Ottawa Public Health's enviable performance during H1N1 campaign sets the bar for effective response in face of crisis

Continued planning, interdepartmental cooperation key to meeting future threats

Recently, Ottawa Public Health closed the doors on its last flu vaccination clinic of the 2010-2011 flu season. By all accounts it was a much more relaxed vaccination campaign than last year's; this season's vaccine contained several influenza strains, including the virus that took the world by surprise in 2009 – H1N1.

The first worldwide pandemic in over four decades, H1N1 was not the virus that scientists and health agencies were monitoring and preparing for; that distinction went to H5N1 ('avian' or bird flu), which the medical community had been tracking in Asia for 12 years.

As a result of H1N1's sudden appearance in rural Mexico in April 2009, and its subsequent spread around the globe, the health associations of developed nations found themselves scrambling to respond to the unexpected threat. On a community level, the resources and manpower of municipal health departments were stretched as personnel and management dealt with the many unique challenges that arose during the resulting mass vaccination campaign.

Some cities fared better than others in their response to the crisis. In Canada, Ottawa proved that planning and cooperation amongst its employees go a long way when facing a sudden health threat. When statistics rolled in following the completion of the vaccination campaign, Ottawa boasted the highest vaccination rate in Ontario and one of the highest in Canada – double that of Toronto.

The largest mass-vaccination campaign in Ottawa Public Health's long history can serve as an example to other municipalities and reassure Ottawa residents that the staff of OPH and the other city departments who assisted in their 2009 campaign are well prepared to take on future challenges. H1N1 tested the city's response, but by meeting the threat and succeeding in their goal of 'blanket' immunization, valuable lessons were learned by OPH and critical experience gained.

OPH's Acting Medical Officer of Health, Dr. Vera Etches, spoke of the success of Ottawa's H1N1 campaign during a January event celebrating a century of public health in Canada.

"With (the H1N1 campaign), we surpassed our goal of immunizing 40% of the population, resulting in the highest immunization rate in Ontario," said Dr. Etches. "I'm proud of the efforts of OPH and city staff. It is their commitment and the collaborative efforts of all of us that allows us to live in a healthy society."

The H1N1 pandemic, and the virus at its core, was ultimately not as deadly as some feared it might be (or might become). When it emerged unexpectedly in the spring of 2009, the product of a virus jumping from the animal population (swine) to humans, scientists discovered it was a form of swine flu descended from the highly deadly strain that caused the 1918 Influenza Pandemic – a health disaster that left 50 to 100 million people dead worldwide.

The 2009 H1N1 virus was found to be a re-assortment of four known strains of H1N1 influenza, a fact that worried scientists and health agencies alike, as it meant the virus could be prone to mutate into a more virulent strain over the course of the pandemic. This is what occurred in 1918. Even before the World Health Organization declared a pandemic on June 11, 2009, researchers were turning their full attention away from preparations for a possible future H5N1 bird flu outbreak and onto preparing a vaccine for a very present threat that had only just appeared on their radar.

Because the vaccine for the planned 2009-2010 flu season had already been prepared, it meant a return to the starting line for both vaccine makers and the governments purchasing it. The major complaint arising from the 2009 pandemic concerned the slow production of vaccine, and the resulting delays in acquiring the vaccine by major world governments, Canada included.

From that point on, success in battling the virus and the societal disruptions and death it could cause depended on the speed and efficiency of the resulting vaccination campaigns, right down to the municipal level. In this respect, Ottawa had reason to boast.

Following the October 26, 2009 launch of the largest vaccination campaign in Ottawa history, OPH staff succeeded in vaccinating 455,000 Ottawa residents – 53% of the city's population. This can be compared to the 45% of Ontario residents who

ultimately received the H1N1 shot (40% in a typical flu season), and the 28% of Torontonians who lined up for the shot.

This success can be placed on the fact that Ottawa had an interagency influenza pandemic plan to turn to, as well as versatile health staff who took on multiple roles to ensure the plan rolled out smoothly. When the vaccine became available, those workers joined forces with staff from other city agencies and departments to make Ottawa's vaccination clinics the standard of efficiency that other municipalities envied.

"CUPE 503 staff were instrumental in the implementation of the vaccination program," said Sherry Nigro, Manager of Integration, Quality and Standards at OPH.

Among the staff who accepted the challenge was Carol Simpson, whom Nigro said was "instrumental in organizing and arranging delivery of immunization clinic supplies."

With six clinics scheduled each day, the pace was feverish and the logistical challenges many, said Simpson.

"There were a lot of variables – working with different departments, including the Emergency Measures Team," she recalls. "Management was really good. There were lots of problems that could have arisen but didn't, so we did a good job...Parks and Recreation brought their expertise – they have a lot of experience in crowd control, and there was a huge slew of volunteers – it was a good use of everyone."

Michelle Desjardins, an OPH health inspector, took on the role of crowd management at the clinics, which were swamped by a concerned populace during the early days of the campaign.

"It was chaos the first few days," she remembers. "A big thing was making sure people had the right forms to fill."

Following the wrap-up of the vaccination clinics and the slow return to normal as the pandemic faded away, Desjardins was struck by how well OPH staff worked with that of other departments and overcame challenges as a unified group.

"Everyone came together – it was really great," she said. "We worked with nursing staff, even the dental team. At the beginning of every shift we would do a debriefing – discussing what needed improvement based on observations from the day before."

Desjardins said the lessons learned from the H1N1 pandemic were "invaluable" for preparing for future vaccination campaigns and health emergencies.

Though the H1N1 pandemic virus did not mutate into a more virulent strain as many feared, it did pose a significant risk to a populace with no natural immunity or protection from the previous flu season vaccine. The efficiency of Ottawa Public Health in distributing the H1N1 vaccine prevented sickness, death and societal disruptions, and gave the city's population newfound confidence and respect for their health officials and workers.

"Our OPH employees' reaction to the potential health crisis was exceptional," said CUPE 503 president Brian Madden. "I am very proud of how quick they reacted to the situation. It's a perfect example of professionals doing what they do best, even during critical times."

While the scientific world is still keeping a wary eye on H5N1 bird flu, the 2009 H1N1 pandemic showed that serious health crises can emerge suddenly and unexpectedly, requiring governments and municipalities to stay vigilant and prepared. This newfound concern can be seen in the 2011 Ottawa budget, which saw \$560,000 allocated to OPH to enable the department to deal effectively with sudden health emergencies.

Whatever form the threat may take, Ottawa residents can rest assured the dedication and professionalism of OPH employees will enable the city to meet any health challenge.