Executive Summary

A Broken System

SARS showed that Ontario's public health system is broken and needs to be fixed. Despite the extraordinary efforts of many dedicated individuals and the strength of many local public health units, the overall system proved woefully inadequate. SARS showed Ontario's central public health system to be unprepared, fragmented, poorly led, uncoordinated, inadequately resourced, professionally impoverished, and generally incapable of discharging its mandate.

The SARS crisis exposed deep fault lines in the structure and capacity of Ontario's public health system. Having regard to these problems, Ontario was fortunate that SARS was ultimately contained without widespread community transmission or further hospital spread, sickness and death. SARS was contained only by the heroic efforts of dedicated front line health care and public health workers and the assistance of extraordinary managers and medical advisors. They did so with little assistance from the central provincial public health system that should have been there to help them.

These problems need urgently to be fixed.

Reasons for Interim Report

The work of this Commission will continue until I am satisfied that the necessary evidence has been reviewed. Because government decisions about fundamental changes in the public health system are clearly imminent, this interim report on the public health lessons of SARS is being issued at this time instead of awaiting the final report. This interim report is based on the evidence examined to date and is not intended as the last word on this aspect of the Commission's investigation.

The fact that the Commission must address public health renewal on an interim basis is not to say it is more important than any other urgent issue such as the safety and protection of health care workers. It is simply a case of timing. The Commission

continues to interview health care workers, SARS victims, the families of those who died, and those who fought the outbreak. Their story and the story of SARS will be told in the Commission's final report.

For an update on the Commission's ongoing work see Appendix A.

Twenty-one Principles for Reform

The lessons of SARS yield 21 principles for public health reform:

1. Public health in Ontario requires a new mandate, new leadership, and new resources.

2. Ontario public health requires renewal according to the principles recommended in the Naylor, Kirby, and interim Walker reports.

3. Protection against infectious disease requires central province-wide accountability, direction, and control.

4. Safe water, safe food, and protection against infectious disease should be the first priorities of Ontario's public health system.

5. Emergency planning and preparedness are required, along with public health infrastructure improvements, to protect against the next outbreak of infectious disease.

6. Local Medical Officers of Health and public health units, the backbone of Ontario public health, require in any reform process a strong focus of attention, support, consultation and resources.

7. Reviews are necessary to determine if municipalities should have a significant role in public health protection, or whether accountability, authority, and funding should be fully uploaded to the province.

8. If local Boards of Health are retained, the province should streamline the processes of provincial leadership and direction to ensure that local boards comply with the full programme requirements established by the province for infectious disease protection.

9. So long as the local Boards of Health remain in place: The local Medical Officer of Health should have full chief executive officer authority for local public health services and be accountable to the local board. Section 67 of the *Health Protection and Promotion Act* should be enforced, if necessary amended, to ensure that personnel and machinery required to deliver public health protection are not buried in the municipal bureaucracy.

10. Public health protection funding against infectious disease should be uploaded so that the province pays at least 75 per cent and local municipalities pay 25 per cent or less.

11. A transparent system authorized by law should be used to clarify and regularize the roles of Chief Medical Officer of Health and the local Medical Officer of Health in deciding whether a particular case should be designated a reportable disease.

12. The Chief Medical Officer of Health, while accountable to the Minister of Health, requires the independent duty and authority to communicate directly with the public and the Legislative Assembly whenever he or she deems necessary.

13. The operational powers of the Minister of Health under the *Health Protection and Promotion Act* should be removed and assigned to the Chief Medical Officer of Health.

14. The Chief Medical Officer of Health should have operational independence from government in respect of public health decisions during an infectious disease outbreak. Such independence should be supported by a transparent system requiring that any Ministerial recommendations be in writing and publicly available.

15. The local Medical Officer of Health requires independence, matching that of the Chief Medical Officer of Health, to speak out and to manage infectious outbreaks.

16. The operational powers of the local Medical Officer of Health should be reassigned to the Chief Medical Officer of Health, to be exercised locally by the Medical Officer of Health subject to the direction of the Chief Medical Officer of Health.

17. An Ontario Centre for Disease Control should be created as support for the Chief Medical Officer of Health and independent of the Ministry of Health. It should

have a critical mass of public health expertise, strong academic links, and central laboratory capacity.

18. Public health requires strong links with hospitals and other health care facilities and the establishment, where necessary, of an authoritative hospital presence in relation to nosocomial infections. The respective accountability, roles and responsibilities of public health care and health care institutions in respect of infectious outbreaks should be clarified.

19. Ontario and Canada must avoid bickering and must create strong public health links based on cooperation rather than competition to avoid the pitfalls of federal overreaching and provincial distrust.

20. The Ontario government must commit itself to provide the necessary resources and leadership for effective public health protection against infectious disease.

21. Public health requires strong links with nurses, doctors and other health care workers and their unions and professional organizations.

It is expected that the final report of the Walker expert panel will recommend a detailed prescriptive blueprint for many of the operational details of a renewed system. Such operational details are beyond the scope of this interim report. Some of the issues that will drive these details are discussed in the report.

Hindsight

Everything said in this report is said with the benefit of 20-20 hindsight, a gift not available to those who fought SARS or those who designed the systems that proved inadequate in face of a new and unknown disease.

