The morning of May 23, 2003, two physicians from Toronto Public Health, Dr. Tamara Wallington and Dr. Lisa Berger, along with Dr. Don Low, a medical microbiologist from Mount Sinai Hospital, arrived at North York General Hospital to review a few patient charts. By this time Public Health believed that Ms. N, who had previously been at North York General Hospital, was the index case of the SARS outbreak at St. John's Rehab Hospital. They also were very concerned about the Patient A family cluster, a family whose patriarch had died at North York General May 1, while hospitalized during the SARS outbreak, and who now had four family members in hospital, all with respiratory symptoms.

Hospital officials understood that Public Health was coming on site to review files in connection with the outbreak at St. John's Rehab Hospital. As noted earlier in this report, North York General Hospital did not know that it had sent SARS to St. John's through the transfer of Ms. N.

As Public Health officials reviewed charts on site, it became clear that there was a big problem: there was a large cluster of unidentified SARS cases among patients, visitors and staff, primarily connected with 4 West orthopedic ward. The exact scope of the outbreak was unknown, as was the source. Public Health officials determined that to contain the spread of SARS, North York General Hospital would have to close.

Prior to the closures of Scarborough Grace Hospital on March 24 and York Central Hospital on March 28, 2003, no one had ever had to close a hospital in Ontario because of an infectious disease outbreak. There had been no experience in conducting such an enormous undertaking. It is to the credit of these hospitals that they did their best and got the daunting job done one way or the other. On May 23, 2003, when it was determined that the emergency department at North York General Hospital (and eventually the entire hospital) would have to close, senior administration and the hospital SARS response team worked until the early morning hours and throughout the weekend to try to close the hospital and to ensure that the needs of patients and staff were met.

But as was seen throughout the SARS outbreak, a lack of planning and preparedness led to breakdowns in communication, as people struggled to do their best amidst the uncertainty and confusion of the day. Communication breakdowns occurred on many different levels at North York General: to staff working in the hospital, to staff who were off sick and to staff who were well but not working on May 23, 2003. The story of May 23, 2003, shows that, during a health emergency, the first question that must always be addressed is, are front-line staff safe? Whatever decisions have to be made, whoever has to be contacted to make those decisions, the safety of staff should be paramount.

The story of the identification of the outbreak on 4 West on May 23, 2003, also underscores the importance of regular, mandatory training programs on isolation policies and of the use of personal protective equipment in all areas of the hospital, even those thought to be "low risk."

As we have seen time and time again throughout the story of SARS, where the system failed, those most affected were front-line staff.

Investigation at North York General Hospital: May 23, 2003

At approximately 11:00 a.m. on Friday, May 23, Dr. Tamara Wallington, Dr. Lisa Berger and Dr. Donald Low met with North York General senior management, infection control and the leaders of the hospital's SARS Management Committee. Public Health officials explained their concerns and talked about the need to review the charts of Ms. N, her roommate and Patient A. The Public Health team did not know what was about to be discovered: that there was a large cluster of SARS cases in North York General, as well as associated ill staff and visitors. As Dr. Wallington told the Commission:

We went there thinking, or at least I went there thinking, that it would be a relatively short meeting and that I would be there to review three, four charts. And they were very accommodating.

Senior management at North York General still did not know that they had undetected cases of SARS in the hospital. They had no idea of the importance the case review would have or that it would lead to the discovery of a large outbreak of SARS among patients, visitors and staff. The focus of the Public Health investigation team at that time was where Ms. N, believed to be the index case of the outbreak at St. John's Rehab Hospital, might have contracted SARS. Additionally, Public Health wanted to further investigate Patient A's health history, as they were very concerned about the cluster of illness in four of his family members. As Dr. Wallington told the Commission:

I was looking for a source. As far as I was concerned, Ms. N. was the index case for St. John's, so I was looking for the source case and I thought that I would find it at North York. I thought she had been at North York between April 22nd and 28th. She got sick on May 1st. Someone who got sick as a result of her being the index case at St. John's was diagnosed with SARS. So retrospectively, she was a SARS case and in my mind, when I was at North York, I was there to look for the source. Who did she get SARS from?

And the first place that made the most sense to start was her roommate. Who did she room with at North York? And so we asked for her chart to be pulled and the roommates of Ms. N's and again, in the background there is also the [Patient A family] that we're worried about, that there's a lot of angst about. And so we said we need to review [Patient A's] chart as well. We've now got two people that we're worried about.

Around the same time that this meeting was taking place on the morning of Friday, May 23, the hospital, still unaware of what was to come, released the following update for staff:

This morning we have some news to share with you. Last night, Public Health Chief Medical Officer Colin D'Cunha announced that four patients from St. John's Rehab have been classified as under investigation. Everyone who has been at St. John's Rehab between May 9 and May 20 are being asked to enter voluntary quarantine and contact public health in this morning.

Yesterday afternoon, we had a patient from St. John's Rehab brought into the Hospital's Emergency Department. The patient was brought in with another medical illness, and then transferred to Scarborough Grace. As an extra precaution, the Emergency Department has undergone a heavy cleaning in its resuscitation area and sent staff and physicians who had contact with this patient home.765

Anyone coming to the Hospital will be asked at the front door if they have been at St. John's Rehabilitation from May 9–20, and will not be permitted entry.

We are now reviewing medical charts of patients who have come to the Hospital from St. John's Rehabilitation during the above mentioned time.

Last weekend, we had some patients who were admitted and put on droplet/respiratory isolation. Public Health has reviewed these cases at that time, and along with other health officials they will be reviewing these cases in light of these new developments.

We will provide you with an update after 2 pm this afternoon.⁷⁵⁹

After the initial meeting with the Public Health team, hospital officials left the boardroom, leaving Public Health to review charts. The Public Health investigation team recalled that the infection control practitioners also left the room but returned with a number of charts and asked the team to review them. As one Public Health physician told the Commission:

They left us alone to review these charts after we had our meeting but the ICPs stayed, the infection control practitioners. And the next thing I knew they were carrying more charts into the room. Charts that we hadn't asked for. Names that I wasn't even aware of. And they were putting them in front of us, saying, could you please just look at this chart. We've always wondered about this patient.

^{765.} The St. John's Rehab patient referenced in the update was the patient who came to North York General from St. John's Rehab Hospital the night of May 22, and was intubated in the emergency department before being sent to Scarborough Grace Hospital. The staff and physicians working in the emergency department had not been notified of the SARS outbreak at St. John's Rehab Hospital and were not aware of the risks they faced or of the need to use protective equipment when caring for the patient. They, along with staff and physicians at Scarborough Grace Hospital, were understandably alarmed and angry when they later learned that there were SARS cases at St. John's Rehab Hospital. This story is told in the previous section.

