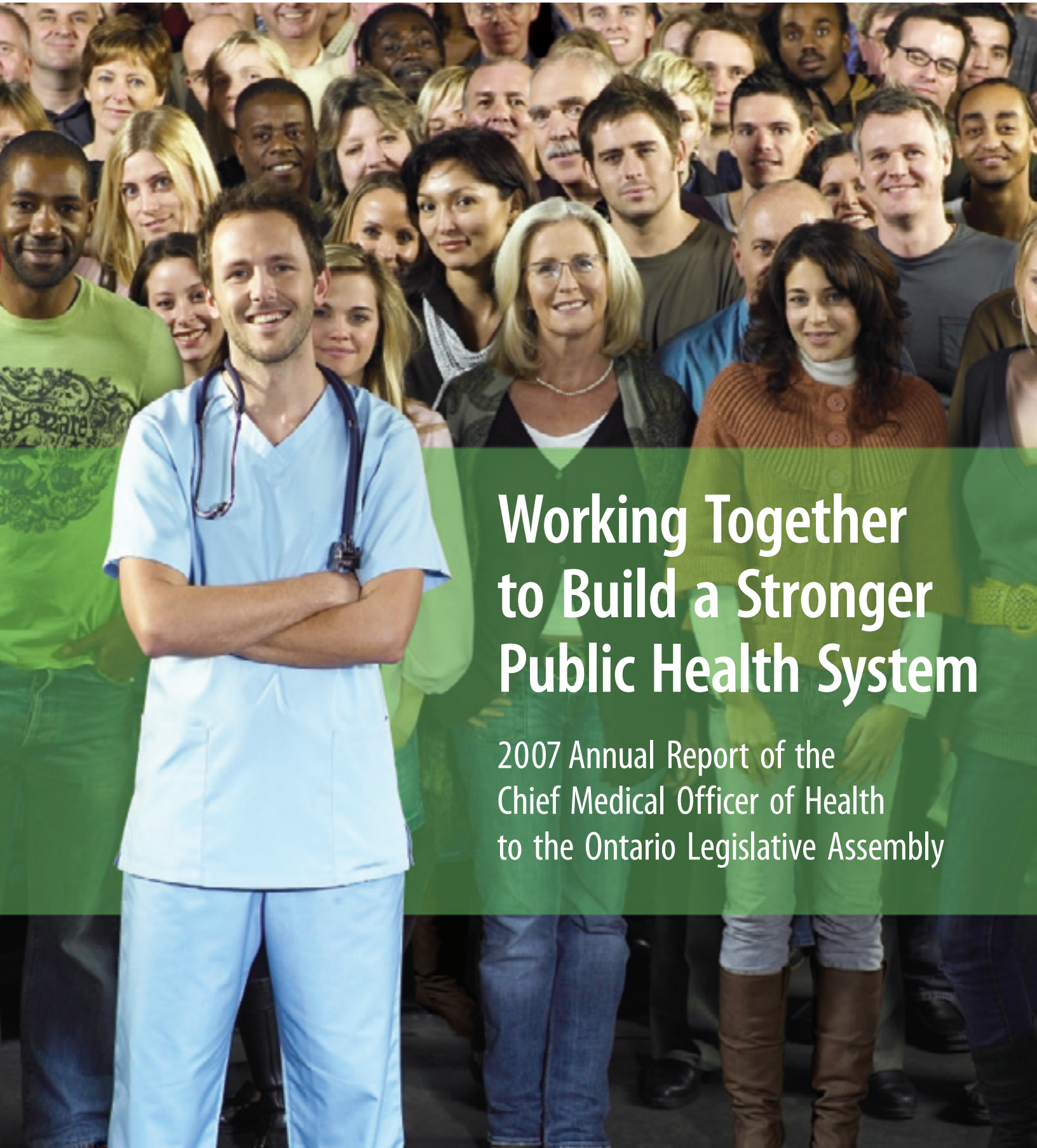
Ontario



Working Together to Build a Stronger Public Health System

2007 Annual Report of the Chief Medical Officer of Health to the Ontario Legislative Assembly

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November 2008

The Honourable Steve Peters
Speaker of the Legislative Assembly of Ontario
Room 180, Main Legislative Building
Queen's Park
Toronto ON M7A 1A2

Dear Mr. Speaker:

I am pleased to provide the 2007 Annual Report of the Chief Medical Officer of Health of Ontario for submission to the Assembly in accordance with the provision of section 81.(4) of the Health Protection and Promotion Act.

Yours truly,

David C. Williams, MD, MHSc, FRCPC
Chief Medical Officer of Health (A)
Associate Chief Medical Officer of Health, Health Protection

Attachment

Executive Summary

Public health is everybody's business. There are times in people's lives when they may be in need of acute care or long-term care services. But all Ontarians are touched by public health every day. Keeping drinking water safe, monitoring food handling practices, encouraging healthy eating and physical activity to prevent diseases and immunizing children are some foundation pieces of public health that often go unnoticed. Many people only give a thought to public health when a crisis erupts – contaminated water, a food-borne outbreak or a health threat caused by known or unknown bacteria or viruses.

Times of crisis put the spotlight on Ontario's public health system. But much of the essential day-to-day work of public health occurs unnoticed and many potential health threats, such as the onset of chronic or infectious diseases, are contained or averted by routine prevention activities and disease surveillance carried out by the public health system. Public health contributes to keeping Ontarians healthy and safe each and every day through protection, prevention and health promotion.

Yet in 2003, the Severe Acute Respiratory Syndrome (SARS) crisis revealed serious cracks within the public health system. It was a seminal event that led to a comprehensive examination of the province's public health system. This examination included a number of insightful reports:

- The Expert Panel on SARS and Infectious Disease Control chaired by Dr. David Walker
- The report of the National Advisory Committee on SARS and Public Health by Dr. David Naylor; and
- The first interim report of the SARS Commission chaired by the late Mr. Justice Archie Campbell released in April 2004. (Campbell's second interim report was issued in April 2005 and the final report, "Spring of Fear," was released in January 2007.)

In response to these key reports and following Ontario's experience with the SARS outbreak, in 2004 the provincial government responded by launching Operation Health Protection (OHP). The three-year mandate of the action plan was to revitalize the public health system, prevent health threats and promote a healthy Ontario. This multi-faceted plan set out to rebuild and support a stronger public health system through a range of important initiatives, investments and programs, like the creation of the first-ever Ontario Agency for Health Protection and Promotion, the modernization of the province's public health laboratories and the enhancement of the health care sector's capability in the areas of infection control, communicable diseases and surveillance.

This 2007 annual report focuses on the accomplishments of OHP and its impact on the public health system in Ontario. It examines how capacity has been built in the areas of infectious and communicable diseases surveillance and reporting, human health resources and the role of emergency health preparedness and planning in supporting the broader health system.

