

# The Role of Health Leaders in Planning for an Influenza Pandemic

May 2006



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# FOREWORD

The potential public health risks and societal disruptions associated with a global influenza pandemic are well documented. A crisis of this proportion would have an impact on every aspect of health care delivery. Effective pandemic planning is complex and, as such, requires dedicated resources as well as a strong commitment by senior health leaders in order to minimize the impact on the health of Canadians.

Recognizing the importance of the role of health leaders in planning for a potential influenza pandemic, the Canadian College of Health Service Executives established a National Advisory Committee to guide the development of a position paper which identifies the key issues and associated recommendations related to planning from a health leader's perspective.

The College sincerely appreciates the expertise and valuable input received from the Advisory Committee members who generously donated their time for five national consultation sessions. In addition, this initiative would not have been possible without the financial contribution and support of the project's corporate sponsors.

For more information on this position paper, including a list of Advisory Committee members and consultation session participants, please refer to [www.cchse.org](http://www.cchse.org) or contact the College at: 1 800 363-9056.

## EXECUTIVE SUMMARY

Discussion concerning a possible influenza pandemic has been mounting as human cases of avian influenza have been found in an increasing number of countries across Asia, the Middle East and Western Europe. Some scientists argue that we are overdue for an influenza pandemic; a pandemic has occurred, on average, every 25 years and the last one took place in 1968-69.<sup>1</sup> Although no one can determine exactly when the next influenza pandemic will occur, planning must be underway now to minimize its effect on the health and well-being of Canadians.

The roles of health leaders during a pandemic will vary depending on the jurisdiction and level of authority and accountability. Leaders at the local, municipal, provincial, national and international levels will need to operate independently and in harmony with one another. Because of the critical importance of inter-sectoral, inter-professional and integrated planning, all must play roles as collaborators and communicators.

Managing strategy and operations across layers of municipal, regional, provincial and national boundaries is no small task. This is further complicated by the necessity of developing alliances between and among health care organizations, unions, providers, and private sector companies who have different and sometimes incongruent perspectives and needs.

In this paper, the Canadian College of Health Service Executives provides Canadian health leaders with the background they need to plan for a potential influenza pandemic. It is designed to support planning at local, provincial, territorial and national levels. The recommendations will stimulate thinking towards system-level issues and how to address these within and across jurisdictions, sectors and organizations.

The paper is comprised of two parts: (1) a review of literature, including an analysis of strategic directions developed by federal, provincial and territorial governments as well as other agencies and (2) a discussion of the issues and recommendations related to pandemic influenza planning from a health leader's perspective.

*Health leaders will want to address the following issues during a pandemic:*

- the deployment of staff and the use of people from other institutions or jurisdictions;
- health care provider health and safety;
- the storage, distribution and security of supplies;
- societal disruption;
- the ethics of access to health care services and mandatory report to work policies;
- organizational risk management and liability;
- governance support for the planning process as well as accountability for plans; and,
- how to acquire the best available research and establish systems for knowledge transfer.

*The following are key recommendations in addressing these issues:*

- adopt a competency-based approach to human resource planning;
- engage union leadership;
- develop a rewards and support system for staff;
- optimize the safety and security of scarce supplies and ensure that medical and health-related supplies are continuously available;
- align plans with municipalities, essential services and utilities;
- establish business continuity procedures during critical infrastructure disruptions;
- provide the appropriate ethics education and decision-making frameworks;
- collaborate with boards, insurers, legal counsel, regulatory bodies and government authorities; and,
- formulate and implement pandemic planning validation and evaluation processes.

Health leaders will need to commit to a continuous planning process that successively involves key stakeholders, promotes better communication and improves overall preparedness.