^{766.} NYGH, SARS Update #42, May 23, 2003.

As noted earlier, infection control told the Commission that they were unaware of an outbreak of respiratory illness on 4 West or of an increase in deaths on the unit. When asked how this reconciled with the information from Toronto Public Health that additional charts, including charts of patients on 4 West, were brought in on May 23 for review, one member of the infection control team explained that the charts were charts of patients who had been readmitted to the hospital through the emergency department with respiratory symptoms:

Question:	Okay, the question then or what we are trying to clarify is before the morning of the 23rd, or on the morning of the 23rd, were there charts other than those requested by Public Health, or were there patients that you were concerned about on 4 West?
Answer:	The thing about 4 West is when I had said I didn't know anything going on on 4 West, I was to referring to patients that were on the floor leading up to then. I knew about patients being readmitted, who had either been there or were relatives of those patients and such. I honestly don't remember what other charts were in the room on this
Question:	When you say you knew about patients who had been there or had relatives, what was the
Answer:	Ones that were readmitted and such. Like the [Patient A family], [the O family], [Ms. N], I remember her having coming back to emerg My having not known about 4 West, that related to just patients who were on 4 West. Because I had mentioned that I can produce a list at any time of the patients who were on isolation in the hospital on their names being flagged in the Patient Care. And when I found the daily reports that we had run off, for May 20th, it didn't have anyone on 4 West. And that's what I was referring to when I said I didn't know about things going on, on 4 West.
Question:	Okay. So, other than these patients that you've mentioned, and this is what I am trying to understand, did you know about the cluster of respiratory illness on 4 West?

Answer:I knew about having come back into emerg but I didn't
know about a cluster ongoing, going on on 4 West, it
was only afterwards when everything was put together.

As noted above, included among those charts were those of the Patient A family members, Mr. O and his wife. Mr. O had been a patient on 4 West during May 2003. He was discharged from hospital on May 11, but was readmitted through North York General's emergency department on May 18. Mr. O's wife had also become ill and was also admitted through the emergency department, on May 20. Ms. N, the St. John's index case whose story is told in the previous section, was admitted to the 4th floor of North York General Hospital on April 28, following a knee replacement. After her discharge to St. John's Rehab Hospital, she developed fever, diarrhea and a cough. She was transferred to the North York General emergency department on May 9 and diagnosed with pneumonia. She returned to St. John's Rehab, where her condition improved, and she was discharged home on May 16, 2003.

Public Health officials told the Commission that while the charts were being reviewed and discussed, Dr. Barbara Mederski, the infectious disease specialist at North York General Hospital, was in the room, that she appeared familiar with these charts and that she offered her view to the Public Health team that these patients did not have SARS.

Dr. Berger told the Commission that as charts were brought in, things happened quickly and that it was clear fairly early that there was a very large problem:

- Question: And how did that happen [the charts being brought in]?
- Dr. Berger: I think they [the charts] were brought in by the ICP [infection control practitioner]. It is hard for me to recall. A lot of stuff started happening very quickly because as I recall, fairly early on, we realized there was a large problem and people started coming in and out of the room and charts were brought in and decisions started getting made. It was a kind of a rapid process. I just remember seeing a pile of charts on a counter and then we were asked to look at a couple more and then some names were raised as well. I don't remember if the charts were there for every name we were asked about.

Question:	And who was asking you about the names?
Dr. Berger:	The ICPs, infection control practitioners. I remember discussing the whole [Patient A] family at that point.

The Public Health team realized it was looking at a significant clustering of febrile respiratory illness associated with deaths, all on one small ward, 4 West. It was a very serious cluster of illness. As Dr. Wallington told the Commission:

It was May 23rd that we made this determination that SARS, unrecognized transmission of SARS was happening on 4 West in particular. Patient-to-patient, patient-to-visitor, patient-to-nurse, nurse-to-nurse, nurse-to-patient, and then eventually it just became so convoluted that we couldn't link people anymore. It was the ward. Because we were unaware of how large this outbreak really was, we were unaware of how many cases we were really unaware of. On May 23rd we decided to treat North York General as an exposure site. Early on in the afternoon, the cases that we were reviewing all came from 4 West, so there was definitely a clustering happening on 4 West. But because we didn't know if there were cases beyond 4 West in the hospital, we decided to call the hospital the exposure site. And that is when North York General Hospital was shut down on May 23rd.

The charts were not the only sign that something was very wrong. Also discovered at this time was another key piece of information that signalled that there was a serious problem on 4 West: the identification of illness among staff. As the week had progressed, more and more staff from the 4th floor had called in sick for work. As noted earlier, there was a breakdown in the system intended to monitor illness among staff: sick calls from staff working on the 4th floor were not reported to the occupational health department. Senior administration and those in charge of the SARS response had not been notified that there was a cluster of illness among staff, so there had been no followup or investigation into the staff illness. Although the number of sick calls had been increasing throughout the week, it was not until May 23 that Occupational Health became aware of the large cluster of illness among staff on 4 West. The Occupational Health Coordinator told the Commission that she reported the illness among staff to Sue Kwolek, co-chair of the SARS Task Force. Ms. Kwolek recounted how she learned about the cluster of staff illness that afternoon:

... sometime in the afternoon, the manager of occupational health and safety came up to the boardroom where the command centre was and she

said there are quite a number of staff on 4 West who are reporting in ill. And that's the first time that, as a member of the SARS management team, and it was me at that point, there was nobody else on the SARS management team there, that I became aware that there was an issue on 4 West.

Bonnie Adamson, Chief Executive Officer of North York General, told the Commission that she became aware of the Public Health meeting that morning but that it was not until later that afternoon that she learned there was a problem:

If I could just describe that day, in the morning [a colleague] and I were going to visit David Young, one of our MPPs, a regular visit, we took him all the sheets, everything that had gone on in SARS. And on the way out the door my secretary said to me, oh, by the way, [Dr.] Don Low is coming to the boardroom today. She had received a call from someone, and he's pretty important, maybe you should go into the boardroom on your way back, he's been on the TV. Maybe you should go to the boardroom. And I said, okay, I talked to David, and I came back, went to the boardroom and Dr. Low was there, all these Public Health people, Sue [Kwolek] was there, [Dr.] Barb [Mederski] was there, there were charts all over the place.