It is important to distinguish between the flaws of public health systems and the skill and dedication of those who worked within them. To demonstrate the weakness of Ontario's public health infrastructure is not to criticize the performance of those who worked within systems that proved inadequate in hindsight. The Commission recognizes the skill and dedication of so many individuals in the Ontario public health system and those volunteers from Ontario and elsewhere who worked beyond the call of duty. Twenty-hour days were common. They faced enormous workloads and pressures in their tireless fight, in a rapidly changing environment, against a deadly and mysterious disease.

It is my hope that those who worked on the front lines and in public health in Ontario during SARS will accept that I have approached the flaws of the system with the utmost respect for those who gave their all to protect the public. We should be humbled by their efforts.

In this interim report I have attempted to avoid, and I invite the reader to avoid, the unfair use of hindsight to judge the actions of those who struggled so valiantly in the fog of battle against the unknown and deadly virus that is SARS.

What Went Right

The litany of problems listed below reflect weaknesses in central public health systems. These weaknesses hampered the work of the remarkable individuals who eventually contained SARS. The problems of SARS were systemic problems, not people problems. Despite the deep flaws in the system, it was supported by people of extraordinary commitment.

The strength of Ontario's response lay in the work of the people who stepped up and fought SARS. What went right, in a system where so much went wrong, is their dedication. It cannot, however, be said that things went right because SARS was eventually contained. It does nothing for those who suffered from SARS or lost loved ones to SARS to say that the disease which caused their suffering was ultimately contained. For the families of those who died from SARS and for all those who suffered from it, little if anything went right. This enormous toll of suffering requires that the Ontario government commit itself to rectify the deep problems in the public health system disclosed by SARS.

The Decline of Public Health

The decline of public health protection in Ontario began decades before SARS. No government and no political party is immune from responsibility for its neglect.

It is troubling that Ontario ignored so many public health wake-up calls from Mr. Justice Krever in the blood inquiry, Mr. Justice O'Connor in the Walkerton inquiry, from the Provincial Auditor, from the West Nile experience, from pandemic flu planners and others. Despite many alarm calls about the urgent need to improve public health capacity, despite all the reports emphasizing the problem, the decline of Ontario's public health capacity received little attention until SARS. SARS was the

final, tragic wake-up call. To ignore it is to endanger the lives and the health of everyone in Ontario.

Lack of Preparedness: The Pandemic Flu Example

When SARS hit, Ontario had no pandemic influenza plan. Although SARS and flu are different, the lack of a pandemic flu plan showed that Ontario was unprepared to deal with any major outbreak of infectious disease.

Had a pandemic flu plan been in place before SARS, Ontario would have been much better prepared to deal with the outbreak. The failure to heed warnings about the need for a provincial pandemic flu plan, and the failure to put such a plan in place before SARS, reflects a lack of provincial public health leadership and preparedness.

Lack of Transparency

Because there was no existing plan in place for a public health emergency like SARS, systems had to be designed from scratch. Ad hoc organizations like the epidemiological unit (Epi Unit) and the Science Committee were cobbled together. Procedures and protocols were rushed into place including systems like the case review, or adjudication process, that grew up to determine whether a particular case should be reported as SARS. Because SARS was such a difficult disease to diagnose, there were no reliable lab tests and knowledge about the disease was rapidly evolving, there were disagreements from time to time as to whether a particular case was SARS.

Although well meaning, this system lacked clear lines of accountability and in particular it lacked transparency.

To avoid this problem in the future the Commission recommends that the respective roles of the Chief Medical Officer of Health and the local Medical Officers of Health, in deciding whether a particular case should be designated as a reportable disease, should be clarified and regularized in a transparent system authorized by law.

Lack of Provincial Public Health Leadership

Few worked harder during SARS than Dr. Colin D'Cunha, the Chief Medical Officer of Health for Ontario and Director of the Public Health Branch in the

Ontario Ministry of Health and Long- Term Care. He demonstrated throughout the crisis a strong commitment to his belief of what was in the public interest. Dr. D'Cunha is a dedicated professional who has devoted his career to the advancement of public health. For the brief reasons set out in the report Dr. D'Cunha turned out in hindsight to be the wrong man in the wrong place at the wrong time.

While it may be due to misunderstandings or a simple difficulty on the part of Dr. D'Cunha to communicate effectively, there is a strong consensus on the part of those colleagues who worked with him during the crisis that his highest and best public calling at this time is in an area of public health other than direct programme leadership. This general concern has undoubtedly been reflected in the government's decision to provide him with other opportunities within his area of expertise.

Because Dr. D'Cunha no longer holds the office of Chief Medical Officer of Health it might be asked why it is necessary in this interim report to deal with his leadership during SARS. The answer is that the public has a right to know what happened during SARS and that obliges me to make whatever findings I am taken to by the evidence. The story of what happened during SARS cannot be told without some reference to the difficulties that arose in respect of Dr. D'Cunha's leadership.

I cannot fairly on the evidence before me make any finding of misconduct or wrongdoing by Dr. D'Cunha. The underlying problems that arose during SARS were systemic problems, not people problemMs. Because the underlying problems were about inadequate systems and not about Dr. D'Cunha, it would be unfair to blame him or make him a scapegoat for the things that went wrong.

It is impossible to say, in the end result, that Dr. D'Cunha's difficulties made any ultimate difference in the handling of the crisis. Although his colleagues were frustrated by his approach to things, the crisis was to a large extent managed around him. It is hard to say that the overall result of the SARS crisis would have been different with someone else at the helm.

