CHAPTER SEVEN: Aftermath

Airport Screening

Airport screening was a controversial matter that, in the end, turned out to contribute little or nothing to the fight against SARS. When SARS was over, it was clear that airport screening was ineffective and that the most effective screening point was the first portal to the health system, whether it be advice from a family doctor or a trip to a hospital emergency room.

The screening measures were the subject of great bickering between the Ontario and federal governments, which regrettably showed the tendency of governments sometimes to fight rather than fix. The lesson learned is that in crisis governments must forgo political sniping and join together in the job of protecting the public.

Health Minister Tony Clement at one point wrote federal Health Minister Anne McLellan to complain that screening measures at Pearson International Airport in Toronto were not vigorous enough to prevent SARS from entering Ontario.[846] Two and a half weeks later, the WHO issued a travel advisory against Toronto, and McLellan was accused in the House of Commons and elsewhere of bringing on the advisory by ignoring requests for better screening of people entering the country.

Medical professionals questioned the effectiveness of the airport screening. For example, Ontario's then Commisioner of Public Safety and Security, Dr. James (Jim) Young, told the CBC that the chances of the screening process catching someone with the disease were slim:

> The airport isn't picking the cases up. People come in, and then they get sick and they go to hospital. We ask them questions if they're sick and we pick them up there.[847]

846. Letter from the Honourable T. Clement, Minister of Health Ontario, to the Honourable A. Anne McLellan, Minister of Health Canada, April 4, 2003.

847. "Airport screening ineffective against SARS," CBC news online, www.cbc.ca, June 11, 2003.

Dr. Andrew Simor, a microbiologist at Sunnybrook, said the airport screening measures were put in place largely to try to satisfy the World Health Organization (WHO):

> The reality is I don't think it was really warranted and I think the costs used for airport screening could well have been spent on other sorts of control measures.[848]

On April 3, 2003, a WHO official described the Pearson Airport screening as an example of best practices.

SARS was not detected by any measure utilized by Health Canada at Canadian airports, as described in the Naylor Report:

> As of August 27, 2003, an estimated 6.5 million screening transactions occurred at Canadian airports … None had SARS … The pilot thermal scanner project included most inbound and outbound international passengers at Toronto's airport … and again none were found to have SARS.[849]

The federal government instituted airport screening on March 18 in hopes of decreasing the risks of travellers importing SARS from Southeast Asia. The initiative began with Health Alert Notices (HANs): posters directing arriving passengers to pick up information on signs and symptoms of SARS and to see a physician if the symptoms developed. This information was printed on 8" by 11" yellow cards and included key telephone numbers.

Vancouver and Toronto international airports received the yellow HANs first, then the initiative was expanded to 12 other airports that received international travellers who might have been in the Far East. Also included were 18 land border crossings to the United States.

On April 3, the federal government distributed "cherry cards" to passengers departing Toronto's Pearson Airport on international flights. This was expanded on April 7 to include Toronto Island Airport and the train stations:

848. "SARS threat persists, screening wanes," *Toronto Star*, November 20, 2003.
849. Naylor Report, p. 205.

> With the advent of SARS transmission in Toronto, Health Canada implemented similar HANs in a different color (cherry) to mitigate the risk of exporting SARS cases. The cherry-colored HANs were distributed to persons departing for international destinations from Toronto's Pearson International Airport. Passengers with symptoms or signs of SARS were asked to self-defer their travel. In these instances, Health Canada requested airlines to waive their policies on non-refundable tickets, and while many did so, the refund and rescheduling policies and conditions were not uniform.[850]

Six days later, in-flight distribution of yellow cards and contact forms began on nine airlines with flights from Asia. The program underwent a series of expansions and revisions, the most significant being the implementation of thermal screening at airports. On May 23, six thermal scanners were set up in Toronto's Pearson Airport for all incoming and outgoing international travellers. This followed a pilot study started May 8:

> In parallel to these measures, Health Canada initiated a pilot study on May 8, 2003, on the use of infrared thermal scanning machines to detect temperatures >38˚C in selected international arriving and departing passengers at Vancouver's International and Toronto's Pearson International airports. Thermal scanning complemented other measures in the overall screening process by helping to triage the large volume of passengers who transit airports. Any passenger with an elevated temperature reading was referred to the screening nurse for confirmation, completion of the screening protocol, and referral to hospital, if necessary.[851]

A study by the Public Health Agency of Canada (PHAC) provided statistical data regarding the number of travellers screened during SARS:

> As of July 5, 2003, a total of 1,172,986 persons received either yellow or cherry HANs. A total of 2,889 persons answered yes to at least 1 screening question on the HAN and were referred to secondary screening according to protocol. None of the 411 outbound passengers who were

850. R.K. St. John, A. King, D. de Jong, M. Bodie-Collins, S.G. Squires, T.W.S. Tam, "Border screening for SARS, *Emerging Infectious Diseases* 11, no. 1 (2005), http://www.cdc.gov/ncidod/EID/vol11no01/04-0835.htm (St. John et al, "Border Screening for SARS").