# INTRODUCTION

Senior health leaders must plan, without the context of time, in order to optimize their response to a wide-scale health emergency. Ontarians, as a result of their experience with Severe Acute Respiratory Syndrome (SARS) I and II, have perhaps the best appreciation for the enormity of the task. SARS infected just over 3,000 people and left 44 dead; in Ontario alone, an influenza pandemic could infect millions and leave thousands dead.<sup>2</sup> Unlike the SARS experience that was focused, contained, and short-lived, estimates suggest that an influenza pandemic could potentially last six to eight weeks and occur in two or more phases. By severe estimates, the virus will attack 30% of Canadians, and kill those primarily in the 20-50 year range.<sup>3</sup> This cohort represents the majority of health care providers and therefore many aspects of the health system and public infrastructure will be challenged directly and indirectly. The first-hand, real-time knowledge and experience that Ontario's health leaders gained during the SARS crisis will be valuable to Canada's overall planning and response during an influenza pandemic.

Pandemic planning is uniquely complex. From local to international plans, all require a blend of strategic and operational, proactive and reactive, integrated and independent and personal and professional approaches. Planners will want to prepare as many different reactions to as many different situations as possible, and every one must be thought out well in advance of execution.<sup>4</sup> Planning must be underway and extend throughout all levels of government and the health system when it occurs.

# LITERATURE REVIEW

## **Global Planning**

The goal of the World Health Organization's (WHO) Pandemic Plan, 2005<sup>5</sup> is to provide guidance to national authorities regarding pandemic planning. It is incumbent on them to use this framework for their own national plans.

The WHO's plan defines six distinct phases of increasing public health risk associated with the emergence of a new influenza virus that may pose a pandemic threat, enabling greater predictability of the measures to be taken by the various partners involved, including the WHO, during the different phases. The plan recommends actions for national authorities and outlines measures to be taken by the WHO during each phase. Ultimately, it is designed to improve international coordination and transparency in national measures.

The plan also includes goals related to surveillance, management and follow-up within the following four periods: inter-pandemic, which focuses on surveillance and planning prior to a pandemic outbreak; pandemic alert, which focuses on early detection and response; pandemic, which focuses on the management of a pandemic outbreak; and post-pandemic, which focuses on the response activities and evaluating their effectiveness. It particularly details the early phases, including environmental scanning and surveillance, when rapid intervention might contain the spread of a new influenza virus. Activities include enhanced surveillance and the use of non-pharmaceutical public health interventions such as education regarding hand-washing and influenza self-care techniques.

The WHO plan goes on to reference key activities that are intended to substantiate pandemic plans. These activities include planning and coordination, situation monitoring and assessment, prevention and containment, health system response and communications.

## **Operationalizing Global Planning**

The WHO and the Centers for Disease Control and Prevention (CDC) are focused largely on environmental scanning and surveillance. Federal governments, if they have not already done so, will forge strong alliances with these agencies to promote smooth information flow regarding immunization, outbreak, and anti-viral medication, and the use of up-to-date research on influenza.

## **Planning in Canada**

According to the Canadian Pandemic Influenza Plan,<sup>3</sup> the goals of influenza pandemic preparedness and response are two-fold: first, to minimize serious illness and overall death and, second, to limit societal disruption among Canadians as a result of an influenza pandemic.

Canada's national plan is broken down into the following four distinct phases: prevention, preparedness, response and implementation, and post-event recovery and after care. Within each phase are common themes including surveillance, communication, vaccines, anti-virals, emergency planning, health services, and public health measures. It was developed through a collaborative federal, provincial and territorial process and identifies the various roles that each governing body must play. Recommendations are made about prevention, care and treatment, communications, resource management and measures to minimize social disruption. It is intended to provide provincial and territorial jurisdictions with a sufficient framework to prepare locally and regionally.

The strength of the national plan is in its identification of the role of federal, provincial and territorial governments in pandemic planning. This is a critical guiding principle given the inter-sectoral and integrated nature of responding to a global emergency.

However, although it emphasizes the need to monitor and evaluate outcomes to ensure that planning is effective, it is critically lacking measurement tools or metrics that would aid in this activity.

The existing provincial plans are thematically similar to the national one but they address more geographic-specific considerations. In particular, the Ontario plan<sup>2</sup> captures the same guiding principle as the national one, as does British Columbia's<sup>6</sup> to a lesser extent, but this principle is lacking in the other provincial plans.