Lack of Perceived Independence

The Commission on the evidence examined thus far has found no evidence of political interference with public health decisions during the SARS crisis. There is, however, a perception among many who worked in the crisis that politics were at work in some of the public health decisions. Whatever the ultimate finding may be once the investigation is completed, the perception of political independence is

equally important. A public health system must ensure public confidence that public health decisions during an outbreak are free from political motivation. The public must be assured that if there is a public health hazard the Chief Medical Officer of Health will be able to tell the public about it without going through a political filter. Visible safeguards to ensure the independence of the Chief Medical Officer of Health were absent during SARS. Machinery must be put in place to ensure the actual and apparent independence of the Chief Medical Officer of Health in decisions around outbreak management and his or her ability, when necessary, to communicate directly with the public.

Lack of Public Health Communication Strategy

The problems of public communication during SARS are addressed thoughtfully in the Naylor Report and the Walker Interim Report. The Commission endorses their findings and their recommendations for the development of coherent public communication strategies for public health emergencies.

There is no easy answer to the public health communications problems that arose during SARS. On the one hand, if there are too many uncoordinated official spokespeople the public ends up with a series of confusing mixed messages. On the other hand, as Mr. Tony Clement the Minister of Health during SARS pointed out to the Commission, any attempt to manage the news by stifling important sources of information will not only fail but will also lead to a loss of public confidence and a feeling among the public that they are not getting the straight goods or the whole story. What is needed is a pre-planned public health communications strategy that avoids either of these extremes.

Poor Coordnation with Federal Government

Problems with the collection, analysis and sharing of data beset the effort to combat SARS. While many factors contributed to this, strained relations between the three levels of government did not help matters.

The lack of federal-provincial cooperation was a serious problem during SARS. This lack of cooperation prevented the timely transmission from the Ontario Public Health Branch of vital SARS information needed by Ottawa to fulfill its national and international obligations. Although recollections differ as to the responsibility for this lack of cooperation, the underlying problems were the lack of pre-existing protocols,

agreements, and other machinery to ensure the seamless flow of necessary information and analysis, combined with a possible lack of collaborative spirit in some aspects of the Ontario response.

The inherent tensions between the federal and provincial governments must be overcome by a spirit of cooperation around infectious disease surveillance and coupled with the necessary machinery to ensure in advance that the vital information will flow without delay. It is clearly incumbent on both levels of government to ensure that the breakdown that occurred during SARS does not happen again.

A Dysfunctional Public Health Branch

The Commission has heard consistent reports that the Public Health Branch of the Ministry of Health had become dysfunctional both internally and in terms of its relationships with the local public health units.

A lack of respect for the Public Health Branch was evident in the responses from outside Ontario and from elements of the Ontario public health system at the local level. When SARS hit, leadership was not forthcoming from a Public Health Branch that turned out to be dysfunctional.

Lack of Central Public Health Coordination

Under the *Health Protection and Promotion Act*, local Medical Officers of Health were responsible for the local response to SARS. It was to the province however, to the Public Health Branch in the Ministry of Health, that the local public health units looked for guidance. Unfortunately many Medical Officers of Health felt there was no coordinated effort at the Public Health Branch to facilitate the SARS response at the local level. For many in the field it seemed as though the Branch was a silo, disconnected from the field, rather than a partner or a resource.

Many local Medical Officers of Health felt abandoned during SARS, devoid of support and guidance. The Branch's failure to co-ordinate and guide the local health units was already a big problem before SARS. It turned out to be a harbinger of the problems that arose during SARS.

Lack of Central Expertise

The outbreak was managed, of necessity, around the Public Health Branch of the Ministry of Health and Long-Term Care rather than through it. The critical mass of professional expertise one would expect in a crucial branch of government in a province the size of Ontario simply did not exist, either in the number of experts or their depth of experience. Key operational groups had to be put together on the run and individual experts had to be recruited from the field to fill this void. Machinery such as the Science Committee and the Epi Unit were run on almost a volunteer drop-in basis because there was no depth of expertise in the Branch itself.

SARS demonstrated that our most valuable public health resources are human resources and that Ontario lacked a critical mass of expertise at the provincial level. It is crucial to the success of any public health reform initiatives in Ontario that there be a high level of expertise at both the local and central levels of public health. Ontario cannot continue to rely on the goodwill and volunteerism of others to protect us during an outbreak. Many of those who came forward to work at the provincial level during SARS were disheartened by the problems they saw and a few expressed doubts whether they would be willing to come forward again, particularly if the problems are not addressed. Examples abound of centres of excellence for disease control: British Columbia, Quebec, and Atlanta, among others. Ontario needs to learn from their example. Without a critical mass of the right professionals public health reform, no matter how well-reasoned and well-resourced, has no chance of success.

No Established Scientific Backup

In March 2003, the Public Health Branch in Ontario had neither the capacity nor the expertise to handle an outbreak of the magnitude of SARS. Neither was there any provincial plan to rapidly bring together the necessary experts to provide scientific advice to those managing the outbreak. One outside expert, brought in to help manage the crisis, noted that Ontario simply didn't have the machinery, people or the leadership at the central level:

> It was abundantly clear to everyone who sat in on teleconferences that Ontario was scrambling, didn't have the infection control expertise, at least the amount of expertise. There were superb infection control people there . . . it's clear they were unable to pull together the data that was required for them and us to try to understand what's going on. It was

> abundantly clear that there was no obvious concerted leadership of the outbreak at least as we could see . . . It was obvious to all of us that Ontario was in substantial trouble.

