

Chapter 5: Border Monitoring & Control Measures Associated with Pandemic Influenza

If a novel strain of human influenza emerges outside North America, the three countries intend to work together to slow the introduction of the virus to the continent by preventing infected individuals from entering Canada, Mexico or the United States. There will also be a WHO containment effort to contain the spread of the virus at its source. Emphasizing a *North American approach*, rather than individualized approaches among Canada, Mexico and the United States, may be the best way to slow the spread of a novel strain of human influenza into our respective countries. Strong disease surveillance systems coupled with appropriate screening at all North American airports, seaports and regional perimeters may further delay the entry of a novel strain of human influenza.

Because the specifics of how a novel strain of human influenza will enter North America and how an epidemic will actually play out are unknown, the implementation of a North American response must remain flexible and adaptable to a pandemic as it unfolds. Nevertheless, certain unifying principles regarding a North American strategy on border protection are evident. Canada, Mexico and the United States intend to develop cooperative measures to 1) slow the entry of a novel strain of human influenza to North America; 2) mitigate disease, suffering and death; 3) coordinate appropriate border measures that will give due consideration to free trade; and 4) mitigate impacts to the economy and the functioning of our societies.

All countries have the sovereign right to control the movement of people and goods across their borders. However, in the event of a widespread pandemic, highly restrictive measures to control the movement of people and goods might initially delay but would not stop the eventual spread of a novel strain of human influenza to North America, and could have significant negative

social, economic and foreign policy consequences. Less restrictive measures could potentially provide similar control benefits with fewer significant negative consequences. Such measures include appropriate restrictions on air, land and maritime passenger travel; restrictions on trade in animals and animal products that may carry the influenza virus; and other similar measures.

Individual traveler screening for influenza-like illness and risk of exposure to a novel strain of human influenza of all persons entering North America may help slow the arrival of pandemic disease to the continent. However, such screening may not detect asymptomatic infected individuals, and individuals with influenza-like illness may not be infected with a pandemic strain. Because some asymptomatic travelers who are incubating influenza may become symptomatic while en route, overall screening effectiveness may be improved by adopting a layered approach that includes pre-departure, en route and arrival screening measures, with appropriate isolation and quarantine measures for individuals suspected of being infected and contacts who may have been exposed.

Air Travel

Pre-Departure Measures for Flights from Affected Countries to North America

Effective host-country health screening of all individuals prior to departure may reduce the risk of infected travelers exposing fellow travelers, aircraft and vessel crews, and others upon arrival. This is consistent with WHO guidance and with the newly revised IHRs (2005).

- It is expected that travelers departing for North America from affected countries will be screened prior to departure in accordance with guidance

from WHO and the International Civil Aviation Organization (ICAO).¹

- Canada, Mexico and the United States intend to coordinate travel restrictions from affected countries with the collective understanding that many factors would drive the decision to implement such restrictions, including case fatality rates, transmission characteristics of the virus and the efficacy of a source country's exit-screening program.
- Canada, Mexico and the United States intend to pursue cooperative arrangements with the international community to encourage voluntary travel restrictions for non-essential travel from any affected country.

Pre-Departure Measures for Flights from North America to Affected Countries When Disease Does Not Exist in North America

Canada, Mexico and the United States intend to coordinate public messaging to travelers departing North America for affected countries. Messaging should be consistent among the three countries and may include information such as location of outbreaks, steps to reduce one's risk of infection and public health measures that may be performed on flights arriving from affected countries.

Pre-Departure Measures for Flights from North America When Disease Exists in North America

Exit screening of travelers departing North America should employ a risk-based approach² and be performed in accordance with WHO and ICAO guidance. Per the IHRs, the countries should be responsible for

performing exit screening on departing passengers once community-wide outbreaks of pandemic influenza are prevalent within their borders. The three countries expect affected countries to implement exit screening

1 ICAO recently adopted guidelines regarding communicable disease/avian influenza that include provisions for exit screening of international travelers from affected areas. These guidelines can be found at <http://www.icao.int/icao/en/med/guidelines.htm>.

2 Measures that are applied to individual travelers to determine the likelihood of infection with a pandemic influenza virus and that may include assessment of signs/symptoms of illness and potential exposure (travel and activity history).

measures until WHO determines that exit screening is no longer effective at slowing the international spread of pandemic disease.

