

CMA Submission on infrastructure and governance of the public health system in Canada

Presentation to the Senate Standing Committee
on Social Affairs, Science and Technology

October 8, 2003

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A healthy population...a vibrant medical profession
Une population en santé...une profession médicale dynamique

The Canadian Medical Association (CMA) is the national voice of Canadian physicians. Founded in 1867, the CMA's mission is to serve and unite the physicians of Canada and be the national advocate, in partnership with the people of Canada, of the highest standards of health and health care.

On behalf of its 55,000 members and the Canadian public, CMA performs a wide variety of functions, such as advocating health promotion and disease/accident prevention policies and strategies, advocating for access to quality health care, facilitating change within the medical profession, and providing leadership and guidance to physicians to help them influence, manage and adapt to changes in health care delivery.

The CMA is a voluntary professional organization representing the majority of Canada's physicians and comprising 12 provincial and territorial divisions and 45 affiliated medical organizations.

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Purpose

The Canadian Medical Association (CMA) has prepared this submission for the Standing Senate Committee on Social Affairs, Science and Technology study on the governance and infrastructure of the public health system in Canada and its response during public health emergencies. We applaud this initiative and welcome the opportunity to present the views of Canada's medical community.

Introduction

Canada has a distinguished history as one of the best countries in the world in which to live, ranking number one on the UN's Human Development Report from 1994 to 2000. Our health care system was a major contributor to the country's top position but in the past few years Canada has lost ground in international rankings on key health indicators.

For example, although Canada's infant mortality rate dropped by 22% between 1990 and 1999, other countries recorded greater declines in infant mortality over the same time period. As a result, Canada's rank dropped from 5th to 17th among the 31 industrialized countries included in the Organization for Economic Cooperation and Development (OECD). In 1999, Canada ranked 5th in life expectancy at birth, down from 3rd in 1990. During the 1990-1999 period, total life expectancy increased by 1.8% in Canada but other countries made larger gains.

The CMA believes that this worrisome turn of events needs attention. Delegates to its 2003 General Assembly called on the federal government to commit to the goal of establishing Canada as the top country worldwide, regarding the health status of its citizens, within ten years.

To achieve this Canada will need a national strategy that defines national health goals and can seriously address the health inequalities that continue to exist in Canada. Improvement to health status in Canada will not be possible without a strong, effective and well-resourced public health system. Unfortunately we do not have that today.

For years the CMA has been warning that our public health system is stretched to capacity in dealing with everyday demands, let alone responding to new and emerging health threats. Canada's physicians have repeatedly called for governments to enhance public health capacity and strengthen the public health infrastructure throughout Canada.

For example, the CMA's submission to the House of Commons Standing Committee on Finance's pre-budget consultations on October 22, 2001 called for substantial investments in public health and emergency response as a first step to improve the public health system infrastructure and surge capacity. It also drew attention to the need for improved co-ordination and communication between jurisdictions.

In February 2003, before the World Health Organization (WHO) issued a global alert about Severe Acute Respiratory Syndrome (SARS), the CMA again raised concerns about the capacity of Canada's health system to handle emerging infectious diseases without being overwhelmed. This warning came in the CMA's submission to the House of Commons Standing Committee on Health hearings on West Nile Virus.

Most recently, in our submission to the National Advisory Committee on SARS & Public Health, *Answering the Wake-Up Call: CMA's Public Health Action Plan*, the CMA called for a clearer alignment of authority and accountability in times of extraordinary health emergencies. The submission also recommended enhancement of the system's capacity to respond to public health threats across the country. The Public Health Action Plan and accompanying technical backgrounders have previously been circulated to the Committee and are attached as Appendix 1.

In this submission we will expand on the recommendations contained in *Answering the Wake-Up Call: CMA's Public Health Action Plan* to focus on the federal government's role in public health. Particular emphasis will be placed on legislative reform, human resource capacity enhancement, and surveillance and communications.

Public Health in Canada

Public health is the science and art of protecting and promoting health, and preventing disease and injury. It complements the health care system, which focuses primarily on treatment and rehabilitation, sharing the same goal of maximizing the health of Canadians. However, the public health system is distinct from other parts of the health system in two key respects: its primary emphasis is on preventing disease and disability and its focus is on the health needs of populations rather than those of specific individuals. It is interesting to note that Canada's current public health legislation was enacted more than a half century before our health care legislation.