Consequently, the Ministry of Health had to turn to experts outside of government for advice and direction. While it is not unusual that outside experts would be consulted during an outbreak, the lack of planning meant that the core expert groups had to be thrown together in haste without adequate planning or organization.

Lack of Laboratory Capacity

Before SARS, concerns had been raised about the capacity of the Ontario Central Public Health Laboratory (provincial laboratory). Despite these warnings, it was not prepared to deal with an outbreak of this magnitude. There were only two medical microbiologists in the laboratory, who were responsible for the entire province.

To make it worse, the Ministry of Health and Long-Term Care, in the fall of 2001, had laid off its PhD level scientists at the provincial laboratory. These scientists were engaged in the diagnosis and surveillance of new and emerging infections as well as research and development.

Within government, there seemed to be a complete lack of understanding of the importance of the work done by scientists at the provincial laboratory. At the time of the layoffs, a Ministry of Health spokesman was quoted as saying:

> Do we want five people sitting around waiting for work to arrive? It would be highly unlikely that we would find a new organism in Ontario.

It is unnecessary, in light of SARS, to bring the irony of this statement to the attention of the reader. Less than two years later, SARS struck Ontario. The provincial laboratory did not have the capacity to deal with SARS.

Despite earlier warnings, the Ontario Central Public Health Laboratory proved inadequate during SARS. It is essential that the provincial laboratory be revitalized with the necessary physical and human resources.

No Provincial Epidemiological Unit

When SARS hit Ontario, the Ministry of Health's Public Health Branch was totally unprepared to deal with an outbreak of this nature. To start with, it had no functioning epidemiological unit (Epi Unit).

The Science Committee needed epidemiological data about the transmission of the disease and whether control measures were effective. It needed answers to a number of vital questions: How was the outbreak progressing? What was the incubation period? How long were people infectious? What were the risks in hospital?

Although an Epi Unit was cobbled together as the outbreak unfolded, its work was hampered by the lack of planning and support systems.

It was a major failure of Ontario's public health system that no such unit was in place when SARS struck. The development of fully resourced epidemiological capacity is vital to protect Ontario against outbreaks of infectious disease. In the absence of major reform, Ontario may not be able in a future outbreak to draw on the extraordinary volunteer resources that helped so much in the spring of 2003.

Inadequate Infectious Disease Information Systems

The fight against SARS was hampered by the lack of an effective reportable disease information system. When SARS hit Ontario neither the provincial Public Health Branch nor the local public health units had any information system capable of handling a disease like SARS. The existing system, known as Reportable Disease Information System, or RDIS, was disease-specific and not flexible enough to handle new diseases.

Until the Epi Unit was up and running, there was no way to coordinate the work of local public health units into a common reporting structure. This delay turned out to be a critical problem. By the time the Epi Unit was established, individual health units were married to their own individual methods of collecting and reporting data. As a result, they were unable and disinclined to change their systems mid-stream, despite problems created by the diverse manner in which the data was being collected and reported.

Because of systemic weaknesses, the Toronto Public Health unit, which had the majority of the SARS cases, relied on a paper-based system of case tracking. This nightmarish system generated cardboard boxes spilling over with paper, all of which had to be collated and analyzed by hand.

The Commission endorses the specific recommendations in the Naylor Report and the Walker Interim Report to address the deficiencies in the federal and Ontario infectious disease information systems.

Should SARS or some other infectious disease hit Ontario tomorrow, the province still has no information system, accessible by all health units, capable of handling an outbreak. The first unheeded wake-up call was the Provincial Auditor's report in 1997. The second unheeded wake-up call was West Nile. If it takes Ontario as long to respond to SARS as it did to those earlier wake-up calls, the province will be in serious trouble when the next disease strikes.

Overwhelming and Disorganized Information Demands

The problem of information flow was not restricted to the lack of the necessary information technology systems. Confusion, duplication, and apparent competition prevailed in the work of those in the central apparatus who sought information from local public health units and hospitals. These unfocused demands consumed valuable time of public health and hospital staff, distracted them from urgent tasks at hand, and impaired their ability to get on with the work of fighting the disease.

SARS caught Ontario with no organized system for the transmission of case information to those who needed it to fight the outbreak. There was no order or logic in the frenzied, disorganized, overlapping, repetitious and multiple demands for information from hospitals and local public health units. Requests would go out simultaneously to many people for the same piece of information. The work of front line responders in hospitals and health units was seriously impaired by this constant and unnecessary harassment.

Inadequate Data

The data produced by the jerry-built system through the frenzy of information demands often proved to be inadequate. Accurate data of high quality was vital to the experts on the Science Committee who had to provide evidence- and science-based

direction for the management of SARS. Because so much about the disease was unknown, case-specific information was vital and sound decisions could not be made without adequate data of the necessary quality.

The Science Committee never reached the point where it received adequate data in a timely manner, including information about contacts of those with SARS. Consequently, it was difficult to judge the effectiveness of control measures such as quarantine.