So I sat there and I listened for a while and I couldn't figure out what in the world is going on, more charts and more charts. And after an hour I left, I thought, well, I'm not contributing anything here, but I went straight out and I called Keith [Dr. Rose] and I said, Keith, I don't know what's going on, but there's something going on. So I went back upstairs to my office and he was in and out, trying to figure out, no one seemed to know what was going on in there. About three o'clock, Sue [Kwolek] called from down there and said, you've got to come right away, they're going to shut us down. So I gathered up Keith [Dr. Rose] and away we went and we were there, and the rest of that is a bit of a fog. We went from there to the boardroom. We had the Ministry of Health on the phone and something drastically had gone wrong.

The discovery of a large cluster of unidentified SARS cases among patients, visitors and staff took everyone by surprise. One member of the Public Health team described how what seemed like a simple review of a couple of cases turned into a surreal experience as it became clear that they had a large outbreak among patients, visitors and staff on 4 West: ... We traipse off to North York on Friday the 23rd, and we told North York, we're going to meet in the boardroom, be there at 11:30, we will review these cases to see if there is anything going on at all, thinking we'll be there about an hour and a half, and that was probably the most surreal day of my life, being in that place, that Friday, it was unbelievable. You are sitting in the boardroom and people are bringing these charts and you are looking at these charts and it became so obvious what was going on.

It was chart after chart, and while this was going on, health care workers were phoning up the hospital saying they had fever, health care workers were arriving back in the emergency department with fever, the head of the emergency department was coming in to us in the boardroom saying, what am I going to do, should I shut down the emergency department because we've got all these people coming in ...

To contain the outbreak, the hospital had to close. The first area to close was the emergency department, with the hospital closing a few hours later.

The notification of staff and the shutdown of the hospital commencing on May 23, 2003, was a huge task. A hospital the size of North York General Hospital could not stop on a dime, especially when it was full of ill patients who continued to need medical care.

Heroism Amidst Chaos

Although the hospital was closed to new admissions, the emergency department remained open to receive staff and patients who had been exposed to SARS. As well, those patients already in the hospital who were suspected of having SARS or of having been exposed to SARS, who could not be transferred out, had to continue to receive medical treatment. This meant that the front-line staff at North York General had to don protective equipment and provide care to possible SARS cases. These cases included patients already in the hospital as well as new suspected SARS patients, including staff, as they came to the emergency department.

One doctor who was not working that day recalled being paged by Dr. Keith Rose to come to the hospital that afternoon to help. This doctor stayed all weekend, seeing patient after patient, including the ill 4 West nurses who had been told to come to the hospital. As she told the Commission:

We just kind of looked at the list and basically, okay, you do this and I do this ... Then I just went see one after the other.

Emergency room staff and physicians worked long hours, providing medical care to those suspected of having SARS. Less than a week earlier, many had attended the May 20 meeting and had tried to convince senior management that SARS was still at North York General. But they put aside whatever anger or disappointment they felt when they learned they had been right all along, that SARS had never left, and once again they stepped up and put the health and well-being of others first.

Those nurses from 4 West who were not ill had to come to work over the weekend of May 24 and 25, until the unit was put on home quarantine, on May 26, 2003. They knew their colleagues were ill and they were frightened for their own safety. Unlike many of the emergency room nurses, the 4 West nurses did not have the experience of and confidence from having already cared for SARS patients. But they continued to come to work to care for the patients on their unit.

One nurse from 4 West who worked the weekend of May 24 and 25, 2003, recalled how afraid she and her family were, knowing she had to go back to work the next day, in the epicentre of the outbreak:

I remember going Saturday morning and I said to my husband, he was in the other room, and I said, I'm going to go, but I am so afraid, and I saw my husband's face and we both had tears in our eyes because I thought I was the next one to get it. I was just so emotional. I just felt so awful. I have to go in, I'm still standing here, I haven't got SARS – well, to me I didn't have SARS – but I thought I was going to be the next one, because all our nurses were falling down.

When she was asked by the Commission if she ever considered not going to work, she said:

I was one of the ones that could go in, to help my work. I think it's your duty to go in as a nurse, to go to the last, to the very end.

These are the heroes of SARS. It is a strong testament to the dedication and professionalism of the front-line health workers and physicians at North York General that amidst the confusion, uncertainty and fear of that day, they did what they had to do to provide care to those who were ill, among them their own colleagues. Without the commitment of physicians and nurses like those quoted above and so many others who worked the front lines and provided patient care, SARS could not have been successfully contained.

Closing the Hospital: The Eye of the Storm

Before SARS, it was unheard of in Ontario that a hospital the size of North York General would have to close at all, much less close as quickly as North York General did on May 23, 2003. The decision to close the hospital, although clearly necessary, had huge consequences for the hospital, its staff, its patients and the entire community. It was not a decision that was made easily or lightly. As one physician said:

So what would it do to the hospital is, it would devastate it, and it did. Closing the hospital, rightly or wrongly, it did devastate the hospital for several months, many, many months. And what it would do to the staff, the same thing, essentially, it would be huge, this was a huge, huge decision that had wide-reaching ramifications for thousands of people ...

People were very frightened, they were concerned about their families, their livelihood, their income, their financial security. They were concerned about their colleagues, their future, that was a very devastating thing. There were repercussions and the multiple fingers of events that had to unfold as a result of that are just phenomenal. There were people there all night, all weekend, trying to get things sorted out.

To close the hospital, many decisions had to be made, each one important and with far-reaching consequences. And, as the above-quoted physician pointed out, the hospital had to close but keep running, as had it to care for patients but at the same time ensure that staff were safe:

We had to close it but keep it running, because we still had patients there and we had to transfer patients out and we were bringing patients in, and we were trying to keep people coming to work because we needed them to come to work, so that we wanted to do that in a safe way. And from what we knew, we didn't know everything about SARS at that point, so it was a very difficult balance to maintain, to try and get people to keep coming to work, which is the whole issue with work quarantine, the same thing, home quarantine versus work quarantine. The only reason that we were work quarantined is because they needed us to work and we needed to look after the patients. So we needed people to come in and maintain

the support services and keep doing their jobs, but at the same time we wanted to protect the staff.

This physician described the challenges as they tried to close the hospital but keep it running for the patients who had to remain inside:

I remember sitting in at the boardroom table with Bonnie Adamson and all the senior admin people, and Public Health and most of the clinical chiefs and support staff, and I think it was Public Health that told us, I believe it was at that meeting, that they were going to close everything and quarantine everybody. And we were discussing the wisdom of the quarantine and who should be quarantined and then when it was finally, the clinicians all had their opinions about that and what it was going to do to the staff in the hospital. Then after it was decided that that was the way it was going to be, then we were talking about how we were going to notify people and call people and distribute the workload and how this was going to be done. And we each had our own separate areas of responsibility ...