Operation Health Protection has left its mark on the health system, particularly in the area of infection control with the creation of the Provincial Infectious Diseases Advisory Committee (PIDAC), which has mobilized expertise to work closely with the health care field to set standards and guidelines for infection control. PIDAC, along with other complementary measures to enhance the province's capability in infection control, communicable diseases and surveillance capacity, represent significant progress in strengthening the public health safety net.

The launch of the Ontario Agency for Health Protection and Promotion (OAHPP) in late 2007 was a significant step forward as were the improvements made to the public health laboratory system. However, the creation of the agency and to some extent the renewal of public health laboratories were at a starting point in 2007 and the full impact of these initiatives on the public health system will take more time to fully evolve. One welcomes the contribution these important initiatives will continue to make in the future for the benefit of all Ontarians.

The long-standing issue of vacancies in leadership positions within public health, particularly at the local public health unit level, was not adequately addressed during the mandate of Operation Health Protection. Public health vacancies are of ongoing concern and require adequate resolution. The government is currently reviewing recommendations contained in the report by the Capacity Review Committee (CRC), which examined the capacity and delivery of programs and services by local public health units. Some of the CRC report recommendations point the way to addressing the complex vacancy issue that for too long has remained unresolved.

While much of OHP focused on health protection and revitalizing our public health system, the business of health promotion and chronic disease and injury prevention was ongoing. Recognizing the importance of public policies that promote healthy living and an active lifestyle, the Ontario government created the Ministry of Health Promotion (MHP) in 2005 with a mandate to focus on promoting healthy living and illness prevention.

Although not addressed in detail in this report, health promotion and the prevention of chronic diseases and injury are not any less important elements of the public health system. These areas require and will be given greater consideration in future reports. Ultimately, public health renewal is about strengthening the public health system to support a healthier and more vibrant population.

System Renewal

We need to build the foundation for a strong and effective public health system that will allow us to ensure health protection and also strengthen our ability to address the entire spectrum of public health issues. Public health's mandate involves not just the immediate threat of infectious diseases, but also the longer-term requirements of chronic disease and injury prevention, healthy child development, family and community health and environmental health – all with a focus on the underlying determinants of health and illness. The ability to fulfill these responsibilities is dependent on the strength and capacity of the public health system.

Dr. Sheela Basrur, Former Ontario Chief Medical Officer of Health (2005 CMOH Annual Report).

Introduction

Introduction

Public health is a safety net on which all Ontarians depend. Often the more secure the net, the less one thinks about it. It tends to be taken for granted that tap water will be safe to drink and that the groceries purchased at a supermarket or a meal enjoyed at a favourite restaurant will not cause illness. Attention turns to public health when the unexpected happens – when things go wrong. Contaminated water, the SARS outbreak, periodic episodes of salmonella, Legionella and E. coli understandably cause all eyes to be riveted on the public health system and its response. **Times of crisis underscore both the strengths and challenges of the Ontario public health system.**

What often remains unseen by the public are how many potential threats are averted and kept at bay by the routine prevention activities and disease surveillance work carried out by public health, both at the provincial and local levels. Public health is about much more than crisis intervention. It involves promotion, prevention and protection. Discouraging a teenager from lighting up a cigarette, assisting a new mother with caring for her infant, vaccinating children and encouraging healthy eating are all as much a part of the public health landscape as is conducting surveillance to detect emerging health threats.

Public health is more than the Chief Medical Officer of Health (CMOH) or local public health units. It extends across the entire health system and encompasses the community. When Ontarians wash their hands regularly or get a flu shot, they are supporting public health. **Fostering a strong, healthy and resilient population is everybody's business.**

This report focuses on the foundation that has been laid to strengthen the protection aspect of public health. But it also recognizes that the prevention and management of chronic diseases and health promotion point the way forward in building and maintaining a healthy community – the ultimate goal of public health.

Historical Perspective

To know where one is going it's important to know where one has come from. Public health has a long history of improving the lives of people in Ontario. In 1833, the Legislature of Upper Canada passed an Act allowing local municipalities to establish Boards of Health to safeguard against the spread of infectious diseases in the province. The year before, a cholera epidemic had swept through Upper and Lower Canada claiming 20,000 lives.

There was a growing recognition in the medical community of the link between diseases and sanitation, particularly clean water. In 1873, the Ontario legislature passed the first Public Health Act since confederation and by the end of the 19th century a variety of regulations had been established to ensure adequate sanitation practices, leading to a dramatic reduction in deaths from water-borne diseases such as cholera and typhoid.

The introduction of mass vaccine programs marked another key evolution in improving the public's well being. In 1882, a smallpox vaccine was made available in Ontario. Vaccines for diseases like diphtheria, measles and eventually polio would follow, greatly reducing the threat of debilitating illnesses that generations of Canadians before had to endure. In the early 1900s, public health nurses visited new mothers and children in schools to support healthy child development. Much of the improvements in life expectancy over the past 125 years can be credited to public health measures such as these.

The public health system evolved from the recognition that government has a pivotal role to play in facilitating initiatives that protect, support and advance the health of the public. Compared to our predecessors, our tools and techniques are far more sophisticated, our knowledge base has deepened and our ability to respond to health threats is greatly enhanced. The public health system has changed significantly since its humble beginnings, but its core tenet has remained constant – to be a vanguard in protecting and promoting the health of Ontarians.

Ontario's Model

Ontario's public health model is unique in Canada. It involves shared authority at both the provincial and local municipal levels. This allows the system to be flexible enough to meet local needs effectively, while having the ability to coordinate measures, programs, services and responses across the province. The sharing of authority and accountability between the province and 36 local public health units also creates challenges. The system requires a great deal of ongoing dialogue, cooperation and collaboration to make it work effectively.

Role and Mandate of the Chief Medical Officer of Health

On December 16, 2004, the Ontario legislature passed Bill 124 amending the Health Protection and Promotion Act to increase the independence of the Chief Medical Officer of Health. The measures include appointing the CMOH to a five-year renewable term by the Lieutenant Governor in Council. Currently, there is an acting CMOH, while an active campaign continues to recruit a permanent Chief Medical Officer of Health.

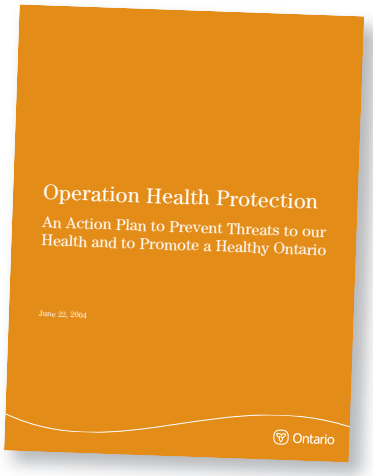
The CMOH is required to table an annual report to the legislature on the state of public health in Ontario. Legislation also allows the CMOH to release other reports to the public whenever he or she considers it warranted. The CMOH is authorized, under certain circumstances, to take any action considered appropriate to prevent, eliminate or decrease a risk to the health of the public. The CMOH can also issue directives to health care providers when he or she reasonably believes that an immediate risk to human health exists.