The Epi Unit and the local health units were often unable to provide adequate and timely data. While there is disagreement among those involved as to the amount of data being provided, what is clear is that the experts and officials who needed the data did not get what they needed when they needed it. The information systems and support structures were simply not in place. In the absence of this necessary machinery, not even the hardest work and greatest expertise of those who came forward to staff the Epi Unit and the Science Committee could overcome the obstacles

Duplication of Central Data Systems

Because there was no standard information system for the Public Health Branch and all the local public health units, each individual health unit developed their own data collection system during SARS. The lack of a single, effective, accessible information system, combined with a constant, intense demand for information from a number of different people and groups, resulted in chaos.

Duplicate data systems sprung up at the Ministry of Health. For example, one group in the Ministry ran a system intended to track the situation in hospitals. This group collected data separate from the Epi Unit, but the numbers reported by this Ministry group often differed widely from the numbers reported by the Epi Unit.

The proliferation of data systems, and the confusion and burdens it created, was an inevitable consequence of Ontario's lack of preparedness for a major outbreak of infectious diseases.

Failure to priorize public health emergency preparedness, and to devise one central system for the collection and sharing of infectious disease data was a major problem during SARS. Although work has been done since SARS to improve the situation, there is no such system now in place to protect us from a future outbreak. Unless this problem is addressed, duplicate systems will spring up again as people scramble to

devise their own information systems in the absence of systems put in place before the next outbreak hits.

Blockages of Vital Information

There was a perception among many who fought SARS that the flow of vital information to those who urgently needed it was being blocked or delayed for no good reason.

What is striking is that the various groups appear honestly to believe that they communicated the information to each other. Yet clearly there were significant gaps in the transfer of information between Toronto Public Health and the province, between the provincial Epi Unit and the Science Committee, and between Ontario and the Federal government. It is impossible to determine the precise source of the data blockages.

It does not matter whose perception, in the fog of battle against the disease, was correct. The bottom line is that the lack of clarity around the flow of communication and the reporting structure, the absence of a pre-existing epidemiological unit coordinated with the local health units and the absence of clear public health leadership above the Epi Unit provided an environment in which the crucial elements of the fight against SARS were disconnected from each other. Despite the best efforts of individuals attached to all of the groups involved, they simply could not connect effectively.

Legal Confusion

The fight against SARS was marked by the lack of clarity of existing laws that impacted on the public health system. Although the Commission cannot at this interim stage make specific recommendations for legislative reform in Ontario, a few things should be said about the general need for work in this area. Areas of concern include the following:

- Who legally was in charge of the outbreak?

- Who had the ultimate responsibility for the classification of a case: the local jurisdiction or the province?

- What was the legal authority for issuing directives to hospitals?
- What were the consequences of not following those directives?
- What specific information had to be transmitted, by whom, when and to whom?
- To what extent could public officials and private experts share data and for what purpose?
- Who was obliged to notify relatives that a family member was classified as a suspect or probable case?
- Did privacy rights prevent the sharing of information necessary to fight the outbreak?

While protection of patient confidentiality is a key consideration in any data sharing agreement or legislation, it should not in the future hinder the vital communication of data to the extent it did during SARS. Notwithstanding the strong privacy concern demonstrated by many of those who fought the outbreak, a number of families affected by SARS reported that they felt their privacy had nonetheless been violated because personally identifying information somehow made it into the media. It is ironic that although privacy concerns restricted the flow of vital information between agencies fighting the outbreak, they were not always effective to keep personal information from the media.

Whatever the precise path of legislative reform, privacy, while vital, should not impede the necessary sharing between agencies and governments of information required to protect the public against an outbreak of infectious disease.

The Commission during the course of its investigation will continue to address issues around the need for legislative changes identified in the lessons learned from SARS.

Public Health Links with Hospitals

SARS was largely a hospital spread infection. Although there was some spread in households and doctors offices, and a limited element of community spread, most of the transmission took place in hospitals.

There are significant weaknesses in the links between public health and hospitals and there is lack of clarity as to the respective accountability and authority of public health and hospitals in a hospital-based outbreak.

Public health should have strong links with hospitals and establish where necessary an authoritative hospital presence in relation to nosocomial infection. The respective accountability, roles and responsibilities of public health and health care institutions in respect of infectious outbreaks should be clarified.

Public Health LInks wiith Nurses, Doctors and Others

Public health links with nurses, doctors, other health care workers and their unions and professional organizations were often ineffective during SARS.

This section of the report illustrates specific problems that arose from this general failure and points to the need for a better system to ensure that public health develops better links and communication systems with the key participants in the health care system.

Lack of Public Health Surge Capacity: The Toronto Example

The sudden demands imposed by SARS on local public health units were overwhelming. The hardest hit jurisdiction was Toronto, where the cases snowballed with each passing day of the outbreak. While the same was true of other public health units, Toronto is selected as an example because it had the greatest number of cases.

Despite the reassignment of public health staff from other jobs, and despite the influx of workers from other health units to help out, Toronto public health was at times overwhelmed by the staggering workload which included:

- Approximately 2,000 case investigations. Each took an average of nine hours to complete.

- More than 23,000 people identified as contacts.

- Of these, 13,374 placed in quarantine.
- More than 200 staff working on the SARS hotline.
- Over 300,000 calls received on the hotline.
- On the highest single day, 47,567 calls.