Public health is about ensuring access to clean drinking water, good sanitation and the control of pests and other disease vectors. Further, it is immunization clinics and programs promoting healthy lifestyles and healthy environments. It is also the systematic response to infectious diseases, there to protect Canadians when they face a public health threat like SARS. When the public health system is fully prepared to carry out essential services, communities across the country are better protected from acute health events.

Unfortunately it is only when something goes terribly wrong, as in the Walkerton tragedy when 7 people died and 1,346 were affected by E. coli contamination of a community well, that the important role and contribution of public health is highlighted.

Today's reality is that Canada does not have a strong, integrated, consistently and equitably resourced public health system. In 2001, a working group of the Federal, Provincial and Territorial Advisory Committee on Population Health assessed the capacity of the public health system through a series of key informant interviews and literature reviews.

The consistent finding was that public health had experienced a loss of resources. There was also concern for the resiliency of the system's infrastructure and its ability to respond consistently and proactively to the demands placed on it. Significant disparities were observed between "have" and "have-not" provinces and regions in their capacity to address public health issues.

The report's findings are consistent with previous assessments by the Krever Commission and the Auditor General of Canada. In 1999, the Auditor General said that Health Canada was unprepared to fulfil its responsibilities in public health: communication between multiple agencies was poor; and weaknesses in the key surveillance system impeded effective monitoring of injuries and communicable and non-communicable diseases. In 1997, Justice Horace Krever reported that the "public health departments in many parts of Canada do not have sufficient resources to carry out their duties."

Public health systems across Canada are fragmented. It is less a system and more a patchwork quilt of programs, services and resources across the country. In truth, it is a group of multiple systems with varying roles, strengths and linkages. Each province has its own public health legislation. Most legislation focuses on the control of communicable diseases. Public health services are funded through a variable mix of provincial and municipal funding formulae, with inconsistent overall strategies and results, and with virtually no meaningful input from health professionals via organizations such as the CMA, or its divisions and affiliates, in terms of strategic direction or resources.

Federal legislation is limited to the blunt instrument of the *Quarantine Act* and a variety of health protection-related acts like the *Food and Drugs Act*, *Hazardous Products Act*, *Controlled Drugs and Substances Act*, *Radiation Emitting Devices Act*. Some of the laws, such as the *Quarantine Act*, date back to the late 19th century. Taken as a whole, the legislation does not clearly identify the public health mandate, or the respective roles and responsibilities of the different levels of government. In many cases, the assignment of authorities and accountabilities is anachronistic.

The existing *Emergencies Act* gives the federal government the power to become involved in public welfare emergencies when regions of the country are faced with "an emergency that is caused by a real or imminent...disease in human beings .. that results or may result in a danger to life or property ... so serious as to be a national emergency."¹ However, in order to use this power, the federal government must declare a "public welfare emergency" which itself has political and economic implications, particularly from an international perspective, that mitigate against its use.

¹ *Emergencies Act*, R.S.C. 1985, c.22 (4th Supp), s. 5. "National emergency" is defined in section 3 as "an urgent and critical situation of a temporary nature that (a) seriously endangers the lives, health or safety of Canadians and is of such proportions or nature as to exceed the capacity or authority of a province to deal with it, or (b) seriously threatens the ability of the Government of Canada to preserve the sovereignty, security and territorial integrity of Canada, and that cannot be effectively dealt with under any other law of Canada." (*Emergencies Act*, R.S.C. 1985, c.22 (4th Supp) section 3).

CMA believes that this all-or-nothing approach is not in the public's best interest and that the concept of national emergency in the context of public health requires a different and differentiated response from governments in the future.

In its submission to the National Advisory Committee on SARS and Public Health the CMA called for the enhancement of the federal government's "command and control" powers in times of national health emergencies through the enactment of a *Canada Emergency Health Measures Act*. The Act would give the federal government specific authority to act for a pre-determined, temporary period of time, during a declared extraordinary health emergency. It would also provide the authority for development of a graduated health alert system with corresponding public health interventions to enable a rapid co-ordinated response as a public health threat emerges.

The declaration of a health alert would imply that financial, scientific and human resources from the federal government would be available as required to address the crisis. An incremental level of federal assistance should be associated with each of the five levels of health alert to help meet the basic costs of response and recovery when such expenditures exceed what an individual province or territory could reasonably be expected to bear on its own. For example at level three a 50/50 cost sharing arrangement could be envisioned with this increasing to 90/10 at level 5. At health alert levels 1 and 2 the financial contribution should be considered to be within the operational funds of the proposed Canadian Office for Disease Surveillance and Control. Financial assistance that may be required during health alert levels 3 to 5 should be submitted to and approved by the Governor in Council during the authorization for declaration of the health alert.