Although the hospital had to close to new admissions, it also had to ensure that patients who would otherwise come to North York General got the medical help they needed. Dr. Tim Rutledge, Chief of Emergency Medicine, told the Commission that closing the emergency department required huge public notification and that they also needed to ensure that patients who had been at North York General, and had therefore possibly been exposed to SARS, had a place to go to get medical attention:

[The emergency department was] completely shut down to the public. Huge public notifications, but we kept it open for staff and patients of the hospital that were returning, select patients to return. So patients that may be having difficulty accessing care elsewhere because they'd been a North York General patient. Any patient that was even concerned they might have SARS because they'd been at our hospital, we saw. Now, we didn't see that many patients but we were open for those patients.

Alternate care arrangements had to be made for ill patients who would not be able to obtain treatment within the hospital. A patient who had cancer still needed treatment, regardless of what was happening at North York General Hospital. As one physician told the Commission:

Everything got shut down. Even cancer patients that we had scheduled for the following week were put on hold and we were all scrambling to get them distributed to other centres to get them looked after. Because no new admission was going to come in, unless they were a SARS patient or our own staff.

Another important responsibility was notifying staff. This included those who were working in the hospital, those who were off ill and those who were off work but were not known to be ill. The scope of the outbreak was unknown. Any one of the health workers could have been exposed. Those who were at home could be exposing their families. Those who were in hospital working unprotected could be exposed to SARS that very day.

The task of notifying staff and identifying patients and visitors was daunting in a hospital that employed thousands of people and saw hundreds of people enter its doors on any given day. One physician who was involved in closing the hospital and notifying staff described the enormous task that lay ahead of them:

It was a monumental task to try and contact everyone that had been in that hospital that day and the previous eight days. Just in my own little world, the ICU, we have over a hundred nurses, just nurses. What about all the physicians, all the cleaning staff, all the dietary staff, the RTs [respiratory therapist], the physios, the occupational therapists. When you think of all the people that had come in contact with just our little unit, 24-bed unit, it's huge, and who was going to do all that calling. Myself? The unit manager? A couple of our assistants? We recruited people, we got volunteers, I think everybody did the best they possibly could but it was not comprehensive because it was impossible to be comprehensive, doing the notifications. It was just impossible.

At 5:10 p.m. on May 23, the hospital released an update to staff in the hospital:

Further to our update this morning, Ministry of Health officials, Toronto Public Health and Dr. Donald Low, Chief Microbiologist at Mt. Sinai, were on site.

We have patients with undiagnosed respiratory symptoms including some health care workers. They are being assessed as "persons under investigation" until a more definite diagnosis is determined.

We have decided to undertake extraordinary precautionary measures and the following steps are being **implemented immediately at the** <u>Leslie</u>

site only: [emphasis in original]

- No transfers out
- No admissions
- No volunteers
- Full barrier precautions
- No visitors with the exception of:
 - One parent will be permitted to visit a child;
 - One person can accompany an expectant mother;
 - One person will be permitted to visit a critically ill patient and palliative patients.

We are still accepting patients for obstetrics (Labour and Delivery), but have closed Emergency Department to walk-ins and ambulances.

The Branson site, Senior's Health Centre and Philips' House are being treated as separate institutions. They are to continue business as usual, but be vigilant in monitoring their environment. There will be no transfers between any sites.

The management team continues to work on this throughout the evening with Toronto Public Health and Ministry of Health to obtain additional information regarding our situation and status.

Senior Management will be walking around to speak with staff with this information and to keep you updated. We will provide you with further information as it becomes available.

The Ministry of Health and Long-Term Care will hold a press conference tonight at 7:00 p.m. Bonnie Adamson will represent the hospital at the press conference.⁷⁶⁷

In a communication disaster, details of the outbreak that conveyed the situation as much more serious than what was reflected in the 5:10 update to staff would be announced at the press conference at 7:00 that evening, before the hospital had told staff. Staff would learn from the news that approximately 25 people were under investigation for SARS the evening of May 23, many of them health workers.

^{767.} NYGH, SARS Update #43, May 23, 2003, 5:10 p.m.

It is difficult to imagine the chaos and stress at North York General that day. One member of the Public Health team tried to describe to the Commission what it was like at North York General on May 23. He likened it to the eye of a storm:

... All of a sudden you have this boardroom full, all the hospital administrators were there, and people asking her questions, "What are we going to do?" "Are we going to close obstetrics?" It was like this whole thing was just rolling out in front of us, and trying to get hold of Colin [Dr. D'Cunha] on the phone and couldn't get anyone in Public Health, at the Ministry, and so finally, early in the evening, we decided we're closing the emergency department, and then later in the night we closed the hospital. It was ridiculous. It was so bizarre, it was like you are in the eye of a storm.

There is no doubt that the task of shutting down the hospital and notifying staff was huge. Compounding the problem was the fact that no one had ever prepared for such an event. There was no system in place to be kicked into gear, to ensure rapid notification to staff, both in the hospital and out. But while the enormity of the task may explain some of the problems in notification, it does not explain them all. Some key areas in the hospital were left out of the communications loop, not just for a few hours, but in some instances for days.

Notification of Staff in Hospital

After May 23, when the story of the discovery of the second outbreak began to spread among hospital staff, it became known that Public Health and Dr. Low had been on site since the morning reviewing files and that senior management had met with Public Health officials and Dr. Low. Post-SARS, many questioned why they didn't learn about the outbreak sooner, and why they weren't protected sooner.

One nurse questioned why it took the hospital so long to warn them that something was wrong:

On Friday, May 23rd, [Dr.] Donald Low and an entourage of people were in our hospital walking through the halls, and at 5:00 o'clock we were shut down. Why were we not warned that day? I just feel there was very poor communication ... The way I see it, they back up that, they did this, they did that. But it's the timely fashion in which they execute these things and how long it takes them to make the decision to act upon

something. They are always way too late.

One nurse from 4 West who worked on May 23 and was later admitted to hospital with SARS told the Commission that she had no idea that there were concerns about SARS in the hospital on May 23. She worked a day shift, without protection, on a unit that we now know was full of SARS. She finished her shift, went home and was unaware of any concerns about SARS. Later that weekend she developed symptoms, and she was admitted to hospital the following week. While in hospital, she learned that the outbreak was identified on May 23, and she wondered why she and her colleagues weren't told that day. She said:

I found this out after, on the Wednesday, when I was admitted. I spoke to one of my co-workers and she said they suspect there was SARS on that Friday. I said, well I worked the Friday [May 23rd] and nobody told me. It was hush-hush, hush-hush.