Despite the best efforts of so many, the systems for redeployment proved inadequate. SARS demonstrated the need to create surge capacity by planning in advance so that every available worker can be redeployed where necessary.

The Case of the Federal Field Epidemiologists

The federal government sent a number of Health Canada employees to work in the field to help with containment efforts. In the early days of the outbreak they sent three federal field epidemiologists to Toronto, often referred to as the field epi's, who brought a badly needed level of expertise to the provincial response. Unfortunately, the lack of clarity concerning their deployment and, from time to time, the tasks that they were asked to perform led to problems and ultimately contributed to the decision by Health Canada to pull them back from Ontario.

The case of the federal field epidemiologists demonstrates many of the underlying problems of Ontario's SARS response noted above: poor coordination among levels of government, poor coordination of Ontario's public health response, and above all a lack of any advance plan for outbreak management.

Improvements Since SARS

This section of the report describes the steps taken to fix the problems disclosed by SARS.

These pending and proposed improvements exemplify an obvious present desire to fix the public health problems revealed by SARS. It is beyond the Commission's mandate to evaluate or monitor these initiatives. The government's efforts to ensure the province will not again be confronted by the same problems that arose during SARS will be effective only if it dedicates adequate funds and makes a long-term commitment to reform of our public health protection systems. As in most areas of human

endeavour, actions speak louder than words. Only time will tell whether the present commitment will be sustained to the extent necessary to protect Ontario adequately against infectious disease.

Naylor, Kirby, Walker

These three reports share a common vision for the renewal of our public health systems through increased resources, better federal-provincial and inter-agency cooperation, and system improvements. They bear close study and great consideration. Their methodology and approach are sound and their recommendations are solidly based in their respective expertise. Based on the evidence it has seen, the Commission endorses the major findings and recommendations of all three studies.

Federal–Provincial Cooperation

Too many good ideas in this country have been destroyed by mindless federal-provincial infighting. The most noble and appealing proposals for reform falter so often in Canada simply because of the inherent bureaucratic and political mistrust between the two levels of government. If a greater spirit of federal-provincial cooperation is not forthcoming in respect of public health protection, Ontario and the rest of Canada will be at greater risk from infectious disease and will look like fools in the international community. While there are hopeful signs that more cooperation will be forthcoming, it will take hard work from both levels of government to overcome the lack of coordination demonstrated during SARS.

Ontario and Canada must avoid bickering and must create strong public health links based on cooperation rather than competition, avoiding the pitfalls of federal overreaching and provincial distrust

Independence and Accountability

There is a growing consensus that a modern public health system needs an element of independence from politics in relation to infectious disease surveillance, safe food and safe water, and in the management of infectious outbreaks.

Whatever independence may be required by the Chief Medical Officer of Health for public health decisions during an outbreak and for the right to speak out

publicly whenever necessary, he or she should remain accountable to the government for overall public health policy and direction and for the expenditure of public funds.

The proposed power to report directly to the public, combined with independence in relation to the management of infectious outbreaks, provides a significant measure of independence to the Chief Medical Officer of Health. It ensures that on important public health issues the Chief Medical Officer of Health cannot be muzzled and that the public can get a direct sense of emerging public health problems without passing through any political filters. It ensures both the reality and the public perception that the management of infectious disease outbreaks will be based on public health principles and not on politics.

The Commission therefore recommends:

- Subject to the guarantees of independence set out below, The Chief Medical Officer of Health should retain a position as an Assistant Deputy Minister in the Ministry of Health and Long-Term Care.

- The Chief Medical Officer of Health should be accountable to the Minister of Health with the independent duty and authority to communicate directly with the public by reports to the Legislative Assembly and the public whenever deemed necessary by the Chief Medical Officer of Health.

- The Chief Medical Officer of Health should have operational independence from government in respect of public health decisions during an infectious disease outbreak, such independence supported by a transparent system requiring that any Ministerial recommendations be in writing and publicly available.

The local Medical Officer of Health should have the independence, matching that of the Chief Medical Officer of Health, to speak out and to manage infectious outbreaks.

The Public Health Ping-Pong Game

Public health in Ontario including protection against infectious disease is delivered primarily through 37 local Boards of Health, which are largely controlled by munici-

pal governments. Public health funding has gone back and forth like a ping-pong ball between the province and the municipalities.

So long as the municipalities fund public health to a significant degree, public health will have to compete with other municipal funding priorities. Communicable disease control is a basic public necessity that can affect the entire province if a disease gets ahead of the controls. Infectious disease control should not have to compete against potholes for scarce tax dollars.

There is no scientific way to determine the appropriate degree of provincial funding upload for infectious disease surveillance and control. Although a case can be made for 100-per-cent funding upload, the persuasive views of a number of local Medical Officers of Health suggest that it would be sensible to upload infectious disease control to a provincial contribution of at least 75 per cent.

Opinions will differ as to how the funding formula should be changed, and whether and how much coordinating or direct power over public health should be uploaded to the province. The one thing on which everyone will agree is that the shifting of funding and accountability back and forth between the province and the municipalities has impaired the stability of Ontario's public health system. It is time to stop the ping-pong game and to begin an era of stable public health funding relationships between the province and the municipalities.

One Local Funding Problem

This section of the report demonstrates in exquisite detail the problems that can arise through the present system of local funding of public health and the disinterest shown by some municipal politicians in the public interest in effective public health protection.