The level of health alert and affected area would be reviewed regularly and modified as needed. The graduated system of health alerts proposed by CMA will ensure a more appropriate and effective response to public health emergencies than currently exists.²

The CMA has also brought the issue of emergency response forward on the international stage through its membership in the World Medical Association (WMA). At the WMA General Assembly in September 2003, delegates from over 50 countries supported a motion put forward by the CMA urging the WHO to enhance its emergency response protocol to deal with world epidemics such as SARS. (See Appendix II.) The WMA agreed to establish a working group, headed by the CMA, to develop a public health risk alert plan.

The report of the National Advisory Committee on SARS and Public Health has now been submitted to the federal health minister. The federal government must not let this report languish on the shelf. It must develop a plan to respond to its recommendations in order to create a strong and well-resourced public health system with adequate surge capacity and sufficient highly qualified public health professionals.

² See Appendix 1: Technical Backgrounders to Answering the Wake-Up Call: CMA's Public Health Action Plan for details on the Emergency Health Alert System.

The CMA has determined that a very targeted incremental investment of \$1.5 billion over five years is needed to address the legislative reform and capacity enhancement required to bring our public health system into the 21st century. Simply re-allocating funds within existing health budgets is not sufficient and would only negatively impact efforts to shore the core of current health care services.

Recommendation One

The federal government rapidly move to enact a Canada Emergency Health Measures Act that would consolidate and enhance existing legislation. This new Act would allow for a more rapid national response, in co-operation with the provinces and territories, based on a graduated, systematic approach, to health emergencies that pose an acute and imminent threat to human health and safety across Canada.

Recommendation Two

The federal government invest in the country's public health system with an immediate commitment of \$ 1.5 Billion over five years to rebuild the public health infrastructure.

An Action Plan for the Federal Government

National leadership is critical to articulate the key issues and challenges facing public health today and to implement comprehensive strategies to address the deficiencies in the system's infrastructure. The CMA has called for a renewed and enhanced national commitment to public health anchored in new federal legislation.

Legislative Reform

Canada's response to SARS brought into stark relief the urgent need for national leadership and coordination of public health activity across the country, especially during such a serious health crisis. It was a wake-up call that highlighted the need for comprehensive legislative reform to clarify the roles of governments and public health officials with respect to the management of public health threats.

The development of a national public health system ought not to occur by the instalment plan, provoked by SARS-like events. It must be carefully planned and evaluated. This, in turn, requires clear identification of key issues and mobilization of resources.

A sustainable public health system also requires a critical mass of technical expertise to support essential public health functions³.

³ The FPT Advisory Committee on Population Health recommended the following as essential functions of the public health system: population health assessment; health surveillance; health promotion; disease and injury prevention; health protection.

The CMA believes that the federal government has a critical role to play in the development of a strong, co-ordinated pan-Canadian public health system. In both the United Kingdom and the United States, national leadership has been instrumental in clearly defining health goals for the population and stating the role of the public health system, its key infrastructure elements and the development of strategies to attain them.

Canada does not have a formal national leadership position comparable to England's Chief Medical Officer or the Surgeon General in the US. There is currently no single credible public health authority vested, through legislation or federal-provincial-territorial agreement, with the overall responsibility for pan-Canadian public health issues. The CMA has recommended the appointment of a Chief Public Health Officer of Canada with decision-making powers in areas of federal jurisdiction.

Currently there is tremendous inequity in the public health system capacity among different provinces and territories. Considering the breadth of public health issues, the relative population sizes and differences in wealth, it will never be feasible to have comprehensive centres of public health expertise for each province and territory. Even if one achieved this, there would increasingly be issues of economies of scale and unnecessary duplication among centres. This issue is not unique to Canada.⁴

The CMA has proposed the establishment of a *Canadian Office for Disease Surveillance and Control* (CODSC) as a key component of its public health action plan. A comprehensive centre of public health expertise allows for a strategic pan-Canadian approach to public health planning and services while developing a critical mass of scientific and public health expertise and resources that can be deployed to any region in the country when necessary.

A first priority of the CODSC must be to facilitate pan-Canadian agreement on the definition of the core functions of the public health system as it will not be possible to assess and develop system infrastructure if these are not defined. (As noted earlier in this paper the Federal-Provincial-Territorial Advisory Committee on Public Health has suggested five core functions.) A follow-up step to the development of core functions for public health is to identify national health goals to improve health status and address health inequities within populations across the country.

