BREAKING THE CHAIN OF INFECTION: THE ROLE OF CLEANING AND OTHER SUPPORT SERVICES

Health care associated infections (HAIs) are the fourth leading cause of death in Canada, and infection rates are rising quickly. One in every nine hospital patients contracts an HAI, and 8,500 to 12,000 Canadians die of HAIs every year. At least 30 per cent of HAIs can be prevented, and cleaning and other support services are a critical factor. Breaking the chain of infection requires well-staffed, well-trained and stable in-house teams working with enough beds and resources and with strong standards and public accountability.

For sources and more detail, see *Health care associated infections: a backgrounder* at: http://cupe.ca/health-care/health-care-associated-infections

What are health care associated infections?

HAIs develop in a patient as a result of their exposure to bacteria and viruses in health care facilities. Some infections, such as *Staphylicoccus aureus* (MRSA), *Enterococcus* (VRE) and *C. difficile*, are becoming increasingly virulent and difficult to treat.

How do they affect us?

HAIs impose avoidable suffering on patients and families as well as extra costs on the health care system and the economy. The direct costs of hospital acquired infections in Canada are estimated to be $1 billion annually. On top of that are costs borne by patients and volunteer caregivers as well as program costs for home and community care. In-hospital and post-discharge costs for patients with HAIs were triple the norm in one major study. Beyond these health care costs are litigation costs, lost work time and other economic impacts.

The benefits of preventing HAIs far outweigh the costs of treating them. The Netherlands' "search and destroy" program of screening, intensified cleaning, and isolation and decolonization of infected patients, for example, has proven cheaper than the cost of treating avoidable MRSA infections.

How do HAIs spread?

Infectious pathogens can survive in health care environments for a long time – some for weeks and even months. They live and grow on bedrails, telephones, call buttons, taps, door handles, mattresses, bedside curtains, chairs, floors, and other surfaces. They survive in dust and in the air, and they spread easily, with dirty environments being a major reservoir. In one survey, MRSA was recovered from 50 per cent of the sites in bathrooms of non-MRSA patients. In another, 42 per cent of curtains were contaminated with VRE.

The National Institute for Occupational Safety and Health gives five reasons for the spread of infectious pathogens: crowding, contact, cuts or abrasions, contaminated surfaces, and lack of cleanliness. High bed occupancy is a major factor in the first two, and insufficient front line staff largely determines the last two.

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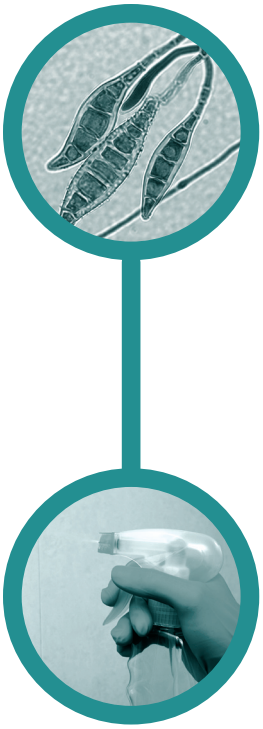

Hand washing is not enough

Governments and health employers have focused almost exclusively on one strategy: hand washing. But without a clean environment, hands are quickly re-contaminated. Cleaning and other support services play a vital role in breaking the chain of infection. Yet those are the very services that have been severely cut and, in many provinces, privatized.

Solutions for preventing and controlling HAIs:

Stop and reverse contracting out. Contracting out cleaning to private companies leads to cuts in staff, lower wages, high turnover, less training and a rift between clinical and support services. These are all identified factors in HAI outbreaks. Studies in the UK found a correlation between contracting out and spiking HAI rates. Scotland and Wales have decided to halt and reverse privatization of hospital cleaning as part of an aggressive campaign against HAIs.

Invest in more cleaning and infection control staff, training and workforce stability. Support services accounted for 26 per cent of hospital spending in 1976, but only 16 per cent in 2002. Where governments in Canada and in Europe have increased investment in cleaning and infection control, infection rates have gone down.

More rigorous cleaning with proper materials. Infection control specialists have called for better resources and more thorough cleaning to eradicate HAIs.

Reduce occupancy rates. Canada has one of the highest bed occupancy rates among OECD countries. A UK study found that hospitals with occupancy levels over 90 per cent can expect a 10.3 per cent higher MRSA rate. In 2005, Canada's bed occupancy rate was 95 per cent. Health care facilities need to reduce occupancy rates so that overcrowding and rapid turnover of patients does not undermine infection control.

Mandatory cleaning standards, monitoring and public reporting of HAIs. In a UK study, researchers found that 90 per cent of rooms that had been declared clean were shown by microbiological testing to have unacceptable levels of microorganisms. Strong pan-Canadian standards and enforcement must be put in place in order to turn the tide on these deadly infections.