Noticeably absent from all provincial plans, although clear in their subtext, are the inter-dependencies of all levels of government and of the various sectors that will come together to operationalize the individual pandemic plans. As well, those from British Columbia, Alberta,<sup>7</sup> Manitoba,<sup>8</sup> Ontario and New Brunswick<sup>9</sup> do not sufficiently address measurement tools which would help to monitor their effectiveness. For example, while it is clear that stockpiles of vaccines and anti-virals will be monitored, at no point do the plans allude to the sentinel thresholds or volumes that will indicate to decision-makers that the supplies do, or do not, meet the required demands.

### **Operationalizing Planning in Canada**

While the Public Health Agency of Canada (PHAC) is responsible for the nation-wide coordination of the influenza response, it does so with the aid and coordinated efforts of several federal departments, branches, institutes and committees. These include Public Security and Emergency Preparedness Canada, the Canadian Public Health Laboratory Network, Health Canada's Health Products and Food Branch, the National Advisory Committee on Immunization, Public Works and Government Services Canada and the Canadian Institutes for Health Research.

Additionally, Health Canada and PHAC play a significant role in encouraging manufacturers to develop contractual provisions to obtain appropriate quantities of specified seed virus identified by the WHO for the purpose of manufacturing domestic or off-shore vaccine supplies and providing the legislative base for the manufacture and sale of vaccines and anti-virals. Research-related activities to be coordinated at the national level include designing, organizing and supporting national studies to better define the burden of disease and evaluate pandemic influenza response capacity.

In conjunction with Public Works and Government Services Canada, the federal, provincial and territorial governments are charged with developing and maintaining routine surveillance activities, coordinating communication strategies and training activities and developing negotiation and indemnification strategies. The Federal/Provincial/Territorial Pandemic Influenza Committee will oversee the nation's collaborative efforts which will include mobilizing the required resources and stockpiling emergency supplies.

Because of the real-time containment issues that a pandemic will present, national, regional and local transportation authorities (including air, rail, and border), in collaboration with public health authorities, will be responsible for developing policies that limit entrance to and

exit from countries with an influenza outbreak. They will be establishing screening and quarantine mechanisms, and communicating with federal, provincial and local governments about the spread of disease.

The individual ministries of health will lead the health sector response across the provinces. They will help to mobilize contingency plans and resources, establish pandemic response centres, strengthen coordination among regional health authorities, coordinate anti-viral stockpiling and delivery, collect data and oversee and resolve health care issues that may arise.

Local health authorities will plan and execute pandemic plans in harmony with and direction from the provincial and federal governments. The local Medical Officers of Health will help to coordinate the activities of the intricate matrix of agencies in a role that is congruent with their provincial counterparts. Additionally, local health authorities will provide information on the number of cases, hospitalizations and deaths from influenza, deliver vaccines and anti-viral drugs and establish alternate care sites for the delivery of health care and immunization initiatives. They will work in concert with municipal governments who will be charged with the responsibility of establishing priorities for disseminating and communicating local plans, closing public buildings, assuring public safety and maintaining essential services such as waste management, transportation and fire and police services.

# ISSUES AND RECOMMENDATIONS FOR HEALTH LEADERS

The following five key areas have been identified as requiring future planning and examination: resources (both human and non-human), ethics, liability, governance, and research and knowledge transfer.

## **Resources**

A number of resources will be necessary to coordinate the health care response to an influenza pandemic. These will include human resources such as health professionals, those who provide custodial services and people with supply distribution responsibilities. Health leaders will also want to consider how to manage non-human resources related to the physical infrastructure such as beds, masks, medications and ventilators.

## **Human Resources**

Health leaders will need to address a range of human resource issues. For example, it is likely that health organizations will run short of individuals who have the necessary credentials to perform a certain skill. In addition, some providers are not employed by any given health care organization, while many are employed by more than one. The movement of staff between facilities could transport the virus from one organization to another.

Leaders will also want to prepare themselves for issues that may arise in relation to the use of non-unionized staff during this time and the labour relations implications of having employees work with infectious disease. It may, for example, be the position of provider unions that members and their families must have access to anti-virals before coming into contact with infected patients.