The impact of inequality in health on health status can be seen within the aboriginal population. The degree of ill health within their communities is one of Canada's major unresolved challenges. Although there have been significant improvements over the past few decades, the overall health status of Aboriginal peoples falls well below that of others living in Canada.

⁴ Many countries (e.g., United States, United Kingdom, Norway and the Netherlands) have developed a critical mass of public health expertise at the national level. The Centers for Disease Control and Prevention in the United States, which has a critical mass, great depth of scientific expertise and the tools and fiscal resources to fund public health programs at both state and local levels through demonstration projects, is a sterling example of the effectiveness of such a central agency.

Mortality and morbidity records indicate that life expectancy, while varying among communities, remains significantly less than that of the average Canadian. And the incidence and prevalence of chronic and degenerative diseases (Type II diabetes mellitus, cardiovascular disease, cancer and arthritis) is increasing. The CODSC would be a key player in establishing health goals and supporting Aboriginal peoples with public health expertise and resources.

The CODSC and the Chief Public Health Officer of Canada will also have a central role in providing public health services to those areas falling under federal jurisdiction where local and provincial Chief Medical Officers of Health do not have access or authority.

Airports, railways, military bases, aboriginal peoples living on reserve, federal meat packing plants and national parks are examples of areas under federal jurisdiction. The delivery of public health in these jurisdictions has been especially compromised by the lack of comprehensive coordination between provincial and federal systems. The CODSC must address this issue.

Under the CMA's plan, CODSC would become the lead national agency on public health matters with a broad mandate to co-ordinate all aspects of planning for national public health emergencies. It would also provide ongoing national health surveillance and work closely with provinces/territories to reinforce other essential public health functions. The Chief Public Health Officer of Canada would head the CODSC and act as the lead scientific voice for public health in Canada.

To effectively carry out its mandate the CODSC's structure must respect five guiding principles. It must be:

- *Independent* – At arm's length from government, insulated from day-to-day vagaries of political pressures while remaining accountable to Canadians.
- *Science-based* – Adherence to the highest standards of risk assessment and decision-making with a view to safeguarding the health of Canadians.
- *Transparent* – Open to public scrutiny and encouraging public participation in its activities.
- *Responsive* – Characterized by a nimble decision-making process and a capability of deploying resources and expertise quickly and efficiently to any part of the country.
- *Collaborative* – Partnership-oriented, fostering collaboration with other federal, provincial and non-governmental partners.

There are three main options for the governance structure of the CODSC. Canadian and international precedents exist for each of the options.

1. Federal departmental entity

Under this option, the CODSC would be created under federal legislation as a departmental branch or agency with the minister of health having general authority for its management and direction. The chief public health officer would be answerable to the minister and to the Prime Minister for the quality of management and advice provided by the office and for any actions taken by agency officials. This would not be very different from what already exists at Health Canada. The critical difference is that the CODSC would be a separate entity reporting to the minister of health, as opposed to the current structure where the Population and Public Health Branch is an entity within the department.

Canadian examples: Canadian Food Inspection Agency, Pest Management Regulatory Agency

International example: U.S. Centres for Disease Control and Prevention

2. National arm's length agency

This option consists of incorporating the office as a not-for-profit entity under the Canada Corporations Act (Part II), with the federal and provincial governments as members/shareholders. The CODSC would be structured on a corporate model with a board, and the chief public health officer acting as CEO. However, instead of direct accountability to Parliament, the office would be accountable to the Conference of F-P-T Ministers of Health. This option would signal a more radical departure from current arrangements and would make CODSC more of a joint venture with the provinces and territories. While the concept is intriguing, this model might place the management of national public health concerns too far from the ambit of governmental accountability.

Canadian examples: Canadian Blood Services, Canadian Institute for Health Information, Canada Health Infoway, Canadian Coordinating Office for Health Technology Assessment

