was recommended for all provinces by the Public Health Agency of Canada’s National Notifiable Disease Working Group.

The Canadian Nosocomial Infection Surveillance System is surveying 48 sen-

tinental institutions to measure the incidence of a virulent strain of *C. difficile*, says Shirley Paton, director of Health-Care Acquired Infections at the Public Health Agency of Canada. Thus far, it has found that the strain involved in the original Quebec outbreak has migrated to every province except PEI, which does not have a sentinel hospital. “It’s obviously spread very rapidly. There’s still a lot more to find out about it, like when and how the extra toxins are being produced,” Paton says.

The program has been monitoring MRSA since 1995, and has discovered that rates are rising steadily. Such developments have left the Public Health Agency increasingly concerned about the emergence of community-acquired MRSA and *C. difficile*, Paton says.

Canada has more to do in terms of understanding and communicating infection rates both within hospitals and in the community, she adds. Among the problems is comparing posted public data in the absence of comparable reporting standards. For instance, should hospitals report the presence of the *Staph. aureus* organisms, she asks, which may or may not result in outbreaks, or only report outbreaks of MRSA? Unless a standard is agreed upon, it will hard for patients to compare institutional performance, Paton says. But the Canadian Council on Health Services Accreditation’s new program “is a huge first step.” — Laura Eggertson, Ottawa

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Canadian physicians help fight RVF in Kenya

Canadians can stake a claim in helping contain a major outbreak of a virulent new strain of Rift Valley Fever (RVF) that recently killed 150 Kenyans and 40 Somalis.

The virus is a mosquito-born pathogen that primarily affects livestock but humans can get infected through mosquito bites or contact with blood or other secretions from infected livestock, particularly during

the slaughtering process. The virus also appears to be transmissible through raw milk.

But its spread was limited during the recent outbreak through a series of measures, such as restricting livestock movement, banning slaughters, wearing mosquito resistant clothing, using mosquito nets, and injecting vaccines in livestock, says Heinz Feldmann, head of the special pathogens program at the Public Health Agency of Canada’s National Microbiology Laboratory in Winnipeg.

Feldman was 1 of 3 infectious disease specialists, along with Allen Grolla and Robbin Lindsay, whom PHAC dispatched to Kenya as part of an international effort to arrest the spread of RVF, for which there is no effective human vaccine. Canada also sent a mobile laboratory in aid of the World Health Organization-led initiative.

“We provided support in laboratory diagnostics as well as support in entomology/ecology,” Feldmann told *CMAJ*. “The support for the outbreak has discontinued but we will establish a presence in Kenya in the future to assist in outbreak and public health questions.”

The RVF virus causes hemorrhagic fever that is similar to Marburg and Ebola but is less virulent. Dr. Kariuki Njenga of the Centers for Disease Prevention and Control in the Kenyan capital of Nairobi, says the virus has not changed since it was first discovered in 1930, but changes in infection patterns are being tracked. The last major RVF outbreak occurred in 1997 during the El Nino rains, and killed more than 300 Kenyans. No outbreak outside sub-Saharan Africa was reported until September 2000, when cases were confirmed in Saudi Arabia and Yemen.

RVF in humans is characterised by fever, headaches and bleeding through the mouth and nose. The WHO says about 1–2% of those infected reach the severe hemorrhagic stage; and about half of those die. Feldmann said ribavirin treatment was used for such clinical cases but efficacy “was not really demonstrated.”—Wairagala Wakabi, Kampala, Uganda

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