Another nurse worked the day shift on May 23, and left for home mid-afternoon. She worked on the 4th floor, without any protective equipment. When she left for home, she had no idea about the outbreak on 4 West and did not learn about it until she received a call at home the following day, Saturday, May 24, telling her she was on home quarantine. As she said to the Commission:

I was surprised it took so long for them to actually close the floor [the 4th floor]. When you have this many people sick on the unit you want to investigate. If something is being spread you want to close the unit immediately ...

Retrospective accounts of when staff were told to reinstitute precautions vary. Some staff who worked on 4 West reported that between 3:30 p.m. and 5:00 p.m., they were told to begin using protective equipment again. Other staff suggest it was later.

By May 22, 2003, Public Health officials knew that they had a SARS case with a link to North York General. They were also concerned about the Patient A family cluster, a family whose patriarch had died on 4 West on May 1 and that had four family members in hospital with respiratory illnesses. Public Health officials were coming to the hospital the following morning to try to identify the source of exposure, as they believed Ms. N to be the index patient of the outbreak at St. John's Rehab Hospital. The night of May 22, 2003, hospital officials were notified that Public Health was coming on site the next day to review files in connection with the St. John's outbreak.

But front-line staff were unaware of these developments.

Although no one knew that there was a large undetected outbreak in the hospital, there were concerns about how Ms. N had gotten SARS and concerns about whether Patient A and his family had SARS. And although Ms. N was no longer in hospital, and although Patient A had since passed away and the Patient A family members were in isolation, being handled with precautions, if these cases were SARS, no one knew the source. As noted earlier, Toronto Public Health told the Commission that the link between Ms. N and Patient A did not become clear until they were on site reviewing charts on May 23. In the meantime, there was one case positively identified as SARS who had been at North York General. But there seemed to be no attempt to investigate or ascertain where exactly she had been in the hospital and to ensure that staff working in that area were put on alert, and no one took a precautionary approach and advised them to don protective equipment until they knew what they were dealing with. There was no system or standard or protocol in place to require this precautionary approach. There should be.

Once Public Health arrived on the scene, they knew very soon that something was very wrong. One member of the investigative team said that within an hour of their arrival it was clear that there was a big problem. Hospital representatives were in the room while files were being reviewed. While there are differing estimates of precisely when it became clear that there were unidentified cases of SARS in the hospital, we know that the chart review began at 11:00 a.m., and that the problem became clear fairly early. Dr. Berger told the Commission that it became apparent that there was a problem very soon after they began reviewing charts:

Question:	So you start reviewing the charts. When did it become apparent that there was a big problem?
Dr. Berger:	Very soon upon review, because Patient A had symp- toms that were consistent with SARS and I think that at that point [another patient name] chart had been brought in and it seemed apparent that he had symp- toms consistent with SARS. It became evident fairly soon that there was transmission going on there and that there was a problem. I don't recall the time frames, but it didn't take a long time to figure it out.
Question:	Was it in the afternoon, before supper, when?

Dr. Berger: Oh yes, we started at 11:00 and it happened very quickly. I think it was mid-afternoon when we closed the hospital, so it had to have happened between 11:00 and 3:00.

Toronto Public Health officials told the Commission that as part of the response plan put into place that afternoon, they told the hospital to reinstitute precautions. Public Health understood that it was the hospital's responsibility to ensure that that was done and that the information was communicated to staff.

By approximately 2:00 p.m., the cluster of ill staff was being reported to the hospital's SARS Task Force. By 3:00 p.m. the hospital was being told it had to close. One member of the Public Health team recalled that they wore masks while in the board-room on May 23. Although they could not recall at what time they put the masks on, they thought it was before the decision to close the hospital at 3:00 p.m.

Post-SARS, the failure to effectively communicate with staff on May 23, 2003, about the outbreak, the risks they faced and the need to protect themselves has left some health workers feeling betrayed and angry. Some staff told the Commission that they thought that Ms. Adamson and other senior officials knew about the outbreak that morning but that they did not tell staff about it as the day unfolded.

The Commission accepts the evidence of Ms. Adamson that she was unaware of the outbreak until the afternoon of May 23, 2003. The Commission finds that there is no evidence that hospital officials deliberately kept information from staff about the outbreak, or that they withheld notifying staff about the outbreak for any improper purpose. The Commission further finds no evidence that senior hospitals officials deliberately put staff at risk.

The Commission does find, however, that the health care system was unprepared in the event that it became necessary to close a hospital in the face of an infectious disease outbreak. The systemic failure to plan and prepare for an infectious disease outbreak in hospitals meant that staff were not informed in a timely manner that there might be unidentified cases of SARS in the hospital. In particular, the Commission finds that a system should have been in place to ensure that the staff on 4 West were told sooner about the possibility of unidentified SARS cases on the unit and that precautions should have been reinstituted earlier.

The problem was that in all the chaos, while decisions about what to close and how to close were being discussed, staff in most areas of the hospital, including 4 West, were

working without protective equipment. By the time the first update was issued at 5:10 p.m., some staff had worked an entire shift that day without wearing any protective equipment. Although North York General made efforts on May 23 to notify staff of their danger, the warnings in some cases came too late and they did not reach all staff in a timely manner.

Even if the links were not clear, even if the decisions on whether to close the hospital and how to go about doing it were unresolved, and even if there was great uncertainty about the scope and the size of the outbreak, front-line staff should have been told of the risk the minute it was reasonably suspected. Even if this meant overreacting or reinstituting precautions temporarily, the protection of front-line staff had to be the first priority. As one nurse said:

Don't you think the CEO should announce there is a problem going on in emerg, we're investigating into it, there is suspicion that maybe SARS has been spread ...

As noted above, Ms. Adamson told the Commission that she did not become aware of the problem until mid-afternoon. The Commission accepts her evidence on this point. But other hospital officials were in and out of the room. Charts were pulled, and the Public Health team reviewed files throughout the morning. The fact that the situation was not made clear to Ms. Adamson earlier did not alter the risk to staff or the need to ensure that they were protected.

This is not to say that hospital administrators, physicians or infection control involved in the May 23, 2003, meetings were unconcerned about staff safety. The Commission does not accept any suggestion that any one of these individuals would knowingly and intentionally put staff, patients or visitors at risk. But the hospital, like most hospitals in Ontario, was unprepared for the news on May 23. Although it had instituted precautions and had been providing care to SARS patients during SARS I, it had never had to ramp back up on a moment's notice.

In the chaos of the day, front-line staff were left in the dark far too long, and were left unprotected. One clear lesson from SARS is that whatever crisis unfolds, whatever decisions have to be made, the number one question that must always be asked is, are measures in place to ensure the safety of staff, patients and visitors? Until that is done, all the resources of an institution should be focused on the single goal of protecting those within the institution. A key part of this is communication with staff. Unless staff know where there is a risk, they cannot protect themselves.

