Feds to create surveillance system for drug-resistant bugs

After five years of inaction, the federal government is finally starting to move toward creating a national surveillance system to monitor drug-resistant microorganisms.

The Public Health Agency of Canada (PHAC), which halted the Canadian Committee on Antimicrobial Resistance in 2009 but promised to step up to the plate, will finally deliver its blueprint for a new system in July, according to an internal plan released to the CMAJ.

Surveillance Strategic Plan, 2013–2016 states that PHAC recognizes the need for change, given that there is “no overarching agreement on integrated approaches to surveillance.”

Details on how the plan will work will be released in July’s blueprint; however, in an email interview, spokesperson Robert Cyrenne stated that it will outline the core elements of the new national surveillance system and provide specific actions to transform the existing system.

National leadership on surveillance is long overdue, according to experts who say that there is little coordination between the federal and provincial levels.

“We are right at the edge of having substantial problems with infections we can’t treat,” says Dr. Allison McGeer, director of the Infectious Diseases Epidemiology Research Unit at Mount Sinai Hospital in Toronto, Ontario. “We do not have surveillance systems and we don’t have adequate mechanisms to deal with it.”

There is a two-pronged approach to dealing with antimicrobial resistance, says McGeer: using antimicrobials wisely and preventing infections where the resistant bugs are the most prevalent.

But first, Canada needs sufficient surveillance data, says McGeer.

A 2011 internal government report identified antimicrobial resistance as a “growing problem,” but the actual scope of the issue remains unknown because the current surveillance systems collect limited data. Most surveillance is now conducted by the Canada Nosocomial Infection Surveillance Program (CNISP) and the Canada Integrated Program for Antimicrobial Resistance Surveillance (CIPARS).

CNISP monitors antimicrobial-resistant organisms in hospitals, but the information it collects represents only slightly more than 35% of all hospital admissions. This isn’t enough, says Dr. Gary Garber, medical director of Infection Prevention and Control at Public Health Ontario. In addition, the data are often released slowly, he says.

CIPARS has initiatives to track antimicrobial-resistant bacteria in humans, animals and foods. PHAC says that CIPARS will review its human surveillance component this year with a view to increasing the number of samples collected and will begin testing for an additional microorganism, Campylobacter.
Overarching problems with both of these programs is their susceptibility to budgetary cuts and their piecemeal approach, says Dr. John Conly, professor of medicine at the University of Calgary in Alberta. For more than a decade, experts have been calling for a more coordinated national system “with the true leadership being shown by the federal level.”

Compared to other countries’ responses to antimicrobial resistance, Conly calls Canada’s efforts “an international embarrassment.” The United States and countries in the European Union, such as Sweden and Denmark, have monitored these pathogens nationally since the mid-1990s. Various systems in these countries provide a comprehensive view of antimicrobial resistance in hospitals and agriculture.

McGeer welcomes any progress to Canada’s current system, but says the plan’s reliance on the public health infrastructure will be a major obstacle.

“If we want to adequately track antimicrobial resistance, we have to figure out a mechanism for being able to watch what’s going on in hospitals and we just don’t have that mechanism in Canada.” — Michaela Kostron, CMAJ