The role of the CMOH is one of leadership within Ontario's public health system, whether during a health crisis or on an ongoing basis to inform, protect and promote the public's health. In matters of public health, the CMOH is often called upon to be the calm voice separating fact from fiction and advocating on the public's behalf.

Review of Operation Health Protection

Review of Operation Health Protection

Public health is focused on the health and well being of the larger community. When the province was blindsided in 2003 by the Severe Acute Respiratory Syndrome (SARS) crisis, it made many in Ontario question the health of the public health system itself. The crisis revealed weaknesses and challenges facing this complex patient, whose vital signs had for too long been neglected.



In June 2004, the Government of Ontario set a course aimed at strengthening the public health system, particularly in areas of vulnerability highlighted during SARS through Operation Health Protection (OHP). This action plan was designed to revitalize the province's public health system. It marked the first comprehensive changes to the public health system since the 1980s. At the time, the government acknowledged that it was a concerted effort to redress decades of neglect that had befallen the public health system. It was also the government's very direct response to the first interim report of the SARS Commission chaired by the late Mr. Justice Archie Campbell and the final report of the Expert Panel on SARS and Infectious Disease Control chaired by Dr. David Walker. The government listened to the experts and set out a plan to lay a solid foundation to protect the public from health threats and promote a healthy Ontario.

The changes outlined in the Operation Health Protection action plan were to be implemented over a three-year period, which ended in March 2007. It is fitting that this annual report comments on how OHP has impacted the public health system.

Initiatives under Operation Health Protection included:

- Enhancing capability in infection control, communicable diseases and surveillance by launching the Provincial Infectious Diseases Advisory Committee (PIDAC) and 14 Regional Infection Control Networks (RICNs) as well as supporting health information management systems
- Creating the Ontario Agency for Health Protection and Promotion (OAHPP)
- Investing in the upgrade and renewal of the Ontario Public Health Laboratories (OPHL)
- Public health renewal, including the review of the mandatory programs and services, a review of public health capacity, including human resources, and increased funding
- Addressing the issue of health unit personnel vacancies by increasing the number of medical and scientific staff working in public health at the provincial as well as the local levels; and
- Building a system of integrated health emergency preparedness and response through the Ministry of Health and Long-Term Care's Emergency Management Unit (EMU), a branch of the Public Health Division.

Over the course of Operation Health Protection, Ontario's investment in local public health units grew to $459.9 million in 2007, compared to $252.3 million in 2004.

To what extent did OHP revitalize the public health system? Are there gaps? What still remains to be done? Examining OHP's accomplishments and impact helps to acknowledge how Ontario's public health system has been strengthened as well as outline the challenges that remain.

Infectious Disease Control, Prevention and Detection

A number of initiatives across the broader health system and within the ministry have tackled the critical areas of infectious disease control, prevention and detection. SARS introduced us to the necessity for a "new normal." The former status quo was no longer tolerable. The bar needed to be sufficiently raised to effectively protect the public against infectious and communicable diseases. The following initiatives helped to address these challenges.

Provincial Infectious Diseases Advisory Committee

The Provincial Infectious Diseases Advisory Committee (PIDAC) was established to bring together a broad base of knowledge to provide expert advice on infectious diseases in Ontario. PIDAC advises the CMOH on prevention, surveillance and control measures necessary to protect the people of Ontario from illness and infectious diseases. It also works closely with the health system to set standards and guidelines for infection control.

Since its creation in 2004, PIDAC – with membership that includes infectious disease, laboratory medicine, and public health experts and specialists – has been extremely productive in setting standards for infection prevention and control and surveillance in health care settings. The committee's leadership and transfer of knowledge are widely recognized and respected by health care professionals in Ontario and across Canada.

PIDAC, through its four sub-committees and two working groups, is noted for the number of best practices guidelines, tools and other initiatives it has developed. These include:

- Best practice documents on handling health care associated infections like *Clostridium difficile (C. difficile), Methicillin Resistant Staphylococcus Aureus (MRSA)* and *Vancomycin Resistant Enterococci (VRE)*
- A pilot surveillance tool for *C. difficile* that was tested at 10 acute and long-term care facilities in 2007; and
- Sponsoring a two-day conference on *C. difficile* associated disease, hosted by the International Infection Control Council in Toronto in August 2007.

PIDAC has also partnered with other stakeholders within the health system, including the Ontario Hospital Association (OHA). Over the course of three years, PIDAC has made its mark and effectively outreached with the broader medical community.

PIDAC: Setting the Standard

PIDAC co-chair Dr. Doug Sider, who is also Associate Medical Officer of Health, Niagara Region Public Health Department, commented that the committee's work is not just an academic exercise producing documents destined to collect dust on shelves.

"PIDAC is not a narrow ivory tower small group. The breadth of our composition, with a wide range of specialists in public health as well as acute care, connects us to the health field and we bring those connections to the issues we tackle," Sider said.

Founding PIDAC co-chair Dr. Dick Zoutman concurred. "We are working with people from the field. Our work is grounded in the realities of those delivering care. Our goal is to develop best practices that are immediately useable by those in the field," said Zoutman, who is also Chief of the Department of Medical Microbiology and Medical Director of Infection Control Service, Kingston General Hospital.

"PIDAC documents have become the standard against which practices are judged," Sider said. "I think it's because PIDAC has gained the respect of the field by being inclusive and seeking a wide range of input from stakeholders who review documents and provide their input. PIDAC has been very productive because we are developing solid and useful information for the health care field."

So what does this mean to the state of public health? "PIDAC's role is helping to address the way health care associated infections are handled. This improves upon and enhances the quality of care delivered to the people of Ontario. The end game is a health system that continually improves," Sider said.

Dr. Doug Sider, co-chair, Ontario Provincial Infectious Diseases Advisory Committee (PIDAC) and Associate Medical Officer of Health, Niagara Region Public Health Department.

Dr. Dick E. Zoutman, co-chair, PIDAC and Chief of the Department of Medical Microbiology and Medical Director of Infection Control Service, Kingston General Hospital.

Regional Infection Control Networks

Fourteen Regional Infection Control Networks (RICNs) were created across Ontario to coordinate infection prevention and control activities and support standardized practices in health care facilities. They include representatives from First Nations and Aboriginal communities. The RICNs' boundaries correspond to those of the province's Local Health Integration Networks (LHINs). The first four RICNs were launched in early 2005 and an additional six began operations in 2006. Three networks were phased in during 2007 and the final network was established in 2008.

Development of the networks has brought together infection prevention and control and infectious diseases expertise across the health care system including acute care, public health, community care and long-term care homes. They are intended to address the gaps in infection control that were exposed during SARS and to create greater cohesion of the province's infection prevention and control activities. The RICNs help to better educate the field by fostering knowledge transfer and information sharing to ensure similar practices across the province. The RICNs have worked closely with PIDAC as the two carry out complementary activities that are serving to weave a more secure safety net within the public health system.