And finally, plans must be made to safeguard the mental health of staff. People at all levels will be operating in a very stressful environment and will need resources and support at their fingertips. This will be equally as important after the crisis has passed since the impact of this trauma may be severe.

Many jurisdictions face a shortage of health human resources during times of normal capacity, and this will be significantly exacerbated during the surge of a pandemic. Health leaders within government and public and private organizations will need to reach consensus on an overriding commitment to preserve the health human resource capacity of the Canadian health care system.

## **Recommendations Related to Human Resources**

### **1. Adopt a competency-based approach to health human resource planning.**

It is recommended that health leaders use a competency-based approach to health human resource planning. They will want to examine various mechanisms and approaches to ensure that a sufficient number of people with the most advanced influenza care skills and competencies are available to provide care. Health leaders are also encouraged to communicate with the regulatory bodies in their jurisdiction to ensure that regulatory issues are addressed.

## **2. Engage union leadership.**

It is recommended that union leaders be engaged during the planning process. Health and labour leaders can work together to develop flexible compensation models within the collective agreements. Compensation models should be defined during the specific period of a pandemic and they also need to be based on the risk profile of the required work. Unions can also help to develop strategies for dealing with the use of non-unionized staff and minimizing the issue of wage differentials.

## **3. Develop a rewards and support system for staff.**

It is recommended that health leaders develop staff reward and support systems. Some employees will be afraid to come into work and may need incentives to do so. Mandatory report-to-work policies are not recommended due to the punitive nature of this type of enforcement; they also violate employees' civil rights. Reward and support systems will be more effective and could include the availability and access to anti-virals and vaccinations, appropriate disability and life insurance coverage, adequate malpractice indemnification, increased wages, a special service to assist with the maintenance of their home environments and child or elder care services.

Education for staff is also very important to optimize everyone's understanding of how influenza is transmitted and how they can protect themselves. It can also help to minimize fear. For example, leaders can inform their staff that vaccines will potentially not be available during the early stages of a pandemic and therefore other protective mechanisms need to be used. They can tell them about equipment and universal precautions, and should also provide resources for them to develop their own home pandemic plans. These could include strategies for food and medication supply, stockpiling, and self-care (such as not working when ill).

Leaders may also want to appeal to the providers' sense of duty to care for their patients during this time.

## **Non-Human Resources**

It is important that health leaders know how to manage non-human resources related to physical infrastructure such as beds, masks, medications and ventilators.

There are major concerns about the availability of supplies, such as masks, and what will be the most appropriate during a pandemic. Currently, many health organizations are utilizing third-party warehouses to handle supplies and some are keeping a 30-day stock on hand. They know that the optimal level of stock is dependent on the type of organization and its needs, and a 30-day supply of most medical supplies will quickly be exhausted.

As well, there are a number of issues that arise when stockpiling medical supplies. Some will have short-shelf lives, so inventory turnover will be an issue. There may also be major security concerns if a pandemic occurs; health organizations could find it very difficult to secure their stockpiles if supplies are not available elsewhere.

Rather than having the provincial or federal governments manage the distribution and supply of medical supplies, institutions themselves are currently responsible for supply management. Therefore, the identification of essential employees in supply chain organizations needs to occur. Those normally responsible for processing orders should have the ability and technology to work from home if necessary.

Third-party vendors and partners should be consulted throughout the planning process. As many organizations rely on third-party management for some of their essential functions (such as food, housekeeping and laundry services), these leaders must collaborate to coordinate policies and establish a consistent response to inventory management and the use of contracted employees. Third-party partners should also be given the knowledge and best practices they need related to health care facility custodial services.

There are a variety of resources that health leaders can use in planning for supply management in an influenza pandemic. The national and many provincial plans include recommendations on this issue. In Ontario, there is a well-established regional plan for priority anti-viral distribution.<sup>2</sup> There has also been some planning related to the ordering of supplies. Some supply companies have been doing work related to surge capacity and have developed a pandemic basics order form. What will be important is optimal business continuity under the circumstances. An operational supply chain will facilitate the achievement of better outcomes for patients, providers and the health care system itself.

