DISCUSSION AND DEBATE

Pandemic Threats and the Need for New Emergency Public Health Legislation in Canada

Les menaces de pandémie et le besoin d'avoir de nouvelles lois sur les services de santé publique d'urgence au Canada

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Abstract

The 2003 outbreak of Severe Acute Respiratory Syndrome (SARS) exposed serious limitations in Canada's ability to respond to a public health emergency. Considerable progress has been made since SARS in addressing these limitations, including the creation of the new Public Health Agency of Canada. A remaining contentious question is whether there is a need for new federal emergency public health powers. Approaches to public health problems are best handled through collaborative processes, recognizing the critical importance of the local public health response. Nevertheless, this paper

argues that a legislative back-up plan must be available to the federal government in the event that collaborative relationships break down. At the minimum, legislation should give the federal government the authority to have guaranteed access to surveillance data during a public health emergency. The legislation should also consider providing the federal government with the authority to devote the nation's resources to the management of an emergency at its earliest stages. However, any legislative approach must be combined with the development of appropriate capacity at the national level to ensure that new powers can be adequately utilized and that required funding reaches public health officials at other levels of government.

Résumé

L'épidémie de syndrome respiratoire aigu sévère (SRAS) de 2003 a fait ressortir les sérieuses limitations dans la capacité du Canada à réagir à une urgence de santé publique. Depuis le SRAS, on a réalisé d'importants progrès dans la réduction de ces limitations, y compris la création de la nouvelle Agence de santé publique du Canada. Une question reste cependant en litige, à savoir, s'il faut établir de nouveaux pouvoirs fédéraux en matière de santé publique d'urgence. Les solutions envisagées pour résoudre les problèmes de santé publique se prêtent mieux à des processus de collaboration qui tiennent compte de l'importance critique d'une intervention locale en matière de santé publique. Néanmoins, cet article soutient que le gouvernement fédéral doit disposer d'un plan de rechange advenant le cas où les relations de collaboration se détériorent. À tout le moins, les lois devraient donner au gouvernement fédéral l'autorité d'avoir un accès garanti aux données de surveillance pendant une urgence de santé publique. Les lois devraient également conférer au gouvernement fédéral l'autorité de consacrer les ressources du pays à la gestion d'une situation d'urgence à ses tout débuts. Cependant, toute approche législative doit être combinée avec la mise en place de ressources adéquates à l'échelon national afin de s'assurer que les nouveaux pouvoirs soient utilisés à bon escient et que les responsables de la santé publique d'autres paliers de gouvernement aient accès au financement dont ils ont besoin.

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Is Canada prepared to manage a pandemic threat within its borders? The outbreak of SARS in 2003 exposed some of the limitations of this country's abilities in this regard, both from the perspective of response capacity and having in place adequate systems of governance. Considerable progress has been made since SARS to address these limitations, including increased investment in public health and strengthening of public health relationships across the country (Public Health Agency of Canada 2006). However, a remaining concern is the adequacy of existing

federal legislation in this area and, in particular, the powers the federal government has at its disposal to respond to a public health emergency confined within the borders of one province (Wilson and Lazar 2005).

Responding to a New Infectious Threat

Consider the following scenario. A new infectious disease outbreak is identified in Canada. At the outset, there is uncertainty about the degree to which it is transmissible from person to person, as well as the impact on health of the infection. The response to controlling the outbreak initially involves local healthcare workers and public health officials. Communication with other provinces would be essential to ensure that neighbouring provinces could protect themselves against potential cross-border transmission of the outbreak. The federal government would need to have full information on the evolving outbreak so as to communicate adequately with the World Health Organization (WHO) and ensure that the international community has the opportunity to prepare.

In this scenario, it is evident that cooperation across all orders of government would be essential to the effective management of the outbreak. We learned from SARS, however, that there is no guarantee that the intergovernmental cooperation necessary to manage an outbreak appropriately will take place. The Campbell report describes in detail problems with communication between the Ontario and federal governments during SARS, which also affected communication with the WHO (Campbell 2004).

In reforming the public health system, many steps have been taken to build collaborative links and more effective working relationships, such as the development of the Pan-Canadian Public Health Network. Unfortunately, response to a crisis can be hijacked by other concerns that may have little or nothing to do with public health. A province may be concerned about reporting because of impact on industry or tourism – a legitimate worry, but one that should not overshadow the public health response. Alternatively, a dispute may exist between the federal government and the province over other matters – for example, fiscal transfers – that may affect the relationship between the two orders of government.

While federal–provincial disputes in this country are not uncommon, such a dispute emerging at the time of a public health crisis, when response timelines are critical, could have serious consequences. Failure to communicate could result in inadequate measures being taken by neighbouring provinces. It could result in delayed federal intervention to assist in the control of the outbreak. All these would be minor compared to the negative impact on international health if the disease were transmitted to a developing country with a health system not prepared to deal with the threat.

The Collaborative Option to Managing Emergencies

Relying upon collaborative relationships is always the starting point in public health, where responses are inherently intergovernmental and where local activities are the backbone of the response. However, SARS demonstrated the possibility that collaborative relationships could fail at a time of crisis. Similarly, efforts to develop a national health surveillance system have been under way for over a decade and are largely based on a collaborative model (Wilson 2001). These efforts have been found to be less than optimal, and there still is an absence of comprehensive intergovernmental agreements on data sharing (Office of the Auditor General 1999). After the anthrax attacks, the US strategy of developing model state emergency legislation reflected the adoption of a collaborative approach to emergency response (Gostin et al. 2002). Hurricane Katrina tested the effectiveness of this approach, and the intergovernmental response was found wanting in several respects.