Other Infection Control Related Activities

- By the end of 2007, the government had funded 136 infection control practitioners in hospitals to increase the capability and expertise at these institutions in preventing and controlling infections and infectious diseases in these settings.
- The ministry supported the development of a multi-faceted hand hygiene program for all Ontario hospitals – called *Just Clean Your Hands.* The government provided hospitals with train-the-trainer sessions, tools and materials, an audit process to evaluate the program's impact, and a website for easy access to information and a place for hospitals to share lessons learned.
- The province funded 180 full-time equivalent communicable disease positions in public health units.

Public Health Informatics

Through OHP, the ministry put greater emphasis on using information and computer technology to support public health practices, including disease surveillance and exchange of information among public health professionals between the local and provincial levels.

Integrated Public Health Information System

In January 2005, the ministry announced the implementation of the Integrated Public Health Information System (iPHIS), which was recommended by a number of expert reports. It is a secure, province wide integrated public health information system for reporting communicable diseases, where information is electronically collected, transmitted and analyzed across the public health system. iPHIS allows local public health units to identify and track unusual and unexpected instances of infectious diseases. It is also effective in the early detection of outbreaks and it supports contact tracing and quarantine management. The iPHIS was fully implemented in all health units and the ministry's Public Health Division during the first year of OHP.

iPHIS allows for much better province wide tracking of reportable and communicable diseases. Increased incidents of a particular disease and other anomalies can be more quickly identified and the 36 public health units can then respond and heighten surveillance around a critical issue in order to protect the public's health.

Syndromic Surveillance

As part of OHP, the ministry, along with its health system partners, piloted several syndromic surveillance initiatives for detecting emerging health threats and outbreaks. Syndromic surveillance monitors in real time or as close to it as possible, information from electronic data collected for other purposes – such as emergency department visits – to detect emerging patterns of disease outbreaks sooner than with traditional public health methods.

The goal of this Early Aberration Detection system is to spot emerging trends and patterns pointing to possible outbreaks to support conventional surveillance systems. The syndromic surveillance approach still remains in its infancy, but there have already been early indications of its value and future potential.

In the wake of SARS, several expert panels found serious gaps in the Ontario public health system's ability to adequately respond to infectious disease outbreaks. A concerted effort has been made to close those gaps and strengthen the safety net by methods such as syndromic surveillance that supports more traditional surveillance activities.

Creating a Centre of Excellence

The Ontario Agency for Health Protection and Promotion will increasingly be an important scientific resource within the public health system to support government in keeping Ontarians healthy, said Dr. David Walker, the inaugural chair of the agency and Dean of the Faculty of Health Sciences at Queen's University. "The agency successfully launched itself and we are continuing to fill the vacancies on the board, at the same time focusing on addressing pertinent public health issues," Walker said. He noted that the agency is currently setting its strategic priorities and identifying four or five key areas where it can make the greatest impact in infection and disease control, surveillance and management, as well as health promotion.

"The agency will be a resource to government, providing intelligence and advice. But being arm's length and grounded in the scientific community, the agency will be very closely linked with the academic expertise needed to give the best advice to support sound decision-making," Walker said.

Walker foresees the agency will work collaboratively with a range of players within the broader health system. "It is important that we're working together. It took decades to allow public health to degrade and it will take coordination and time to fully rebuild sufficient capacity. But I think the steps that have been taken mean the public is much better off in a variety of ways," Walker explained.

Dr. David Walker, the inaugural chair of the agency and
Dean of the Faculty of Health Sciences at Queen's University.

Ontario Agency for Health Protection and Promotion

On June 4, 2007, the Ontario Agency for Health Protection and Promotion Act was passed, legally establishing the agency. Dr. David Walker, Dean of the Faculty of Health Sciences at Queen's University and former Chair of the Expert Panel on SARS and Infectious Disease Control, was appointed chair the following month along with five other founding board members. Recruitment began in earnest for the remaining seven directors.

The creation of Ontario's first ever arm's-length public health agency marks a significant step forward in strengthening the public health system. The reports of various expert panels, including the Walker report, all concurred that the province needed an agency with strong academic links to provide a critical mass of medical, public health, epidemiological and laboratory capacity and expertise.

The mandate of the Ontario Agency for Health Protection and Promotion is to provide scientific and technical expertise and advice for those working to protect and promote the health of Ontarians. It will also provide support to front-line health care workers, public health

units and government by translating research and information into practical tools and enhancing the public health system's emergency response capability.

This is only the beginning. It will take time for the agency to evolve to the point where it will be able to play a pivotal role within the public health system. To flourish, the agency will require sufficient resources and a strong commitment from government. To grow as a centre of excellence in public health protection and promotion in the international arena, the agency needs to be effectively supported to continue to attract experts in the field, who will need to be well equipped with the necessary technology and tools to fulfill their roles in helping to keep Ontarians healthy.

Modernization of Public Health Laboratories

The Ontario Public Health Laboratories (OPHL) consists of a central public health laboratory in Toronto and 11 regional laboratories, which perform approximately four million tests per year for clinicians, hospitals, community laboratories, public health units and the general public.

In 2003 when SARS struck the province, OPHL had just two medical microbiologists on staff to support public health. OHP made the most significant investment in the province's health laboratory system in decades in order to redress its weaknesses. The impact of the public health laboratories renewal is beginning to take shape.

Through a concerted effort, the public health laboratories have recruited 11 key international specialists: three clinical microbiologists, four medical microbiologists, three PhD scientists and one medical epidemiologist. The OPHL was able to attract these recruits because of a commitment made by the provincial government to invest in major capital and technological upgrades to continue the public health laboratories transformation. These include molecular testing capabilities, which have been successfully introduced across the public health laboratory system, allowing clinical samples to be processed more efficiently and effectively.

A new $12 million Laboratory Information System (LIS) is being implemented throughout the OPHL that will reduce the test turnaround time significantly. Previously, the majority of information involved in processing and handling of clinical samples was written on paper. It was an outdated approach, which left the system more susceptible to human error. The LIS not only reduces the processing time, but also reduces the potential for error. Automatic notification of positive test results through fax is also a key feature of the LIS. This supports the commitment to quicker and more efficient notification to public health units, especially in those instances of an emerging health threat or outbreak.

Laboratory Modernization: Improving Response Capabilities

On a quiet Friday morning aboard a Via Rail train in northern Ontario a passenger dies suddenly and five other passengers fall ill in short order. The train carrying 264 passengers is halted and world attention swiftly focuses on the quiet hamlet of Foleyet. In a post-SARS environment concerns are raised over a possible infectious disease outbreak.

Clinical samples are rushed to an Ontario public laboratory in Timmins. Within hours the samples are tested and the results show that the ill passengers are suffering from common flu and the passenger's death was unrelated to an infectious disease. "The public health lab in Timmins was able to quickly identify the nature of the problem. The world was watching and the regional public health laboratory was able to respond quickly," explained Dr. Don Low, Chief Microbiologist of the Ontario Public Health Laboratories (OPHL).