Health leaders will be, if they are not already, planning for the vast societal disruption that will occur during an influenza pandemic and how this will affect their human and non-human resources. This issue includes the potential for limited food supply chains, reduced garbage and sanitation services, decreased public protection services, disruption to public transportation services, and the closure of educational and day care facilities. Components of the critical infrastructure (such as hydro, gas, sanitation, and police services) will be challenged by employee illness and absenteeism.

### ***Recommendations Related to Non-Human Resources***

#### **1. Make Personal Protective Equipment (PPE) widely available.**

It is recommended that health leaders determine if their organizations will provide optimal or maximal levels of protection based on the best evidence available from the WHO. This equipment should be made available to students, volunteers and others not normally working in the environment if they are exposed to the virus. Everyone needs proper training on how to use PPE effectively.

#### **2. Ensure that medical and health-related supplies are continuously available.**

It is recommended that health leaders use inventory mechanisms for stockpiling supplies, find incremental warehousing and develop policies for frequent supply rotation. Directives on inventory control and supply warehousing need to come from Health Canada to ensure that there is a fair and equitable distribution of scarce supplies to the jurisdictions that need them most. Health Canada and provincial ministries should be responsible for coordinating a centrally-managed system for stockpiling supply inventory.

Dr. Michael Osterholm, Director of the Center for Infectious Disease Research and Policy at the University of Minnesota, suggests that planners need to factor in the impact of the just-in-time economy.<sup>4</sup> That is, planning needs to consider the echo effect of stockpiling vaccines and anti-virals; eventually, manufacturers will not be able to keep pace with the demand.

There are no national or provincial standards for ordering, stockpiling or storing non-human resources such as vaccines, anti-virals or ventilators. Health leaders should encourage and support senior federal and provincial government leaders in the development of these standards as part of national and provincial pandemic planning.

### **3. Optimize the safety and security of scarce supplies.**

It is recommended that health leaders develop mechanisms to optimize the safety of anti-virals and vaccines during storage, transportation and distribution. They may be in short supply during an influenza pandemic, and the risk of theft is extremely high. These include securing contracts with reputable security companies that offer services in transporting and guarding scarce materials. Policies about which people and positions have the authority to access secured storage areas should form part of the pandemic plan to optimize the protection of these commodities.

### **4. Align plans with municipalities, essential services and utilities.**

It is recommended that health leaders ensure that their plans are aligned and that they communicate with senior leaders of the public utilities and government to maintain business operations and health care service delivery in the event of a critical infrastructure systems failure.

Business continuity plans should be part of an organization's emergency preparedness plans and address issues such as staff deployment, access to custodial services and supplies and key data access and security. Similar to the collaboration between the health care sector and public utilities for "Y2K" planning, community-wide planning and leadership is essential. Leaders need to ensure that their pandemic and business continuity plans are developed in collaboration with and integrated into their emergency preparedness plans. These should be implemented in coordination and cooperation with each other, not in isolation.

A useful tool for health leaders is the Business Pandemic Influenza Planning Checklist produced by the US Department of Health and Human Resources and the Centers for Disease Control and Prevention.<sup>10</sup> It can help with planning related to protecting employees' health and safety as well as limiting the negative impact of the crisis on the economy and society.

### **Ethical Issues**

During an influenza pandemic, providers will have to make decisions about several ethical issues. For example, they need to know which patients to treat, and if they should close their doors or continue to treat people under less than ideal conditions.

One ethical concern is whether the treatment and provision of prophylaxis will be available to family members of care providers if there are insufficient anti-virals for the general population. Will health care providers be expected to continue working when there is a possibility that their family will fall ill?

Other issues are emerging as well. If providers are not working because someone in their family is ill, will they be forced to work? The lack of resources may also lead to major ethical issues over who will be receiving treatment in a pandemic situation. Based on the current supply of ventilators, a regular influenza season leads to almost full capacity use. During a pandemic, there may be some instances where life-saving treatment will not be available. Several influenza plans have developed ethical frameworks for decision-makers. Health leaders will need to work with their staff to use and adapt these to their circumstances.