3. Federal arm's length agency

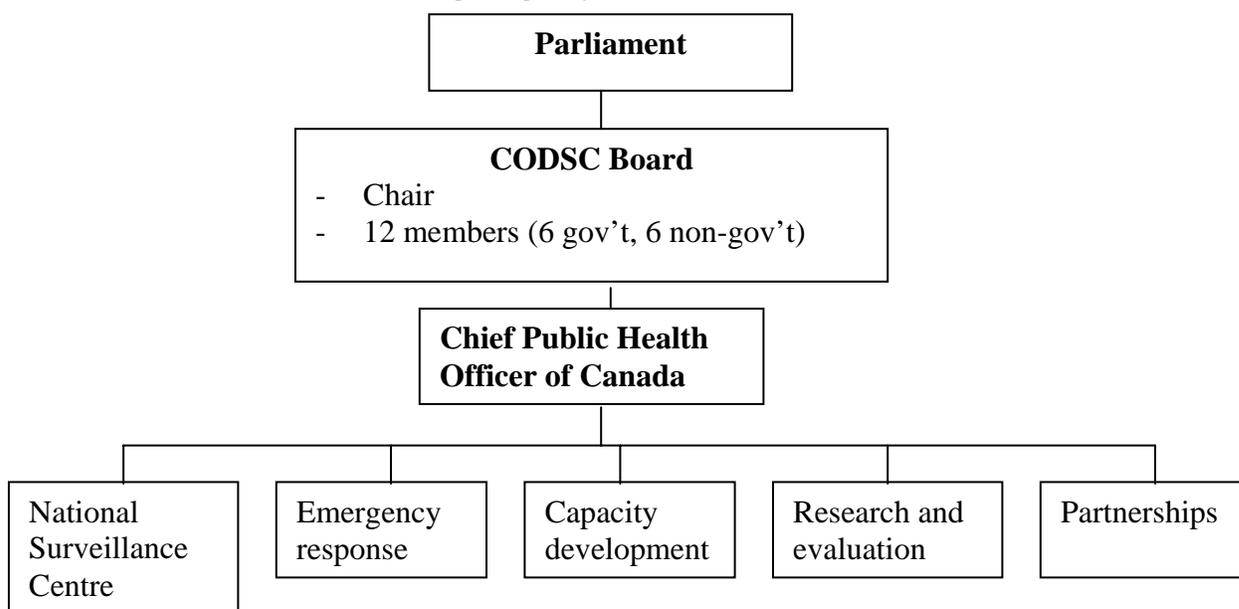
This middle option would consist of creating a more independent entity within the purview of the federal government. Under this approach, CODSC would be structured on a corporate model in which decision-making powers are vested in a board. The board, in turn, would be accountable to Parliament and the public for the exercise of these powers. The chief public health officer would be CEO and would oversee the day-to-day operation of the office. CODSC would be created through new federal legislation but would remain under the health portfolio, with accountability to Parliament through the health minister.

Canadian examples: Canadian Institutes for Health Research, Canadian Centre for Substance Abuse, Hazardous Materials Information Review Commission

International example: U.K. Health Protection Agency

While each of the options discussed has strengths and weakness, a federal arm's length agency would be the best fit with the CMA's vision for the CODSC. It would mark a departure from the status quo in that the level of professional autonomy would increase and the level of ministerial involvement in professional issues would be reduced. This would contribute to making the CODSC more credible as a science-based organization. The board governance structure would encourage participation from the broader public health community and could therefore be more effective in creating partnerships with other key players.

Illustration of a federal arm's length agency



CMA is very encouraged with the strong support for a Canadian public health agency shown by federal Health Minister Anne McLellan and her provincial /territorial counterparts following their most recent meeting. We also welcome their recognition of the need for significant resources to deliver the kind of integrated, collaborative national public health infrastructure needed to protect the health and safety of Canadians.⁵

We have estimated the incremental cost of establishing and operating the CODSC to initially be \$20 million over five years, over and above existing funding for programs that could be transferred to the new office such as emergency preparedness and response, and surveillance co-ordination. In its recent brief to the House of Commons Standing Committee on Finance 2003 pre-budget hearings, CMA asked that these monies be allocated immediately to allow for the creation of the CODSC within the next fiscal year.

⁵ McLellan promises health cash injection, A4, The National Post, 04-09-2003

Recommendation Three

That the federal government create a Canadian Office for Disease Surveillance and Control led by a Chief Public Health Officer of Canada to be the lead Canadian agency in public health, operating at arm's length from government.

Recommendation Four

That the federal government allocate at least \$20 million / 5 years with appropriate ongoing funding, over and above the funding for existing national public health programs, for the creation and operating expenses of the Canadian Office for Disease Surveillance and Control.

Health Human Resource Capacity Enhancement

The CMA has been speaking out on the impact of the shortage of physicians and other health care professionals on the acute care system for the last five years. In prior submissions to this Committee, to the House of Commons Committee on Finance and to the Royal Commission on the Future of Health Care in Canada, the CMA called for increased funding for the recruitment, education and on going training of physicians to address the current crisis in the acute care workforce.