This story painfully reveals the importance of ensuring that funding for local health activities is not left to the mercies of any intransigent local council that fails to live up to its legal responsibilities in respect of public health protection. Basic protection against disease should not have to compete for money with potholes and hockey arenas. Even if most municipalities respect their public health obligations under the *Health Protection and Promotion Act,* it only takes one weak link to break the chain of protection against infectious disease. Should an infectious disease outbreak spread throughout Ontario, the municipality that cannot or will not properly resource public health protection may be the weak link that affects the entire province and beyond.

The Municipalities' Funding Dilemna

All municipalities are affected by the underlying difficulty of funding any provincial programme from the local municipal property base. SARS and West Nile showed that infectious disease protection has to be approached at a provincial level. It is anomalous to fund a provincial programme like infectious disease control from the limited municipal tax base. In a submission to the Commission, the Association of Municipalities of Ontario makes a persuasive case for the province and the municipalities to sit down together and agree on the best structure to fund infectious disease protection and the best process for getting there.

One Local Story: Parry Sound

SARS was not restricted to Toronto. This section outlines the response to SARS by the local hospital, the West Parry Sound Health Centre and the local public health unit. It demonstrates the lack of provincial public health support to a local community faced with SARS and the difficulties caused by the inability of many local public health units to attract and retain permanent a Medical Officer of Health.

If the present system of local control over public health and infectious disease is to be maintained, it is essential that machinery be put in place to ensure continuous unbroken oversight and authority in every public health unit in Ontario supported by the necessary cadre of public health professionals.

An Ontario Centre for Disease Control

A consensus has developed that some kind of separate "CDC Ontario" is needed, with strong academic links, in order to provide a critical mass of medical, public health, epidemiological, and laboratory capacity and expertise. Structural models abound for such an organization, from the British Columbia Centre for Disease Control (B.C. CDC), to the Institut national de santé publique du Québec, to the federal model proposed in the Naylor Report, and even to the United States Centres for Disease Control (CDC) itself. It is expected that the final Walker Report will make detailed and prescriptive recommendations for the structure and mandate of such an organization.

While it is beyond the scope of this interim report to address this issue in the detailed fashion expected from the final Walker report, a few observations are in order.

First, the structure of the new agency or centre, which will combine advisory and operational functions, must reflect the appropriate balance between independence and accountability whether it is established as a Crown corporation or some other form of agency insulated from direct Ministerial control.

Second, it should be an adjunct to the work of the Chief Medical Officer of Health and the local Medical Officers of Health, not a competing body. SARS showed that there are already enough autonomous players on the block who can get in each other's way if not properly coordinated. There is always a danger in introducing a semi-autonomous body into a system like public health that is accountable to the public through the government. The risk is that such a body can take on a life of its own and an ivory tower agenda of its own that does not necessarily serve the public interest it was designed to support.

Third, it must be made clear from the beginning that the agency is not an end in itself but exists only to support public health.

The success of centres such as the CDC in Atlanta and the CDC in British Columbia flows largely from a widespread recognition that these institutions house the very best of the best. The authority they have comes from their recognition as centres of excellence that can be counted on to work collaboratively with local agencies. To achieve this authority and success an Ontario Centre for Disease Control will require considerable resources and a strong commitment from government to maintain those resources. It will only work if it has the resources to attract recognized experts and to provide them with the best technology and equipment and optimal support to perform their work. It will take years to build a reputation for excellence and anything less than a 100-per-cent commitment to this long-term goal will surely result in failure.

Public Health Restructuring

Whenever a system proves wanting it is tempting to blame its problems on structure and to embark on a course of reorganization, or centralization, or regionalization, or decentralization. It must be remembered that organizational charts do not solve problems. The underlying problems of public health in Ontario have to do with a lack of resources, years of neglect, and lack of governmental priority. These problems developed during the regimes of successive governments and no government or political party is immune from responsibility for the decline of public health protection. These problems will not be fixed by drawing boxes on paper around public health units and

moving them into other boxes. The underlying problems will only be solved by a reversal of the neglect that has prevailed for so many years throughout the regime of so many different governments headed by all three political parties.

That being said some attention must be given to the best way to structure and organize the delivery of public health in Ontario. This section discusses the respective merits of different approaches to the restructuring of Ontario's system of public health protection.

Greater Priority for Infectious Disease Control

SARS made it clear that our public health system must give greater priority to protection against infectious disease. It is equally clear, however, that our entire public health system cannot be reorganized around one disease like SARS. Many diseases produce more sickness and mortality than SARS, and the task of plugging the holes demonstrated by SARS cannot be permitted to detract public health from the task of preventing those afflictions that comprise a higher burden of disease than SARS and other infectious diseases.

While it would be wrong to downgrade the long-term importance of health promotion and population health, the immediate threat posed by any infectious outbreak requires that a dominant priority must be given to protecting the public against infectious disease. It does not disrespect the advocates of health promotion to say that the immediate demands of public safety require that public health, as its first priority, looks after its core business of protecting us from infectious disease.

The tension in public health, between priority for infectious disease control and priority for long-term population health promotion, including the prevention of chronic lifestyle diseases, is not going to go away. There is no point in arguing which is more important, because they are both important. There are however five basic reasons why protection against infectious disease should be the first basic priority of our public health system.