## **Recommendations Related to Ethical Issues**

### **1. Balance treating the community with allowing care providers to refrain from working.**

It is recommended that health leaders, as well as governments and providers, determine the proper ethical balance between treating the community and allowing providers to refrain from working.

They will also want to develop strategies to achieve the proper ethical balance between caring for people with influenza versus those with other health care issues. As many resources will be channelled towards managing pandemic-related situations, health leaders will need to uphold standards of patient safety under crisis circumstances.

### **2. Develop sound ethical decision-making frameworks.**

It is recommended that health leaders, in collaboration with their associations and governance bodies, develop ethical decision-making frameworks. If these already exist, they should be reviewed and adjusted as necessary to be used within the context of an influenza pandemic. Changes could include scenarios related to a lack of availability of life-saving equipment such as ventilators and the criteria to identify who receives this treatment and who does not.

### **3. Help staff make decisions about scarce resources.**

It is recommended that health leaders educate staff about ethical decision-making and the potential dilemmas that they will face during an influenza pandemic. Leaders can refer to the University of Toronto's Joint Centre for Bioethics document on ethical decision-making during a pandemic,<sup>11</sup> and Health Canada's document on the ethical perspective of pandemic influenza planning.<sup>12</sup>

### **4. Communicate publicly about ethical decision-making.**

It is recommended that health leaders communicate the potential ethical issues that may arise during a pandemic to the public. Provincial and territorial governments also need to have a strategy to do this. It is important for the public to understand what the health system may be faced with and how these issues will be addressed. Public health educators may be able to play a role.

## **Liability**

In a crisis situation, there will be a number of groups working in the health care setting who in normal circumstances would not be. These include students, volunteers and health care providers from other jurisdictions. There are issues of concern surrounding the liability coverage for these individuals. Those who are normally employed by health organizations are protected by workers' compensation insurance coverage, so if they become ill, they will be covered. However, the reality is that others may not be compensated.

Leaders will want to consider their organizations' liability as it relates to their risk management strategies. The liability of health leaders, board members, health professionals and others working in health care during a pandemic should be considered in planning.

## **Recommendations Related to Liability**

### **1. Engage insurers and legal counsel.**

It is recommended that health leaders implement appropriate policies and procedures to minimize the liability of their organizations, directors and employees during an influenza pandemic. They need to collaborate with insurers and legal counsel to plan for their response and mitigate the risk of liability before, during and after the crisis.

### **2. Collaborate with regulatory bodies and provincial and territorial authorities.**

It is recommended that health leaders determine the level of liability they will endure and who is accountable for what. Many people will be working in areas and with equipment unfamiliar to them or providing service that is outside their legal scope of practice.

Health leaders should also work with educators and regulatory colleges to determine how students will be handled in a crisis and how liability issues might be appropriately addressed. Liability coverage should be extended to volunteers, students and out-of-province health care providers.

## **Governance**

Boards play a unique role in maintaining services during an influenza pandemic. They will have the ultimate responsibility and accountability for the development and implementation of pandemic influenza plans. The effectiveness of these plans and associated liability may also be a governance issue.

## **Recommendations Related to Governance**

### **1. Determine key decision-makers and define emergency and policy implementation triggers.**

It is recommended that governing bodies be fully engaged in the pandemic planning process. Planning must occur at all levels and from a strategic perspective. There should be clear guidelines on the roles and responsibilities of all involved and a definition of what constitutes an emergency should be articulated to management. Managers also need to know how to implement specific policies and procedures in a pandemic.

Local health care agencies, such as hospitals, face the greatest operational challenges associated with responding to an influenza pandemic. While they must develop policies and plans in accordance with local and provincial requirements, they also must provide for both the health care needs of the broader communities they serve, as well as for the workers who directly provide care. The latter requires screening and surveillance, provision of anti-viral drugs and vaccination, establishing screening and quarantine protocols, providing physical resources (such as masks) and psycho-social support. Good communication will help to avoid widespread panic and further cripple a tapped workforce. Individually, health care providers will be responsible for monitoring and evaluating the health of patients, and reporting adverse events through established channels.