The timely response of the regional public health laboratory can be credited to an Operation Health Protection initiative to upgrade the public health laboratory system. This included the introduction of molecular testing capabilities. "Previously we had to rely on antiquated techniques that would have taken three, four or five days or even up to a week to identify the problem. Here the response came within hours," Low pointed out. The improved testing capabilities are part of a comprehensive overhaul of the public health laboratory system. As Low noted, the laboratories were very much in need of change.

Apart from the capital and technological upgrades, Low said, a key change has come from the laboratories' success in recruiting 11 scientists and microbiologists. "As a package, these individuals will ensure that we have public health labs with state-of-the-art capabilities," Low said. "They will enable us to increase our surveillance capabilities and identify problems that might otherwise not be readily apparent. They will be participating in research, shaping questions and recognizing new emerging problems."

Dr. Low emphasized that improving the capabilities of the public health laboratories means previously undetected issues may well arise. "When you invest in improvements you end up turning over more stones and you start to see problems that you didn't recognize in the past and you have to continue to support the resources to address new and emerging issues," Low said.

Dr. Don Low, Chief Microbiologist at the Ontario Public Health Laboratories (OPHL).

The implementation of the LIS at the12 public health laboratory locations began at the end of 2007. In this early stage, approximately eight per cent of the clinical samples the public laboratories receive are being handled by the LIS and it likely will take until the end of 2009 for the majority of clinical samples to be processed electronically within the laboratories. The improvements to the public laboratory system are certainly welcomed by the health care sector, but there are still a number of key steps to be taken before the LIS can be used to its highest potential to strengthen the public health system.

Public Health Leadership and Vacancies

Strong leadership in public health is essential, particularly during times of crisis. However, there have been some long-standing vacancies at a number of local public health units across the province. In 2007, nearly one-third of Ontario's 36 local public health units were without a permanent Medical Officer of Health (MOH) and many faced difficulties recruiting other types of public health professionals, particularly public health nurses and public health inspectors. The problem of vacancies at public health units stretches back to the 1990s. (See Appendix A for a list of MOH vacancies and Appendix B for a list of Associate Medical Officer of Health (AMOH) vacancies.)

To address these ongoing challenges, the Capacity Review Committee (CRC) was established in January 2005 to examine the capacity of local public health units to effectively carry out their role in serving Ontarians. The CRC's recommendations to strengthen local public health capacity were released in May 2006. Among its comprehensive findings, the review noted that some health units lack sufficient capacity to manage effectively during vacancies or emergencies or to recruit and retain staff. This places great pressure on surrounding health units to lend their support in carrying out mandatory programs. Smaller health units, in particular, find it difficult to afford the specialized staff needed to cope and respond to expanding demands and increasingly complex programs and issues in public health.

The situation at the provincial level is also of concern. Ontario has been without a permanent Chief Medical Officer of Health since Dr. Sheela Basrur resigned from the post in December 2006 for health reasons. Dr. George Pasut assumed the role of Acting CMOH for 11 months before leaving in October 2007 to take on the newly created position of Associate Chief Medical Officer of Health, Public Health System Policy and Planning within the ministry. Dr. David Williams

took on the role of Acting CMOH in November 2007. Despite an active ongoing recruitment search, a permanent Ontario Chief Medical Officer of Health has not been found.

The government has taken a number of steps to try and address the problem of vacancies. To increase the number of qualified MOHs in Ontario, five new dedicated physician re-entry positions were approved in October 2006 for practicing physicians who wish to pursue a master's degree in public health or specialty training in community medicine. In March 2007, the ministry offered re-entry funding to four physicians to pursue a master's in public health, and to two physicians to pursue specialty training in community medicine. The ministry's Public Health Division and Health Human Resources Strategy Division continue to work on addressing the challenges of recruitment and retention in public health.

Yet, the complexities surrounding the ongoing vacancies at the local level and shortage of medical expertise within the ministry are not easily remedied. The reasons are multi-layered and these issues are relevant across the country. Canadian physicians who have undergone specialty training in public health are well qualified, but too few graduating doctors pursue this avenue. Canada has a limited number of residency positions each year for training in community medicine. The National Advisory Committee on SARS and Public Health report released in 2003 noted that a large number of doctors who were trained in community medicine or public health were not actively working within the field. Unfortunately, little seems to have changed in the intervening years. The pressures of working in a highly visible public role and taking on the overarching responsibility for the health of thousands of residents within a geographic region, can pose challenges to attracting and retaining physicians in public health.

Compensation for medical health professionals working in public health also serves as a disincentive. The ministry has traditionally lagged behind that of the broader health care system in this area, contributing to recruiting challenges. A recent salary review has improved compensation at the ministry level. Continued focus on human resources issues is needed to ensure that the ministry is an attractive career option for medical professionals.

At the local level there continues to be great discrepancy between the wages of MOHs and AMOHs, compared to those of other medical specialists. There are also instances of wide variations in salary scales between neighbouring health units. The health care sector is looking at creating a template regarding the compensation of MOHs to ensure some consistency across the field.

Overall, these issues result in public health vacancies at all levels continuing to persist and they reflect the national reality of a shortage of community medicine specialists. The Ontario government is still reviewing many of the recommendations of the CRC report. The province's public health system model with its dual authority and diverse governance at the local level makes arriving at a solution to the vacancy issue more challenging. But an effective solution must be found to remedy this weakness in the public health system. Ontarians are not well served by the chronic vacancies at the MOH level. A review of the barriers in attracting and retaining medical professionals to public health positions is warranted in Ontario as well as on a national scale.

Standards and Protocols

"The ministry has achieved significant success in several key areas: new Ontario public health standards and protocols are being reviewed in preparation for deployment; the Ontario Agency for Health Protection and Promotion is now operational and has embraced the challenge of assimilating and revitalizing the Public Health Laboratory system; and reforms in the Health Protection and Promotion Act. It is the hope of our members – health units and boards of health – that the momentum provided by these achievements can be applied to alleviating such long-standing areas of concern as the shortage of public health physicians and professionals, and the appointment of a Chief Medical Officer of Health in the very near future."

Dr. Charles Gardner, Medical Officer of Health, Simcoe Muskoka District Health Unit, 2007 Chair of the Council of Medical Officers of Health of Ontario (COMOH) and current President of the Association of Local Public Health Agencies.

Public Health Funding

Public health funding has been traditionally cost-shared between the province and municipalities. As part of OHP, the Ontario government committed to increase its share of funding for mandatory programs delivered by public health units to 75 per cent by 2007 from 50 per cent in 2004.

The Ontario government committed $459.9 million in 2007 to the province's public health units to fund 17 mandatory health programs and services. This compares with $252.3 million in 2004 when OHP was launched. This increased investment was intended to enhance the total funding available to public health units, improve local public health capacity and offer some financial relief to local municipalities.

Stepping up the provincial cost sharing split to 75 per cent potentially serves to strengthen the ability of each of the province's 36 public health units to better deliver essential programs and serve the people of Ontario. It was the hope of the CMOH that municipalities would have maintained their level of funding to public health even as the provincial contribution increased. This has not occurred consistently across Ontario. It has led to greater inequities within a system that was already afflicted by disparities based on geography, population growth and a shrinking tax base in some areas of the province. Measures should be explored to help equalize the delivery of public health services across Ontario.