Hospitals must plan for the worst. In the wake of SARS, we now know that a hospital may have to close its doors suddenly, when it is full of patients and with staff on the front lines who must continue to provide patient care. There must be clear policies, tested and evaluated, that ensure that if and when it becomes necessary to close a hospital or to institute precautions, all staff are notified quickly and steps are taken to protect staff at the earlier possible opportunity.

When dealing with an infectious disease, one day can make a huge difference. An hour can make a difference. Had Mr. T, the first index patient at the Scarborough Grace Hospital, been isolated immediately under precautions, the first outbreak of SARS would probably have been stopped in its tracks, as it was in Vancouver. Mr. T's exposure to staff and other patients within the first 24 hours of his admission to hospital had profound consequences.

These examples provide compelling evidence that a few hours of exposure by an infectious patient can spark an outbreak. Every moment that staff at North York General worked without protection put them at risk.

The Scramble to Reinstitute Precautions

As news of the outbreak spread and staff were directed to reinstate full barrier precautions, they faced the challenge of gathering equipment and reorienting themselves to the proper procedures for the application and removal of the equipment. Because precautions had been relaxed earlier in May, some units did not have an adequate supply of the necessary protective equipment. For many, the situation seemed chaotic and confusing, which only added to the level of anxiety among staff.

The 4th floor, the epicentre of the second outbreak, had not previously been considered a high-risk area for SARS. The unit had not previously been used as a SARS unit, and it was not expected that the nurses on the unit would be caring for SARS patients.

As noted earlier in the report, many of the nurses from 4 West told the Commission that they received no training or education with respect to the use of the equipment or the proper isolation techniques prior to May 23, 2003. They had not been fit tested, and a number of them later learned, when they were eventually fit tested, that they had been wearing a respirator that did not properly fit their face. Although 4 West was staffed by senior, experienced, knowledgeable nurses, they had received no special training or education for handling a SARS case. Although safety training and fit test-

ing were required by Ontario law, that requirement was ignored by, and in fact unknown to, most Ontario hospitals.

Imagine, then, the fear of knowing that you had to enter a room and provide care for a SARS patient, worried that you might not have everything you needed for protection and having learned how to apply the equipment only moments before entering the room. With practice comes familiarity and confidence, a comfort that these nurses did not have at this time.

One 4 West nurse who worked in the days after the second outbreak was discovered described the confusion as she tried to gear up to provide care to what was by then known to be a suspect SARS case:

They were slowly collecting equipment. The UA [unit administrator] showed up on the ward early in the morning ... She was there trying to tell us how we were supposed to dress to protect ourselves and how we handle all this isolation. I did isolation downtown many years ago but they never had any reorientation on it ... They were trying to direct us. First they were in the change rooms telling us, now we have to go into this room and put on the scrubs now, this was all happening just on the Sunday morning ... But they first spent at least a good two, three hours finding all the proper equipment for respiratory isolation of a SARS patient ... We needed booties, we needed caps, we needed still more things than just what they were doing on Saturday evening.

One 4 West nurse worked on Saturday, May 24, 2003, and had to transfer a patient to the SARS unit. Another health worker involved in the transfer wore a Stryker suit, which afforded more protection than the protective equipment the nurse was wearing. The nurse had never used a Stryker suit before but thought it seemed like a good idea to have the most protection available:

When I went to work, I remember saying there's an outbreak and we have to wear the PPE and also I remember I had to transfer a patient to the SARS unit. I just came on shift and I was told that this patient had to be transferred, they weren't doing well ... An RN had to go with the patient. The RT was there and the doctor was there and because I guess her sats were low so they were there trying to titrate the oxygen and whatnot, seeing there would have been a problem. And when we were ready to transfer, they said an RN has to go.

So I was basically going to go with my my yellow gown and mask and with the PPE basically. Then I saw the RT all dressed up in this white suit. So I asked him where did you get that from? And then he asked me, do you want one? So he went somewhere and got one for me, a Stryker suit, so I wore that on top of my PPE and so I had that to transfer the patient to the 8th floor.

She had received no training in how to use a Stryker suit and had never seen one on her floor before this. Whether or not the Stryker suit was necessary in those circumstances is irrelevant. It must have been both confusing and frightening to observe varying levels of protection without clear training to educate staff on how and when to use the equipment.

Another 4 West nurse who worked the entire weekend described the fear and confusion as staff tried to help the patients but also to protect themselves:

Every day you'd go in and it was just like a war zone, you thought, uh-oh, you're next. It was just crazy. At that point I know they made us take, get out of our own uniforms and put on the hospital uniforms and to put the high-risk, you've got your goggles, you had to wash in between every step, and that was the directive from Saturday, that Saturday and Sunday, and then Monday was the horrendous day. We were just trying to get people home or get them out of our unit, the ones that were okay to leave.

And so around 7:30 that evening they told us okay. There was only three of us left on the floor and then the SARS nurses came in like robots in full gear, they had their helmets, everything on. We didn't have the helmets or anything, we just had our masks, our goggles, our gloves. They said okay, you go home, you're staying home, you are quarantined now, don't leave the house until you get further notice ... That was the Monday evening, we were given a box of masks to take home and just not to leave our house, and I was worried about my family too but they said they should be okay, just wear a mask and use your own utensils, your own towels, not to sleep in the same room as my husband, they gave us those directives and that was the scariest time of my life.

What makes this nurse's story even more remarkable is that she is the nurse quoted earlier in this report who said she never once thought about shirking work that weekend, even though she was terrified of becoming ill herself or of infecting her family. This shows the danger of limited training in the use of personal protective equipment. Infectious diseases like SARS do not respect boundaries within hospitals. Infectious diseases can spread undetected in hospitals, and an unidentified case of SARS or any other infectious disease could end up anywhere in a hospital.

As noted earlier, North York General was not the only hospital in Ontario that had allowed infection control standards to decline. Nor was North York General the only hospital to use the N95 respirator without proper training and fitting. Unfortunately, in a major systemic flaw, few in the health sector were aware of requirements under the *Occupational Health and Safety Act* and Health Care Regulations 67/93 that staff must be properly trained and fit tested to use the N95 respirator.

Post-SARS, we now know that strong programs are required throughout the health system to promote and maintain safe work environments: both strong infection control programs and strong worker safety programs. Patient safety and worker safety go hand in hand. One does not exist without the other. Hospitals must support resource programs to provide regular, mandatory training for all front-line staff in proper isolation techniques, precautionary measures and the use of personal protective equipment.