Best practices in isolation are not sufficient in a health emergency situation; there must be a governance structure that can be held accountable.<sup>13</sup>

## **Research and Knowledge Transfer**

It is important that health leaders use the best available research and develop strong systems to transfer knowledge. If information is shared across jurisdictions, sectors and organizations, the likelihood of optimal outcomes is greatly increased.

Collaboration can lead to a better grasp of best practices and better outcomes for all involved. All types of health organizations and decision-making bodies will be able to contribute to the body of research. It may involve biomedical, clinical service delivery, pharmaceutical and population health experts.

## ***Recommendations Related to Research and Knowledge Transfer***

### **1. Harmonize knowledge transfer.**

It is recommended that health leaders work together to share best practices and plans both within and across sectors and jurisdictions. They are encouraged to support research, education and the accumulation of new knowledge within and across sectors.

### **2. Foster practical decision-making stimulation models.**

It is recommended that health leaders also collaborate across sectors and jurisdictions about the development, testing and evaluation of decision-making simulation models. These will enhance the way decisions are made about the existing human and non-human resources and help to determine the needs of the organization in the event of a surge. Protocols for admission, resource distribution, ventilation, and other resources should be tested, examined and validated. Leaders can use tools such as FluAid 2.0 or FluSurge 2.0<sup>14</sup> to help plan various scenarios. Best practices identified through these exercises should also be shared.

### **3. Develop ways to evaluate the pandemic plan.**

It is recommended that health leaders identify indicators that can be used to collect data. While this will obviously not be a priority, it will help them to respond to future situations. Leaders can refer to the WHO's document on validating pandemic preparedness plans.<sup>15</sup> It is also recommended that pandemic plans be shared, critiqued and evaluated as a health system to ensure that all sectors are prepared to optimize health care and service delivery.

## CONCLUSION

As more people are infected with emerging strains of the influenza virus, and as time passes since the last pandemic, the need to plan for a potential influenza pandemic grows. Health leaders have a unique role in this planning, one which requires collaboration and communication across geographic and governmental boundaries, as well as synchronization of planning activities within and outside of health care. In fulfilling their considerable leadership responsibilities, there are several things they can do now to lessen the impact of an influenza pandemic.

Health leaders will want to be aware of the most recent international, national, and provincial and territorial plans, and the responsibilities of various levels of government that have been identified. Familiarity with these plans, which stress collaboration and convey the importance of clearly defined roles, helps to ensure that their themes pervade more localized planning.

The Canadian College of Health Service Executives has examined five key issues and created a list of practical recommendations to further assist health leaders in fulfilling their own considerable responsibilities in planning for a potential influenza pandemic. Resources, ethics, liability, governance, and research and knowledge transfer are issues confronted in all health sectors, and leaders can adapt these recommendations to their specific environments. For example, a pandemic plan for a health care supply organization may consist of strategies for business continuity, policies related to fair and equal distribution of limited supplies and contingency plans for ordering, and distribution mechanisms should transportation systems become limited. A plan for a long-term care facility may include policies related to visitors, vaccinating employees, contingencies related to the availability of food and linen supplies and security of storage facilities.

The planning process is ongoing and all plans will need to be continuously reviewed and updated as international directives and federal or provincial mandates evolve. New scientific research on emergent strains of the influenza virus will also help provide further insight into the potential impact of a pandemic and how to plan for this eventuality.

The Canadian College of Health Service Executives supports health leaders in planning for a potential influenza pandemic and recognizes that informed and comprehensive planning is paramount in minimizing the impact on the health of Canadians.