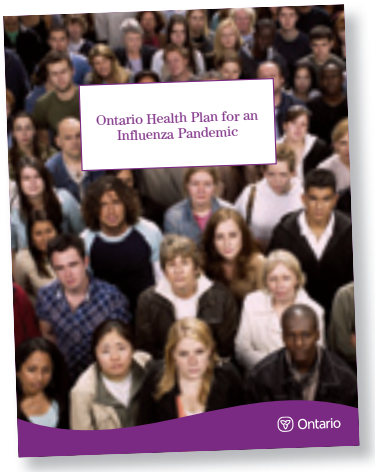
Ontario Public Health Standards

Building on the recommendations of the Expert Panel on SARS and the Capacity Review Committee as well as commitments under OHP, the ministry led a review of the 1997 Mandatory Health Programs and Services Guidelines in collaboration with the ministries of Health Promotion and Children and Youth Services.

Ontario is the only province in which public health mandated guidelines are referred to in legislation. The 36 local health units are responsible for delivering 17 mandatory programs as outlined in the Mandatory Health Programs and Services Guidelines. The guidelines set out the minimum requirements for mandatory public health programs and services targeted at disease prevention, health promotion and health protection, to which all public health units must comply. Public health units may deliver additional programs and services in response to local needs identified within their communities.

The Ontario Public Health Standards (OPHS) and accompanying protocols were approved by the Ministers of Health and Long-Term Care, Health Promotion and Children and Youth Services, and were transmitted to boards of health in October. A rollout strategy, including a series of workshops, is currently underway to support their implementation by boards of health. The release of the OPHS and protocols marks an important step in helping to strike a balance between provincial consistency and local flexibility across the public health system.

Emergency Health Preparedness and Response and Pandemic Planning



In December 2003, following Ontario's experience with the SARS outbreak, the Emergency Management Unit (EMU) was created to lead and support emergency management activities for the ministry and the health system. In 2006, in response to a recommendation of the second interim report of the SARS Commission, the EMU became part of the ministry's Public Health Division, reporting directly to the CMOH.

The EMU has become a centre for leadership and expertise in the area of health emergency management, with much of Ontario's work in this area being held up as a model in other jurisdictions. The EMU has been instrumental in leading pandemic preparedness for the health sector and developing the public health emergency preparedness standard as part of the Ontario Public Health Standards. In addition, it has spearheaded a number of other plans and programs to address public health risks and hazards.

Some examples of the important work done to date in the area of health emergency management include:

- Development and management of the Emergency Medical Assistance Team (EMAT) – a 56-bed mobile field unit that can be deployed anywhere in Ontario with road access within 24 hours to assist with surge capacity

- Roll-out of the Chemical, Biological, Radiological/Nuclear (CBRN) program for hospitals, public health units and emergency medical services
- Distribution of 15,000 Emergency Infection Control Kits to community-based health practitioners
- Stockpiling and warehousing emergency supplies and equipment to keep health workers and the public safe during emergency situations
- Education/training on influenza pandemic, health emergency management, and the development of Ontario's first-ever infection prevention program for school-aged children (ages 5-13): Bug Out! Get the Facts on Germs
- Establishing a process for issuing Important Health Notices to alert the health system to an abnormal event or developing emergency, a 24-hour information cycle for use in emergencies and the Health Providers Hotline; and
- Developing and maintaining a resourceful website for emergency planners, health workers and the public.

The Ontario Health Plan for an Influenza Pandemic (OHPIP)

The EMU released the fourth iteration of the Ontario Health Plan for an Influenza Pandemic in 2007. The plan continues to evolve year after year and is regularly updated and improved with emerging clinical, epidemiological, and operational information. Ontario's pandemic plan has in recent years received national and international recognition.

As in previous years, the 2007 OHPIP involved collaborating with numerous stakeholders from health, labour, emergency management and government sectors. The plan built on the community focus of the 2006 OHPIP. It included enhancements such as:

- Identification of equipment, supplies and staff for flu centres
- Guidelines for care of individuals with cancer
- A comprehensive paediatrics and obstetrics strategy
- Occupational health and safety measures and infection prevention and control; and
- Incorporating the "precautionary principle," which will be applied to decision-making regarding personal protective equipment for health workers when there is an immediate risk to health and when there is scientific uncertainty.

EMU staff participated in numerous pandemic exercises organized at the local level as well as an ongoing series of exercises sponsored at the national level through the Public Health Agency of Canada. They were also involved in over 215 public-speaking engagements on pandemic and emergency management in 2006-07. In addition, the EMU distributed 3.5 million copies of the brochure, "What you should know about a flu pandemic," to public health units and community health providers. It created 10 pandemic fact sheets aimed at the public in 23 languages and developed eight pandemic fact sheets for health care workers.

The Impact of Operation Health Protection on the Public Health System

Operation Health Protection was a comprehensive foundation plan. It was an impressive call to action. Yet it faced the daunting challenge of trying to redress decades of neglect of Ontario's public health system. Its three-year mandate was insufficient time for some of its key initiatives to be fully realized and extensively impact the health system. Given this reality, the clearest examples of the success of OHP can be seen in its initiatives that have served to enhance and strengthen the province's capability in infectious and communicable disease control and surveillance capacity. Most notably, PIDAC has clearly left its mark on the health system by contributing expertise, setting standards, establishing best practices, and providing accessible tools that can be readily used by the field to improve infection prevention and control. PIDAC has gained the respect and recognition of a broad sector of the health care field, both in Ontario and across Canada.

Complementary initiatives like the RICNs and funding to increase the number of infection control practitioners in hospitals and to allow for additional communicable disease professionals at local public health units have collectively provided the health system the ability to build capacity to better prevent the spread of disease. Similarly, the province wide iPHIS for reporting and efficiently analyzing information about communicable diseases, along with the syndromic surveillance initiative, improved the public health system's ability to detect disease outbreak and better protect Ontarians.

Also notable was the goal of OHP to strengthen the ministry's emergency preparedness and response through the EMU. EMU has taken a leadership role and built networks and partnerships across the health system to enhance the province's ability to respond quickly and effectively during times of crisis. The resources and tools it has created to support emergency preparedness has served to strengthen the public health safety net.

However, it is important to never become too self-satisfied or complacent because no safety net can be woven tightly enough as to be impenetrable. The system must always strive to prepare itself as best as possible for the unknown and the unexpected. Not every outbreak can be prevented. Early detection is essential, whether the threat be from bacteria and viruses that have existed for a millennium or an unknown, emerging threat. Effective prevention, early detection, adequate control and timely response are all key foundation prerequisites in protecting the public and keeping them safe – reducing the impact of infectious and communicable diseases. Public health stakeholders, both within and beyond the ministry, have worked diligently to improve the system in this area. But infection and disease control, as well as emergency preparedness, involve a continually moving target and demand a tireless response.