It is therefore important to consider what would happen in the event of an infectious outbreak where collaborative relationships broke down and a province did not see a role for federal involvement. According to the *Emergencies Act* (Government of Canada 1985), a public welfare emergency must involve two provinces before the federal government would have the authority to intervene without provincial permission. The federal government would have some powers under its authority over international ports and borders, but otherwise there would be little it could do except wait until the province invited it in.

There are potentially serious consequences associated with this limitation of federal authority. The emergence of a pandemic infection within this country is immediately an issue of national concern, and the federal government should have the option of being involved at the earliest stages – when the opportunity for controlling the spread of the outbreak is greatest and the need for communication with other governments is critical.

The importance of aggressive early intervention is illustrated in two simulations of an emerging person-to-person transmissible avian flu outbreak in Southeast Asia, published in the journals *Nature* and *Science*. These simulations demonstrated that the outbreak could potentially be halted at source with early detection of the disease and the use of such strategies as the targeted distribution of antivirals and social distancing measures (Ferguson et al. 2005; Longini et al. 2005). In order to be effective, these measures would need to be implemented within two weeks of the first case of human-to-human transmission. The message from these simulations for Canada is that the best opportunity to control the spread of a new epidemic – for example, a SARS-type infectious threat – would occur if the full resources of federal, provincial and local governments were immediately dedicated to controlling the outbreak. If a province sought to address the challenge on its own and failed, the consequences would be experienced by all of Canada and internationally. Under the existing legislation, the federal government

would have the authority to act, without provincial permission, by the time a second province is involved, when the possibility of controlling the epidemic may have passed.

An Alternative Plan

A simulation of a US human avian flu outbreak identified, based on conservative estimates, that within two weeks of the incident case 1,000 individuals would be affected, and by 48 days 100,000 people would be affected (Germann et al. 2006). The length of time required to resolve intergovernmental disputes in this country could therefore result in delays in effective responses and the preventable spread of the disease. A more rapid alternative is necessary – and would exist, if the federal government had clearer legislative authority.

In response to SARS, and in recognition of the limitations of the existing emergency legislation, the Canadian Medical Association put forward a proposal for new public health emergency legislation based on a health alert system (CMA 2003). In this model, considered by both the Naylor and Kirby reports, the federal government would be provided with increasing levels of responsibility based on the extent and seriousness of the outbreak (National Advisory Committee on SARS 2003; Standing Senate Committee on Social Affairs, Science and Technology 2003).

The model put forth by the CMA would be an excellent basis for new legislation. In general, there are three key powers the federal government should have available. The first is the authority to oversee the response to an emergency. Second, and related, legislation should provide the federal government with authority to have access to surveillance data on an emerging outbreak so that it may then serve as a conduit for information transmission to provincial and international officials. This power is particularly important given the release of new International Health Regulations that mandate new surveillance reporting requirements of member nations during an outbreak (WHO 2005a,b; Wilson et al. 2006). Third, and most contentiously, the federal government should also have the option of intervening at an early stage if it perceives that a national response team could better manage the outbreak. The first two powers should be available to the federal government at the outset of an outbreak that is potentially of national concern. A clear federal test would have to be described for the third power to be utilized. It would be logical that if the WHO declares a public health emergency of international concern, the emergency would immediately be a federal matter, a situation that does not necessarily exist at present (WHO 2005b: Annex 2).

Concerns about New Powers

There are potential problems with the use of federal legislation that need to be considered. Importantly, the use of federal powers must not create financial burdens on

a province, and the federal government must be prepared to pay the cost of exercising those powers. Therefore, the federal government must ensure that it has the appropriate capacity to utilize any new powers, a capacity that likely does not exist at this time. Such capacity would require investment in local surveillance networks, establishing emergency response capability and general investment in public health personnel. The federal government must also be prepared to accept the political responsibility that would accompany these powers. New federal powers, specifically the use of restrictive measures and access to data, must also comply with the *Canadian Charter of Rights and Freedoms*.

A question could also arise about the constitutionality of new legislation. There is at least an argument that the federal government has authority under the "peace, order and good government" or criminal powers clause in the Constitution, although this question deserves the attention of legal experts (Jackman 1996). However, even if the federal government were confident in its constitutional argument, it may be reluctant to infringe upon provincial jurisdiction for fear of raising provincial ire. It is quite possible that provincial governments could object vehemently to such an aggressive new federal power. It would be disruptive and harmful to the response if the federal government chose to "commandeer" public health and healthcare facilities in the presence of provincial opposition. Nevertheless, the existence of this "last resort" federal authority could serve to encourage provincial collaboration at an early stage, particularly on issues of data transfer and communication. What is also evident is that if such federal authority does not exist and intergovernmental disputes contribute to preventable morbidity and mortality among residents of a province, the anger of these residents will be directed at all levels of government. Such a scenario has emerged in the aftermath of the New Orleans disaster, in which intergovernmental confusion was a component of the failure to respond in a timely manner and where all orders of government are being blamed for their failures in this regard (Stout 2005; "Katrina Reveals Fatal Weaknesses" 2005).

Conclusion

Ideally, managing a public health crisis in this country would be a collaborative venture among all levels of government, building on existing relationships and recognizing the central role of the local response. However, public health has adopted the approach of not waiting for definitive evidence before taking measures to manage risks (Kriebel and Tickner 2001). Such an approach should also be applied to public health governance strategies. A plan needs to be available to the federal government to act assuming a worst-case scenario in which an otherwise collaborative relationship deteriorates at the time of an outbreak. Having in place appropriate federal legislation is, therefore, an essential component in this country's plan to manage future public health threats.

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