The SARS outbreak has clearly demonstrated that Canada's public health workforce is especially thin. The shortage of community medicine and infectious disease specialists, nurses and laboratory technicians affects our capacity to respond to health threats. For the essential functions of the public health system to be realized, public health agencies need a workforce with appropriate and constantly updated skills. As the first line of defence against threats to the health of Canadians, the public health system must be able to respond quickly to an emergency with a skilled and trained workforce with sufficient numbers to meet the demands of the crisis.

While Health Canada has made some limited progress to help address ongoing education needs of public health practitioners, there are virtually no resources currently dedicated to address public health emergency response skills or the essential cross-training that is critical during a public health crisis. Effective cross-training boosts surge capacity by equipping public health practitioners with knowledge and skills that can be called upon in times of public health emergency while allowing them to fulfil essential public health services at other times.

CMA's submission to the National Advisory Committee on SARS and Public Health has called for investment in multidisciplinary training programs in public health and the dissemination of best practices to public health professionals.⁶

⁶ Recommendation 4 of Answering the Wake-Up Call: CMA's Public Health Action Plan: The creation of a Canadian Centre of Excellence for Public Health, under the auspices of the CODSC, to invest in multidisciplinary training programs in public health, establish and disseminate best practices among public health professionals.

But our country's response to SARS also confirmed the co-dependent nature of the public health and acute care systems. The scarcity of hospital-based infection control practitioners, emergency physicians, nurses and technologists in the clinical and laboratory arenas within the acute care system were particularly striking during the SARS outbreak.

This clearly demonstrated the need for a pre-planned approach to support and augment the public health and acute care workforce during a crisis. With essentially no plan in place to systematically shift human resources within the public health and acute care systems, we were ill prepared to move health professionals from other jurisdictions to respond to the crisis. Consequently Toronto public health and acute care professionals were stretched to their physical and mental limits. Recruitment of health care professionals to assist in the Greater Toronto Area depended, to a large degree, on volunteerism rather than co-ordinated efforts.

Therefore, the CMA has proposed the establishment of a Canadian Public Health Emergency Response Service to work in collaboration with non-governmental health organizations like the CMA and the Canadian Public Health Association and function under the auspices of the Canadian Office for Disease Surveillance and Control.⁷

The Canadian Public Health Emergency Response Service would be made up of a core group of highly trained and mobile public health professionals, employed by the CODSC, able to carry out emergency response interventions as directed by the Chief Public Health Officer of Canada.

But what SARS also clearly demonstrated was the need to be able to support and provide respite to the physicians and nurses overwhelmed by the influx of patients to acute care facilities and the accompanying institutional infection control measures.

The CMA believes that the federal government must have access to a predetermined cadre of health care professionals willing to be deployed to provide acute care "locum" services during health emergencies. The CMA is well positioned to play an important part in recruiting physicians for an Emergency Relief Network. CMA's MedConnexions online job matching service for health professionals, developed in partnership with Industry Canada, is a tool that could be used to disseminate information on the Network and collect contact information from physicians interested in volunteering to be deployed to provide local services.

Volunteers would be asked to provide services that they normally provide, (for example, emergency medicine, intensive care, respirology, infection control) or other general services in affected areas to provide relief to staff that are stretched to the limit. Training in outbreak investigation would allow these individuals to also supplement the public health workforce in times of crisis.

⁷ Recommendation Five of Answering the Wake-Up Call: CMA's Public Health Action Plan: The establishment of a *Canadian Public Health Emergency Response Service*, under the auspices of the CODSC, to provide for the rapid deployment of human resources (e.g., emergency pan-Canadian locum programs) during health emergencies.

CMA would maintain control of the volunteer list and establish procedures to ensure that the information on the list is accurate and current. CMA would also undertake to determine that issues such as compensation (payment services and lost time [e.g., because of quarantine]), licensing, liability, disability coverage, logistics (travel and accommodation) are covered. CMA would contact members of the list in response to a request from the federal government through the CODSC.

Recommendation Five

That the federal government invests \$250,000/ year on an ongoing basis to establish, in partnership with the profession, an Emergency Relief Network of physicians able to provide “locum” services during health emergencies.

Recommendation Six

That the federal government under the auspices of the Canadian Office for Disease Surveillance and Control provide funding for the training of physician volunteers in outbreak investigation.

Surveillance and Communications

The effectiveness of the public health system is also dependent, in large part, on its capacity to communicate authoritative information in a timely manner. A two-way flow of information between experts and the practising community is necessary at all times but becomes especially crucial during emergency situations. A well-functioning public health system will allow for this two-way communication — disease information to a central body that can analyze the aggregate data, and a capability to share aggressively and in real time the resulting analytical assessment with front line workers.