Two key initiatives of Operation Health Protection – the creation of the Ontario Agency for Health Protection and Promotion as well as the renewal of the public health laboratory system – represented significant and long awaited steps within public health. However, the agency is in its infancy having only been launched near the end of 2007. It will take time for this welcomed and important institution to evolve into a centre of excellence and significantly impact the health system. The changes at the public health laboratories are similarly in their initial stages. The increased professional expertise the OPHL has succeeded in attracting will greatly enhance the capacity of the laboratories to support the health system. A number of capital and technological improvements also represent important steps. But these relatively recent developments will take time to be fully implemented.

Increasing the province's share of funding mandatory programs and services carried out by local public health units was a key component of OHP. The increase to 75 per cent from 50 per cent over a three-year period represented an important injection of funds at the local level for the benefit of serving and protecting Ontarians. Yet one has to be concerned by inequities that have resulted from some municipalities maintaining their previous funding levels of public health and others choosing to scale back as the provincial funding increased. Such inconsistencies in the local public health funding levels of mandatory programs need to be addressed.

The Capacity Review Committee was set up to examine capacity issues at the local public health unit level. The committee's work and its subsequent report and recommendations were comprehensive. However, the government has yet to effectively respond to the CRC report so it remains unclear as to what direction and steps will be taken to resolve a range of ongoing concerns at the municipal level.

The issue of the ongoing vacancies in public health is perhaps the most concerning area that OHP did not adequately address. Not enough has been done to tackle this complex problem. Operation Health Protection strengthened the public health infrastructure; now greater measures need to be explored to respond to the outstanding human resources issues.

Finally, keeping Ontarians healthy is about much more than protecting them against disease. The stated mandate of Operation Health Protection also encompassed promoting the health of Ontarians. But there is little to point to within OHP initiatives that addressed health promotion. Creating a solid foundation for the public health system is essential. Operation Health Protection laid some important components, but the work is not complete. Further reinforcement of the foundation is still required for the full vision of OHP to be realized. Only then can the province's public health system fully leverage its capacity to keep Ontarians healthy in the broadest sense.

Highlights of OHP Outcomes

Provincial Infectious Diseases Advisory Committee:

Has made its mark in improving infection and disease control practices within the health system.

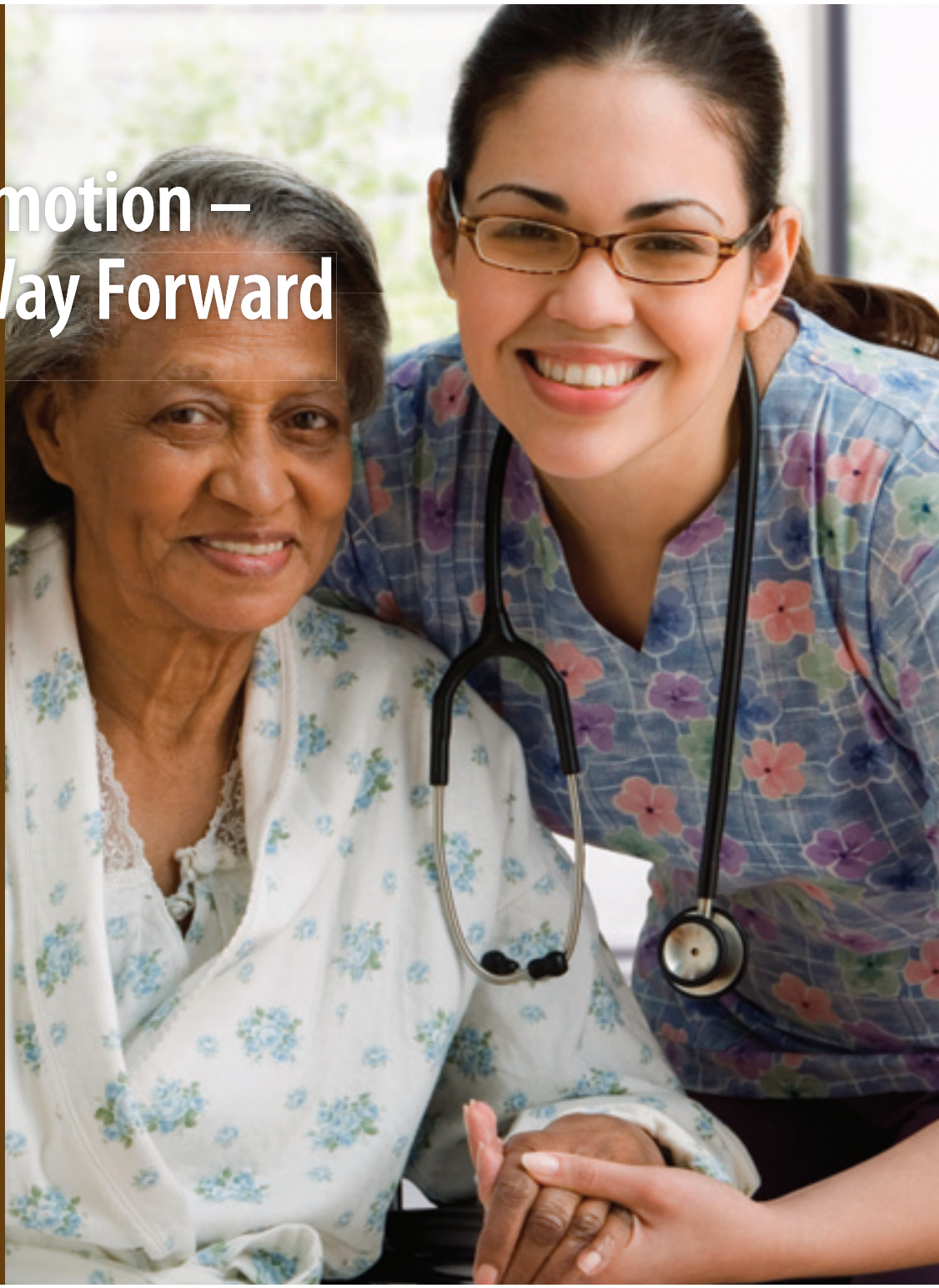
Ontario Agency for Health Protection and Promotion/laboratory modernization:

Important additions to public health, but changes are still within their infancy – more time is required for the full potential to be realized by the system.

Public health leadership and vacancies:

A long-standing issue that has yet to be resolved satisfactorily.

Health Promotion – The Way Forward



Health Promotion – The Way Forward

Holistic Approach to Public Health

Public health involves much more than legislative mandated protection activities, which so often get much of the focus and the financial resources, noted Dr. Chandrakant Shah, Professor Emeritus, Dalla Lana School of Public Health, University of Toronto. “Not enough has been done to look at population health as a central part of public health,” said Shah, who has focused his career on public health for three decades and trained many Ontario public health physicians. “Public health is more than health protection. The objective of public health is to keep the population healthy and vibrant. Much more time needs to be spent looking at health promotion and disease prevention.”