851. St. John et al, "Border Screening for SARS".

> referred for secondary screening in Toronto were asked to defer their travel. All persons were cleared, and none were referred for additional medical examination.
>
> In addition, 763,082 persons (467,870 inbound and 295,212 outbound) were screened by the thermal scanners. Only 191 persons had an initial temperature reading of 38°C and were referred for secondary evaluation. No data were collected systematically to correlate thermal scanner results with results of temperature taking by secondary screening nurses. Some of the persons arriving or departing Toronto and Vancouver airports were screened by both HAN and thermal scanning measures.[852]

It became apparent that airport screening did not work and that the best way to identify SARS cases was at the first point of entry to the health system, Dr. Young said on the CBC. Later studies supported what Dr. Young claimed at the time. The PHAC study concludes:

> We suggest that in-country, acute-care facilities (hospitals, clinics, and physicians' offices) are the de facto point of entry into the health care system for travelers with serious infectious diseases.

One of this study's authors, Dr. Ron St. John, was quoted in another article as saying:

> They didn't detect any SARS … Sometimes what seems like a reasonable thing to do doesn't turn out that way.[853]

Another study, from the U.K., reported in the *British Medical Journal*, has similar findings:

> Entry screening is unlikely to be effective in preventing the importation of either SARS or influenza. The incubation period for SARS is too long to allow more than a small proportion of infected individuals to progress to symptomatic disease during flight to the UK from any destination.[854]

852. St. John et al, "Border Screening for SARS".
853. "Screening methods used during SARS outbreak had limited success: study" The Canadian Press, December 28, 2004.
854. *British Medical Journal*, September 23, 2005.

Dr. Naylor gave a presentation to the Standing Senate Committee on screening systems that were used during SARS. He stated that there is a need for information in people's hands and for a good public health infrastructure to support the information being handed out:

> Absent that, you have to focus on two things. One is information. You have to put masses of information in the hands of people. Assuming that most people are good, well intentioned and want to do the right thing, they will bring themselves to public notice quickly if they have suspicious symptoms and have been travelling. Second, you need a strong, local public health infrastructure so that when someone phones and says, "I have this information packet, I was just in wherever and I have the symptoms that match, I am worried that I may have X or Y," there is an instant response. Someone is at the house in 30 minutes. They get the information about what to do on the phone. They are transported, with appropriate precautions, to an emergency room that has an isolation area. They go into hospital, if need be, and into a negative pressure room, if that is required.
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> There must be a local system that knows how to respond to the traveller who has concerns or suspicious symptoms. We believe, and we have recommended, as I think honourable senators will have read, that there is a need for a multilateral, international process to reconsider travel screening; but also that we need in Canada to take a sober and critical look at the results of our screening activities. Millions of people went through thermal scanners and card systems with no cases detected. Let us have a critical look at it and decide what we need to do as a country in terms of information for travellers and screening.
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> Quarantine officers are another issue that has been covered in the report in some detail. We need a proper set of quarantine officers at all ports. This is all there. The United States government has become increasingly concerned about global travel as a means for the spread of new or re-emerging communicable diseases … A National Response Guidelines Manual has been developed by the U.S. Department of Transportation which provides a "big picture" for those involved in both planning for and responding to a quarantinable, communicable disease incident at an airport.[855]

855. The Standing Senate Committee on Social Affairs, Science and Technology, chaired by Senator Michael Kirby, October 9, 2003.

The Commission agrees with Dr. Naylor's observations, as set out in the Naylor Report:

> Screening for a rare disease like SARS in a large population (i.e., millions of travelers) is both difficult and ineffective with an extremely low likelihood of actually detecting cases.
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> Also, travel screening fails to detect those who may be incubating the disease – these individuals would still be symptom-free. Screening healthy people for infectious diseases should be based on certain premises: that a disease is present in the general population, that it can be detected by screening measures, and that there is a high risk of transmission by asymptomatic individuals. None of these conditions were met by SARS. In the absence of such features, screening healthy people is expensive, possibly highly intrusive, and can create a false sense of security or needless anxieties.[856]

The screening program was well intentioned and was somewhat helpful in that it provided some information to the public. However, it turned out in SARS to be an ineffective measure with the potential to divert resources from more effective work and can create needless anxiety in individuals and a false sense of public reassurance.

856. Naylor Report, p. 206. The Naylor Report made a series of recommendations to ensure that travel screening is imposed only when evidence suggests it will be effective, to improve quarantine officer resources, to improve communication of health risk to travellers and the travel industry and to develop cooperative intergovernmental protocols to these ends. The Commission endorses the thoughtful recommendations of Dr. Naylor, listed at p. 207 of his report.