A pan-Canadian surveillance system must be a fundamental component of the public health system. One of the keys to building a strong surveillance system is a robust connectivity with all points of health care. This would ensure real time notification through a pan Canadian health surveillance system of the occurrence of reportable diseases by front line health care workers throughout the country.

All jurisdictions have embarked on information technology strategies that will build the connectivity to points of care over time. It is estimated that this work will take up to 10 years to complete and will require a \$4 billion investment. Provinces and territories are at different stages of advancing this agenda and Ontario probably has the most progressive initiative. (It has committed to spending approximately \$1 billion to put in place the pipelines that provide the connectivity and will cover the costs to carry the information traffic.)

It is also important to note that Canada, as a World Health Organization member state, has international obligations in public health surveillance under the International Health Regulations (IHR). The IHR, introduced in 1969 to help monitor and control four serious diseases which had significant potential to spread between countries, involve:

i. **Notification of cases:**

- WHO Member States are obliged to notify WHO for a single case of cholera, plague or yellow fever, occurring in humans in their territories, and give further notification when an area is free from infection.
- These notifications are reported in WHO's Weekly Epidemiological Record.

ii. **Health-related rules for international trade and travel.**

iii. **Health organization:** Measures for deratting, disinfecting, and disinsecting international conveyances (ships, aircraft, etc.) are to be implemented at points of arrival and departure (ports, airports and frontier posts). The health measures called for are the maximum measures that a state may apply for the protection of its territory against cholera, plague and yellow fever.

iv. **Health documents required:** Requirements are included for health and vaccination certificates for travellers from infected to non-infected areas; deratting/deratting exemption certificates; health declarations- Maritime Declaration of Health; Aircraft General Declaration.⁸

The IHR are currently under revision to include mandatory reporting of “public health emergencies of international concern”.⁹

The health consequences of new infectious diseases are magnified because these public health threats cross local, provincial/territorial and national borders. Decisions made by one government have a direct impact upon the activities of adjacent governments.

Canadian jurisdictions must co-ordinate their approaches to public health challenges to ensure they are effectively managed. Canada must ensure that our surveillance networks and public health infrastructure are up to the challenge in order to meet our international obligations to recognize and deal with emerging infectious diseases.

In our submission to the National Advisory Committee on SARS & Public Health the CMA argued for a \$1 billion infusion to rebuild the capacity of the public health system. Part of this investment is to help with the communication dimension of the connectivity problem.

SARS highlighted the fact that Canada does not have information systems in place to facilitate real time communication with front line health professionals. Gaps in the basic communication infrastructure prevented public health agencies from interacting with each other in a timely manner. They also hindered exchanges between public health staff, private clinicians and other allied health workers about the latest information on the management of the disease. In addition, contact information, when it was there, was found to be seriously out of date and communications methods were not appropriately targeted to the end users.

⁸ <http://www.who.int/csr/ihr/current/en/print.html> accessed September 15, 2003

⁹ <http://www.who.int/csr/ihr/revision/en/print.html> accessed July 4, 2003

CMA learned some valuable lessons about how to provide real time communications to physicians. The health crisis resulted in the CMA mobilizing our communication networks to provide physicians with critical information about the public health management of SARS. Over 50,000 physicians received pertinent information on SARS over a 24-48 hour period of time. In addition, over 1500 health care facilities received critical authoritative information on SARS via the Canadian Council on Health Services Accreditation. For the first time in Canadian history an e-grand rounds initiative was launched to provide on line advice to physicians across this country in a format that they are familiar with.

While the CMA succeeded in getting the information to physicians virtually in real time it was clear that the current infrastructure was inadequate. The CMA had to jury-rig a system that tied together disparate information lists and communications channels to move the information out to physicians. There was no guarantee the approach would work and there was no guarantee it would be timely. Luck was on our side. But we cannot continue to rely on luck; we must rely on sound management and planning.

A stronger and more complete communications capacity to move information to physicians needs to be in place as soon as possible. This system has to ensure that the information is shared in a manner that respects the confidentiality and modality of how physicians would like to receive time sensitive information.

One of the key lessons drawn from this latest emergency is that information is taken up by physicians in different ways. Some like to receive it by e-mail, others by fax and still others by mail. Even those with e-mail have expressed a desire to get emergency information in a different format. Iterative research will provide the information necessary to construct a solution that best maps how physicians work. There is a critical need to invest in data management infrastructure to maintain physician contact information (over 20% changes yearly) and build the correct modality channel to forward emergency information. This is a labour intensive process without which the assurance of reaching the majority of physicians would be compromised.