The Ministry of Health and Long-Term Care and the Ministry of Labour must work together to hold health care institutions to the highest standards of patient and worker safety, to ensure that as the memory of SARS fades and as budget pressures loom, infection control and worker safety standards are maintained. Much like public health, if we do not provide the resources necessary to address the gaps identified during SARS, if we allow the system to slip back to the way it was, when the next health emergency comes, we will see the same problems that arose during SARS. This time, however, there will be a greater risk that if workers feel that they are unprepared and unprotected for the risk we ask them to face, they will decide not to work.

Notification of Sick Staff

On May 23, 2003, it was finally brought to the attention of senior administration, occupational health and those in charge of the SARS response that there was a problem of illness among staff. With the discovery of unidentified SARS among 4 West patients, it became likely that the nurses who were sick from that unit were sick with SARS. It was no coincidence that there was a cluster of ill patients and a cluster of ill staff, both from the same unit.

Staff who had been at home sick had to be brought to the hospital to be assessed for SARS. Occupational health and supervisory staff from 4 West began to call those nurses they knew were at home ill, to tell them to come to the hospital for assessment. But the nurses were not told that it was for assessment for possible SARS.

All the nurses interviewed by the Commission who were ill at home with SARS in the days leading up to May 23, 2003, reported that they were not told that they were being brought in to be assessed for SARS or that they were going to be admitted. Post-SARS, many are angry at this lack of communication, and question why they weren't warned what was happening. As one nurse said:

Occupational health calls me, the nurse from occupational health called me and she said a lot of you girls have called in sick in the last one week, at least six or seven of you all, and that Dr. Mederski, she's the infection control doctor, would like to come to assess you all, I was told to assess us. So I dropped everything and then my husband drove me there and I went there and I saw the rest of my colleagues sitting outside the 8th floor. Shortly after that the occupational health nurse came and said you all are going to be admitted for probable SARS. I was very angry. Somebody could have at least said something to me or given a hint that that's what they were calling us for.

This nurse told the Commission that she had no idea what was to come. She said she had just purchased a meal and that she had told her husband to save it, that she would finish eating it when she came back. Her husband drove her to the hospital without a mask, both of them completely unaware that she might have SARS. She described seeing her colleagues and being admitted under investigation for SARS as a "total shock." She also described to the Commission how frightened and angry she was, worrying whether she had infected her family. She said she struggled to tell her family what was happening, knowing that she had possibly exposed them to SARS, and how she especially worried about her husband, who had had health problems before SARS:

I was so angry about whether I had infected him [her husband]. It was a rollercoaster, mentally, whether I had infected him and my [child] who's at home ... So I was admitted and it took me a while before I could even take the phone and call my husband and tell him what happened ... It was a very difficult year for us, and time, and I was just going crazy thinking about my husband. I thought I could have infected him and he could die. And it was a rollercoaster, not only thinking about him, and then me

being in that isolation room, sitting there, being a nurse and knowing that SARS is a new disease and they really don't know how to treat us ... Mentally it has affected us a lot, sitting down there in that room thinking, am I going to go home alive. And I worried about my family too, at the same time, have I infected them.

Another 4 West nurse had been off sick that week, as she had been ill since May 18. She had gone to see her family doctor on May 21. Her family doctor had sent her to the emergency department at the Branson site, but she was sent home, as she was thought to have the flu. She recalled being contacted at home the afternoon of Friday, May 23, 2003, and being told to come to the hospital:

Answer:	So we came home [from the emergency department] but my symptoms were present and even worse, I could- n't sleep and I couldn't eat. I remember I was crying and my children, and my husband were staying near me. Nobody called me from work, nobody asked me how I was doing. Just Friday, May 23rd, my manager called me from my floor and she said I am supposed to come to the hospital. So I remember I came around three or four o'clock.
Question:	Did she tell you why you were having to come in?
Answer:	Yes, I asked her but she said, don't ask me, just come.
Question:	Did she say that you had to wear a mask to come to the hospital?
Answer:	No. When I came to the hospital, they gave us every- thing, masks, hat, shoes, gown.
Question:	How did you get to the hospital?
Answer:	My husband drove me, by car. So I was waiting there, all of us in the hallway, all of us. It was scary, you know, to look, I don't know, the people were very sick, they are just lying down and not talking, not anything, but we were waiting there in the chairs

As noted earlier in the report, the unit administrator for 4 West was unable to be interviewed by the Commission and was therefore unable to provide her perspective of what occurred on May 23.

Another 4 West nurse who had been off sick prior to May 23, 2003, had gone to her family doctor to obtain a referral for a chest x-ray. No one had contacted her from the hospital while she was off sick. She did not know that a number of her colleagues were also ill. When she returned home that afternoon, she had a message to call the occupational health department:

So I went to get a referral for the chest x-ray and unfortunately, the lab was closed, so I had to come back Saturday. So I have the referral, I went home and [her child] said, Mom, occupational health called, and they said you have to go report to North York General to see Dr. Mederski. And so I phoned North York General, the occupational health department, and I said, can I please go to Markham Stouffville, which is closer? They said, no you have to come here and see Dr. Mederski. So I went, my husband drove me. And then when I was there, they didn't tell us that I would have to stay in the hospital. I mean, just to see Dr. Mederski and go, she says go to the 8th floor. So I went to the 8th floor, I was gowned and everything now at the entrance. And they said, just wait for somebody to open the door. I had my cellphone with me in my bag. But I was waiting very long at the door and nobody was opening it and I was gowned. I was sweating and everything.

So I phoned the unit, 4 West, and one of our colleagues was in charge. I said, what's happening, can you phone them inside? Then she tried to phone and finally, by chance, there was a lady going in there. The door opened so I went in and to my surprise, in the waiting room, some of us were waiting. Some of them were already in. Nelia Laroza and her son were already in, were already admitted. And I don't know who else was admitted ... I think there were four of them and the rest of us were still waiting. So, are you here too? Why are we coming here? So that night, I think I was admitted around 1:00 a.m. I had told my family, my sister, my husband, I will phone you to come and pick me up, not knowing that I would stay there. And I stayed there for 20 days.

When her husband drove her to the hospital, neither of them was wearing a mask and they did not know that she was going to be assessed for possible SARS.

Another 4 West nurse who had been off ill that week reported that when she received the call that afternoon to report to the hospital, she too had no idea she would be admitted and she did not know that she was going to be assessed for SARS. She took a cab to the hospital. Neither she nor the cab driver wore a mask.