## APPENDIX A

### SUMMARY OF ISSUES

#### **Resources**

- Shortage of credentialed care providers
- Use of non-unionized workers and staff from other institutions or jurisdictions
- Physical and mental well-being of staff
- Availability, storage, distribution and security of supplies
- Failure of critical infrastructure and resulting societal disruption

#### **Ethics**

- Prioritizing access to treatment
- Mandatory report to work policies

#### **Liability**

- Employment of people not normally working in a health care setting
- Organizational risk management strategies

#### **Governance**

- Support and accountability for plan development and implementation

#### **Research and Knowledge Transfer**

- Use of the best available research and systems for knowledge transfer
- Collaboration by all types of health organizations and decision-making bodies

## APPENDIX B

### SUMMARY OF RECOMMENDATIONS

#### **Recommendations related to resources (human and non-human)**

- Adopt a competency-based approach to health human resource planning
- Engage union leadership
- Develop a rewards and support system for staff
- Make PPE widely available
- Ensure that medical and health-related supplies are continuously available
- Optimize the safety and security of scarce supplies
- Align plans with the municipalities and essential services and utilities

#### **Recommendations related to ethics**

- Balance treating the community with allowing care providers to refrain from working
- Develop sound ethical decision-making frameworks
- Help staff make decisions about scarce resources
- Communicate publicly about ethical decision-making

#### **Recommendations related to liability**

- Engage insurers and legal counsel
- Collaborate with regulatory bodies and provincial and territorial authorities

#### **Recommendations related to governance**

- Determine key decision-makers and define emergency and policy implementation triggers

#### **Recommendations related to research and knowledge transfer**

- Harmonize knowledge transfer
- Foster practical decision-making stimulation models
- Develop ways to evaluate the pandemic plan

## APPENDIX C

### STATUS OF PLANNING IN CANADIAN JURISDICTIONS

The federal, provincial and territorial governments are all currently involved in pandemic planning activities. These plans will continue to be revised as new research and knowledge becomes available.

**Federal Government**<sup>5</sup>: An updated version of the federal government's plan is expected in 2006. Public discussions are planned to explain priority rankings for limited anti-viral drugs and first available vaccines. Efforts to engage businesses in continuity planning are also slated.

**British Columbia**<sup>6</sup>: Its plan was updated in August, 2005. The Ministry of Health is engaging municipalities and the business sector in continuity planning.

**Alberta**<sup>7</sup>: The province's plan charges the Public Health Department with coordinating vaccine delivery and Emergency Management Alberta with monitoring the pandemic's effect on essential services.

**Saskatchewan**<sup>16</sup>: The most recent draft of the plan was released in March, 2006. The province has a small stockpile of anti-viral drugs available.

**Manitoba**<sup>8</sup>: The most recent plan issued was issued in October, 2005. The province has asked municipalities to prepare their own plans, addressing how essential services will be maintained in the event of a pandemic.

**Ontario**<sup>9</sup>: The initial plan was released in 2004 and updated in 2005, with additional annual updates planned. The province has stockpiled 12.4 million Tamiflu® pills\*.

**Quebec**<sup>17</sup>: The plan is pending publication. Approximately 9.8 million Tamiflu® pills are stockpiled, with the goal of amassing 11.1 million pills.

**New Brunswick**<sup>9</sup>: New Brunswick's plan includes measures to stockpile 364,000 Tamiflu® pills.

**Nova Scotia**: Release of the revised plan is expected in the spring of 2006.

**Prince Edward Island**<sup>18</sup>: The initial plan, first published in 2002, is being revised. The province has 70,000 Tamiflu® pills stockpiled with needles and masks.

**Newfoundland and Labrador**<sup>19</sup>: Newfoundland has not publicly released its plan. Approximately 258,300 Tamiflu® pills have been stockpiled.

**Northwest Territories**<sup>20</sup>: The government is currently revising its plan, which was initially developed in 2001.

**Yukon**: The Yukon was expecting to release its plan in March, 2006, although it has not yet been made public. Health officials are currently meeting with other government departments to familiarize them with the implications of pandemic influenza.

**Nunavut**: The government has not made the details of its plan public.

\* *The prophylaxis dosage of Tamiflu® (oseltamivir phosphate) for adults and adolescents is approximately 10 pills per person (75 mg/2 timer per day for 5 days)*<sup>3</sup>.

## APPENDIX D

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