The CMA has carried out an internal assessment on how it can best mobilize its own outreach capabilities coupled with those of its 12 divisions and has determined that with a one time investment of \$250,000 for research, development and implementation of internal IT systems and ongoing operational funding of \$100,000 a more robust, timely and assured connectivity with physicians will result. It is estimated that this connectivity could be built within the next twelve months.

Recommendation Seven

That the federal government partner with the CMA and the Canadian Council on Health Services Accreditation to ensure the capacity to communicate with physicians in real time during health emergencies.

Recommendation Eight

That the federal government invest in communication between professionals within the health care system through immediate funding for dedicated internet connectivity for all physicians in Canada.

Conclusion

SARS brought out the best in Canada and Canadians' commitment to one another. It also turned a bright, sometimes uncomfortable spotlight on the ability of this country's health care system to respond to a crisis, be it an emerging disease, a terrorist attack, a natural disaster or a large-scale accident. We must learn from the SARS experience and quickly move to build the infrastructure of a strong public health system.

Different parts of the country have developed particular public health strengths and we can build on these strengths. With national leadership, commitment and resources, Canadians can have a well-functioning pan-Canadian public health system. The CMA believes that the federal government has a critical responsibility to ensure that the infrastructure for a strong public health system to serve all Canadians is in place.

Summary of Recommendations

1. *That the federal government rapidly move to enact a Canada Emergency Health Measures Act that would consolidate and enhance existing legislation, allowing for a more rapid national response, in co-operation with the provinces and territories, based on a graduated, systematic approach, to health emergencies that pose an acute and imminent threat to human health and safety across Canada.*
2. *The federal government invest in the country's public health system with an immediate commitment of \$ 1.5 Billion over five years to rebuild the public health infrastructure.*
3. *That the federal government create a Canadian Office for Disease Surveillance and Control led by a Chief Public Health Officer of Canada to be the lead Canadian agency in public health, operating at arm's length from government.*
4. *That the federal government allocate \$20 million / 5 years with appropriate ongoing funding, over and above the funding for existing national public health programs, for the creation and operating expenses of a Canadian Office for Disease Surveillance and Control.*
5. *That the federal government invest \$ 250,000/ year on an ongoing basis to establish, in partnership with the profession, an Emergency Relief Network of physicians able to provide "locum" services during health emergencies.*
6. *That the federal government under the auspices of the Canadian Office for Disease Surveillance and Control provide funding for the training of physician volunteers in outbreak investigation.*
7. *That the federal government partner with the CMA and the Canadian Council on Health Services Accreditation to ensure the capacity to communicate with physicians in real time during health emergencies.*
8. *That the federal government invest in communication between professionals within the health care system through immediate funding for dedicated internet connectivity for all physicians in Canada.*

Appendix I

(These documents available on the CMA website, under Submissions to Government)

Answering the Wake-Up Call: CMA's Public Health Action Plan, June 2003

Technical Backgrounders, July 21, 2003

Appendix II

WORLD MEDICAL ASSOCIATION

Latest releases: 15 September 2003

Action Urged to Improve Response to World Health Epidemics

The World Health Organisation has been urged by physicians of the World Medical Association to enhance its emergency response protocol to deal with world epidemics such as Sars.

Meeting in Helsinki for their General Assembly, WMA delegates from almost 50 countries were critical of the way in which the Sars epidemic was handled earlier this year and in particular the failure of WHO to involve physicians early enough.

The WMA Assembly called on the WHO to provide for the "early, ongoing and meaningful engagement and involvement of the medical community globally, including initiating immediate discussion on the establishment of an effective and real time means of communicating reliable, evidence-based information to front line workers and the establishment of reliable sources of products and materials needed to safeguard the health of front line workers and their patients".

The WMA has also agreed to develop a public health risk alert plan covering areas of communications, preventive measures for physicians and patients, best practice in terms of diagnostic and therapeutic methods and evidence-based travel advice for the public.

The plan is to be drawn up by a working group headed by the Canadian Medical Association, which, at the height of the Sars epidemic in Canada, managed to contact 26,000 physicians via e mail and the internet. The CMA described the World Medical Association's new resolution as "a wake up call to the world".

The WMA has now invited all national medical associations to share the lessons learned during the Sars epidemic by providing details of measures taken in their countries to strengthen the responsiveness of their public health systems.

Printed from: http://www.wma.net/e/press/2003_20.htm