Shah explained that it is critical to consider the primary causes of diseases that greatly impact a broad segment of the population, as well as to pay special attention to vulnerable communities. “We need to take a population health approach. Public health and health promotion is like the left and right eye. They must work together and they must focus together,” he said. “We also need to be developing health promotion programs that speak to a broad range of diverse communities in a culturally sensitive manner.”

To take a population health approach would require that public health work more closely with primary care. “If you want to promote a healthy population then you have to be at the table with primary care physicians.” The effectiveness of mass immunization and various screening programs, for example, rely heavily on primary care health practitioners being on side. “Public health can also readily provide physicians with the population assessment tools to better target and deliver care,” Shah explained. “Public health has more expertise in certain areas like smoking cessation and these experts could be working more closely with primary care to transfer knowledge for the benefit of the health of the population.”

“If you are in the business of looking after people’s health, you have to be looking at the areas that are creating ill health, looking beyond outbreak protection and focusing on the determinants of health, including the environment and ecosystem,” Shah said.

Dr. Chandrakant Shah, Professor Emeritus,
Dalla Lana School of Public Health, University of Toronto.

As much as the SARS crisis pointed to the importance of focusing on and maintaining vigilant health protection measures, it is essential that one not lose sight of an equally important aspect of public health: a healthy population is a resilient and productive population. A fundamental role of public health is to create the sustainable conditions for healthy individuals, communities and populations.

Unfortunately, while many Ontarians are living longer in good health, some segments of the population are in poor health and struggling with multiple chronic diseases. This places greater strain on Ontario's health care system as the population ages and grows. In addition, the increasing rates of obesity and overweight children and adults have repercussions not only for life expectancy and quality of life, but also for Ontario's prosperity and the sustainability of the health care system.

Chronic disease prevention and management and health promotion must become greater focal points of public health as well as other sectors where Ontarians work, live, study and play. To achieve this requires greater collaboration between public health and other health system players, including Local Health Integration Networks – entrusted with integrating health care delivery – primary care practitioners and Family Health Teams, as well as sectors such as education, environment, child development, transportation, housing and the private sector.

It will require cross-governmental collaboration to assess how factors such as education, income and early child development affect health. It is especially important that the Ministry of Health and Long-Term Care and the Ministry of Health Promotion have a strong partnership to ensure a consistent approach in keeping individuals and communities healthy. Examining the determinants of health and taking a big picture strategic approach to promoting health and changing social norms light the way forward.

Environmental Health

As one focuses on illness prevention and health promotion as part of public health, one is led to the necessity to view the determinants of health through an even broader lens. To be truly healthy one must also be concerned about the health of the environment – the quality of the air and the toxins that impact the planet. The health of the environment reflects the health of the community.

After nearly a decade of calls from the field, the Environmental Health Branch was created in February 2007 to take a leadership role in adding the human health perspective to environmental policy and related issues, such as drinking water protection, food safety, air quality, and climate change adaptation. The launch of the branch is commendable and presents exciting opportunities for the future. The branch provides technical expertise and support to local boards of health for food safety and safe water mandatory programs, and helps Ontario's public health system to prevent and reduce human health impacts posed by environmental hazards.

One of the early initiatives of the branch included working on amendments to the food premises regulation to permit street food vendors in Ontario to offer expanded, diverse and healthier menu choices. The branch has also implemented the provincial food safety education campaign for farmers' markets and community-based special events.

In Spring 2007, when there were unexpected findings of elevated levels of lead in drinking water in some municipalities, the branch worked closely with the Ministry of the Environment and public health units to better understand the levels of risk and determine an appropriate public health response. In June 2007, the Ontario government took steps to reduce potential levels of lead intake for pregnant women and children six and under – those most vulnerable to lead.

On a more global perspective, the Ontario government set up an Expert Panel on Climate Change Adaptation to consider the impact of climate change in the province and recommend effective adaptation strategies. Climate change can bring with it the risk of droughts or severe floods, change and increase the risks of diseases carried by insects, food and water, lead to more days with poor air quality and create more heat-related stresses. The Environmental Health Branch is playing an important role in this multi-ministry initiative to ensure that health-related issues are kept in the forefront. The branch is well positioned to interact with various ministries and external stakeholders to bring focus to the health perspective of environmental issues. If one is to take a holistic approach to public health, then the environmental impact on the determinants of health must be brought within the purview of public health.

Looking Ahead

2007 was an important marker in public health as it signaled the wrap up of the three-year mandate of Operation Health Protection. Much work has been done to strengthen the system. There are weaknesses that remain, but we have gained a greater understanding of what is required to continue to solidify the foundation of public health.

The Capacity Review Committee offered many recommendations to address gaps within the system. Their report is currently under review by the government and contains some recommendations well worthy of serious consideration. It is important that the government indicate its strategic and policy direction in this area. The update of public health standards and their implementation will help to further strengthen the system by fostering greater consistency and equity across the province.

Apart from these developments, public health would also benefit from greater collaboration and coordination with other health system stakeholders like Family Health Teams, primary care practitioners and LHINs. A holistic approach to public health demands the involvement of a broad cross-section of health system players.

At the ministry level, an ongoing major restructuring within MOHLTC will alter the organization of the Public Health Division. It is hoped that the internal transition within the division will better position it to partner and collaborate more effectively with other health system players for the benefit of Ontarians.

Operation Health Protection represented a major re-investment of resources in public health to make up for years of neglect. History has taught us that we can ill afford to allow our commitment to lapse in future. Gains have been made, but more remains to be done and there is no room to become complacent. Government must continue to remain committed and take a leadership role in building and maintaining a public health system focused in the broadest sense on keeping Ontario's communities and families healthy.

But the job of public health is not the government's alone. All health system stakeholders have an important role to play. Even members of the public can take some responsibility. Hand washing to prevent the spread of infectious diseases is an example of a simple, but effective, contribution of individuals to support the public health safety net. All Ontarians have a role to play in protecting and enhancing the health of the province. Public health is everybody's business.

Appendix A

Ontario Public Health Units with Vacant MOH Positions Filled by Acting MOHs as of September 1, 2008

Chatham-Kent Health Unit

Eastern Ontario Health Unit

Elgin-St. Thomas Health Unit

Haldimand-Norfolk Health Unit

Huron County Health Unit

Lambton Health Unit

Northwestern Health Unit

Oxford County Public Health and Emergency Services Department

Perth District Health Unit

Porcupine Health Unit

Thunder Bay District Health Unit

Timiskaming Health Unit

Wellington-Dufferin-Guelph Health Unit

Total = 13

Appendix B

Ontario Health Units with Vacant AMOH* Positions as of September 1, 2008

Durham Regional Health Unit

City of Hamilton Health Unit

Kingston Frontenac Lennox and Addington Health Unit

City of Ottawa Health Unit

Peel Regional Health Unit

Windsor-Essex County Health Unit

Total = 6 Health Units with AMOH Vacancies**

* Under 62. (1)(b) of the Health Protection and Promotion Act, every board of health may appoint one or more associate medical officers of health.

** NB: Vacancies may include less than or more than one full-time equivalent position per health unit.

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