En Route Measures

Given the short incubation period of influenza and the length of some international flights, one can assume that some travelers with influenza will develop their first symptoms during the journey. It is possible that additional training of flight and cabin crews to detect and manage ill travelers may decrease the risk for others on board, as well as at the point of arrival in North America. When combined with pre-departure exit screening, appropriate application of existing en route screening measures may help detect those who have developed signs of illness en route.

- Canada, Mexico and the United States intend to coordinate to determine best practices for the in-flight management of ill travelers based on symptoms and existing reporting requirements.
- All three countries intend to coordinate efforts and engage the international community and industry to establish protocols and minimum requirements for en route screening and reporting on flights bound for North America.
- Canada, Mexico and the United States are developing protocols, through the North American Aviation Trilateral³, to coordinate the dynamic management of inbound international flights in high-risk situations.

Arrival Measures

Arrival or entry screening of passengers should serve as an important supplement to host country exit screening. Travelers with influenza-like illness should be isolated and required to undergo appropriate public health-

3 The North American Aviation Trilateral established a common concept of operations (CONOPS) to enhance shared situational awareness and operational coordination among the three countries on containment efforts related to pandemic influenza that involve the North American aviation system. The CONOPS outlines common objectives, principles, communication mechanisms and protocols, and coordination requirements and processes that have been developed in accordance with Canadian, Mexican and U.S. national pandemic influenza plans, as well as guidance from ICAO and WHO.

related diagnostic testing, while travelers who could potentially have been exposed to pandemic influenza may be quarantined, as appropriate.

Canada, Mexico and the United States intend to employ a risk-based approach to screening and intend to collaboratively establish common criteria and protocols for entry screening of all travelers on flights bound for North America during a pandemic. The three countries intend to minimize arrival screening measures and maintain existing pre-clearance arrangements employed for air travelers within North America to the extent practicable.

Maritime Travel

Although maritime crew and passenger transport today represents a small fraction of total entries to North America, and longer transit times in the maritime environment may help to clarify public health risk when compared with air and land border environments, there are features of maritime travel that are important to consider. Maritime spread has been significant in past pandemics, and the close contact that occurs on board ships creates an epidemiological setting where influenza outbreaks may occur. Overall, reducing risk in a maritime setting is an important component of comprehensive efforts to delay a pandemic in North America.

- Canada, Mexico and the United States intend to apply a risk-based approach to the screening of passengers and crew in the maritime environment.
- All three countries intend to coordinate to establish criteria and protocols similar to those used in aviation for exit, en route and entry screening for all travelers (passengers and crew) on ships bound for North America, as well as exit screening, when appropriate, for ships departing North America.

Land Borders

Once disease exists in one North American country, the others will likely experience outbreaks soon thereafter. Canada, Mexico and the United States intend to coordinate on land border issues to enhance the North American approach and best serve their respective populations:

- Canada, Mexico and the United States intend to employ a risk-based approach to the screening of

travelers entering the North American region by land, consistent with entry screening in the aviation and maritime environments.

- Canada, Mexico and the United States intend to share and coordinate common triggers, criteria and protocols for screening of travelers at land borders when certain conditions are met. These triggers, criteria and protocols should be balanced against the necessity to maintain the flow of persons, cargo and trade across North American borders.
- Canada, Mexico and the United States intend to coordinate public messaging to be employed at land border crossings once disease exists in North America. Messaging should be consistent among the three countries and may include information such as location of outbreaks, steps to reduce one's risk of infection and public health measures that may be performed at ports of entry:
- Once pandemic disease is common in all three North American countries, Canada, Mexico and the United States mutually understand that exit screening at our shared land borders may no longer be necessary. In accordance with WHO guidance and the IHRs, exit screening should continue, however, at all airports, seaports and ground crossings along North American regional borders.

Information Sharing

As discussed in Chapter 2, robust emergency coordination between Canada, Mexico and the United States will be critical during a pandemic. A successful North America border-containment strategy will benefit from efficient information sharing among SPP member countries. This coordination is especially relevant to monitoring and surveillance, as well as to collaborative land-border public health measures.