The first is that the threat from infectious disease is direct and immediate. The second is that an outbreak of infectious disease, if not controlled, can bring the province to its knees within days or weeks, a threat not posed by lifestyle diseases. The third is that infectious disease catches the direct attention and immediate concern of the public in a way that long-term health promotion does not. It is essential in an infectious disease outbreak that the public be satisfied that they are getting solid information from the

government and that everything possible is being done to contain the disease. The fourth is that infectious disease prevention requires an immediate overall response because it moves rapidly on the ground and spreads quickly from one municipality to another and from province to province and country to country, thus engaging an international interest. The fifth is that health promotion depends largely on partnerships outside the health system between public health and local community agencies like schools and advocacy groups, allies and resources not available to infectious disease control which must stand largely on its own.

For these five reasons safe water, safe food, and protection against infectious disease should be the first priorities of Ontario's public health system.

Central Control Over Health Protection

An uncontrolled outbreak of infectious disease could bring the province to its knees. The province-wide consequences of a failure in infectious disease control are simply too great for the province to delegate infectious disease protection to the municipal level without effective measures of central provincial control. There is little machinery for direct central control over infectious disease programmes. The existing machinery to enforce local compliance with provincial standards is cumbersome and underused. Better machinery is needed to ensure provincial control over infectious disease surveillance and control.

During a disease outbreak the international community and organizations like the World Health Organization look for reassurance and credibility to the national and provincial level, not to the particular strength of any local public health board or the particular credibility of any local Medical Officer of Health. Viruses do not respect boundaries between municipal health units. The chain of provincial protection against the spread of infectious disease is only as strong as the weakest link in the 37 local public health units. A failure in one public health unit can spill into other public health units and impact the entire province and ultimately the entire country and the international community. When dealing with a travelling virus, concerns about local autonomy must yield to the need for effective central control.

If the *Health Protection and Promotion Act* were amended to provide that:

- The powers now assigned by law to the Medical Officer of Health are reassigned to the Chief Medical Officer of Health, and

- The powers reassigned to the Chief Medical Officer of Health shall be exercised by the Medical Officer of Health in the local region, subject to the direction of the Chief Medical Officer of Health,

it would leave to the local Medical Officers of Health a clear field to exercise the same powers they have always exercised, subject to ultimate central direction.

Under the old system, such a re-arrangement of powers might raise serious concerns of loss of autonomy on the part of the local Medical Officer of Health including the spectre of political influence from Queen's Park on local public health decisions. While concerns about local autonomy will never go away in any centralized system, the new independence of the Chief Medical Officer of Health and the Medical Officer of Health should go a long way to allay such concerns.

A further sensible measure to allay these concerns, and to further protect against the perception of political interference with public health decisions, would be to remove from the Minister of Health under the *Act* the direct operational power in cases of health risk, such powers to be assigned to the Chief Medical Officer of Health.

These measures are proposed to strengthen provincial control over public health protection with adequate safeguards to ensure the political independence of the Chief Medical Officer of Health and the local Medical Officer of Health in relation to infectious disease control.

Without stronger measures to ensure central provincial control of infectious disease control whenever necessary, Ontario will be left with inadequate protection against potential public health disasters.

Political Will

A reformed public health system requires a major injection of resources. The Naylor, Kirby, and interim Walker reports analyzed the need for a critical mass of scientific and medical expertise, more capacity to educate, recruit, and retain public health professionals, increased laboratory capacity, and improved technology. Further recommendations are expected in the final Walker report. Significant financial resources will be needed to give Ontario's public health system any reasonable capacity for protection against infectious disease.

The decline of public health protection in Ontario reflects a consistent lack of political will, over the regime of many successive governments and all three political parties,

to bring up to a reasonable standard the systems that protect us against infectious disease.

Competition for tax dollars is fierce. It is not easy in a time of fiscal constraint for any government to make additional funds available for any public programme. It will require significant political will on the part of the Minister of Health and the Ontario government to commit the funds and the long-term resolve that are required to bring our public health protection against infectious disease up to a reasonable standard.

It would be very easy, now that SARS is over for the time being, to put public health reform on the back burner. It is a general habit of governments to respond to a crisis by making a few improvements without fixing the underlying problems responsible for the crisis. It would be a tragedy if that turned out to be the case with SARS. As the Naylor Report pointed out:

> SARS is simply the latest in a series of recent bellwethers for the fragile state of Canada's . . . public health systems. The pattern is now familiar. Public health is taken for granted until disease outbreaks occur, whereupon a brief flurry of lip service leads to minimal investments and little real change in public health infrastructure or priorities. This cycle must end.[1]

Ontario, as demonstrated in this interim report, slept through many wake-up calls. Again and again the systemic flaws were pointed out, again and again the very problems that emerged during SARS were predicted, again and again the warnings were ignored.

The Ontario government has a clear choice. If it has the necessary political will, it can make the financial investment and the long-term commitment to reform that is required to bring our public health protection against infectious disease up to a reasonable standard. If it lacks the necessary political will, it can tinker with the system, make a token investment, and then wait for the death, sickness, suffering, and economic disaster that will come with the next outbreak of disease.

The strength of the government's political will can be measured in the months ahead by its actions and its long-term commitments.

1. National Advisory Committee on SARS and Public Health, *Learning from SARS: Renewal in Public Health in Canada* (Health Canada: October 2003) p. 64. (Subsequent footnotes will refer to this report as the Naylor Report.)