Toronto Public Health told the Commission that when the outbreak was identified on May 23, they understood that the hospital would notify ill staff that day and have them come to the hospital to be examined for SARS. Toronto Public Health understood that the occupational health department at the hospital would be contacting the ill staff.

The occupational health coordinator was asked by the Commission whether there was a script for calling the ill nurses and why the nurses weren't told they were coming to the hospital to be assessed for SARS:

Question:	Post the 23rd, was there an investigation into what happened?
Answer:	I don't know about an investigation. I know that I became aware about 2 o'clock, well, I think [a colleague] told me a little ahead of time, but there was a meeting at 2 o'clock with the Committee upstairs, and I sort of reported to them, people had been phoning in sick with flu-like symptoms. So it was decided at that point to call them all back and have them come in for assessment and admission, which I did.
Question:	And at that point in time, was it clear or were you aware that these
Answer:	We were suspicious, yes.
Question:	The staff were phoned, and was there a decision as to what they would be told, was there a script provided to you? Was that discussed in the meeting?
Answer:	Not really, we were just told to call them and say, you know, "we're concerned and we want you to come in. Dr. Mederski will see you and make an assessment and you may be admitted as required." I think everybody at that

SARS Commission Final Report ♦ Spring of Fear *Guangdong to Scarborough Grace Hospital*

	point kind of thought that they were probably SARS.
Question:	And who was making the calls?
Answer:	I was. Well, myself and the Occ. health nurses. And I think that was a Friday as well.
Question:	To your recollection was SARS mentioned in the tele- phone call?
Answer:	I can't recollect.
Question:	Did you recall if you told them that there were many of them that were sick, would they have been aware that their colleagues were sick?
Answer:	I didn't make them aware because that is a confidential thing, but I think they had been talking to each other.
Question:	Well, actually, one of the things that has become pretty apparent is that staff that had been called in on the 23rd, in fact almost all of them complained that when they came in they actually didn't know they were coming in as a potential SARS case, they didn't know that their staff colleagues were sick. So what happens is, they get a phone call, they come in, they show up and they see all their colleagues sitting in a waiting room outside 8 West and that that was very shocking to them
Question: Answer:	apparent is that staff that had been called in on the 23rd, in fact almost all of them complained that when they came in they actually didn't know they were coming in as a potential SARS case, they didn't know that their staff colleagues were sick. So what happens is, they get a phone call, they come in, they show up and they see all their colleagues sitting in a waiting room outside 8 West and that that was very shocking
	apparent is that staff that had been called in on the 23rd, in fact almost all of them complained that when they came in they actually didn't know they were coming in as a potential SARS case, they didn't know that their staff colleagues were sick. So what happens is, they get a phone call, they come in, they show up and they see all their colleagues sitting in a waiting room outside 8 West and that that was very shocking to them
Answer:	apparent is that staff that had been called in on the 23rd, in fact almost all of them complained that when they came in they actually didn't know they were coming in as a potential SARS case, they didn't know that their staff colleagues were sick. So what happens is, they get a phone call, they come in, they show up and they see all their colleagues sitting in a waiting room outside 8 West and that that was very shocking to them That was very shocking, that would be.

Answer:	I don't know how that happened, because my under- standing was that they were coming in to be assessed. I didn't know they would all meet up together.
Question:	Well, was it communicated to them that they were coming in to be assessed for SARS?
Answer:	I believe, I don't know if I mentioned SARS but I said they needed to come in for assessment because we wanted to rule out, you know, it's so hard to remember now.
Question:	Sure. And you know, certainly not looking to blame anybody but as far as a lesson learned, is there a way to improve on that communication. I appreciate there are patient confidentiality issues, but you can understand if you're a nurse and you get a call and the call is: "I understand you are sick, would you come in for assess- ment," you might come to a different conclusion if you understand that there are ten of your colleagues who are also coming in for assessment. Is there a way to bridge that?
Answer:	Yes, a couple ways, I could probably say, we've had a number of sick calls from your unit and we want you to come in for assessment, along with some other of your colleagues.
Question:	Did you develop a script as time passed for contacting staff who were potentially exposed?
Answer:	Well, when we put the 4 West staff on home quaran- tine, yes. We just need to know if there were signs and symptoms that are applicable, and they knew we would be calling. Because we went up and we had a chat with the staff and told them what the expectations were going to be.
Question:	Okay. So is it fair to say that when you were phoning the staff on that day on the 23rd, you were just really

	going off the top of your head and that you had been given no specific instructions about what to say, you were just using your best judgment.
Answer:	No, no, in fact I thought they were just coming in for assessment and then I went back up and they said, no, no, no admissions.
Question:	And that was the other thing is a lot of them said they came ill prepared to be admitted. So your understand- ing was they thought they were going in to be assessed.
Answer:	Yes, and then they said, admission, so it was tough.

As noted above, all of the ill nurses who spoke to the Commission said they were unaware that they were going to be admitted and they were unaware that they were going to be assessed for possible SARS. Simple things like being open and clear with ill staff and notifying staff who were at home and may have been exposed were missed in the chaos and confusion of the day.

The lesson from SARS, learned through the pain and suffering of those nurses from 4 West who arrived at the hospital completely unaware of what was to come and shocked by the discovery that they and many of their colleagues were being admitted for treatment for SARS, is clear. Communication with staff must, above all, be open, forthright and clear.

Notification of Staff at Home

When the outbreak at North York General was identified on May 23, 2003, one of the things that became critical, in addition to notifying staff who were in the hospital, was notifying staff who were not working that day but were at home on a scheduled day off. Because there were so many ill patients, staff and visitors, no one knew where SARS might have come from or where it might have spread. Until all the cases and contacts were identified, any employee who had worked at North York General could have been exposed to SARS, either through an ill patient, a visitor or a colleague.

Hospital administration worked very hard to contact staff. Dr. Rutledge described how he and others worked until the early morning hours, phoning doctors and nurses to let them know they were on quarantine: Later that day [May 23], I guess it was determined that North York General was the source of the St. John's outbreak, and by 5:00 p.m. it was determined that we, all of the members of our hospital community, were to be put on work quarantine. So from 5:00 p.m. until the wee hours of the morning, I was phoning docs and nurses, a number of us were phoning and saying, you're on work quarantine, and explaining to them what work quarantine was.

Hospital officials and managers were aware of the importance of contacting staff and keeping them informed of what was happening. They sent updates via email, there was a press release and efforts were made to contact staff by telephone. Despite these efforts, many health workers told the Commission that they did not get notified about the outbreak but heard about it through colleagues or on the news. They had no idea what their risk was or whether they had put their family at risk simply by being at home.

One nurse who worked on the SARS unit reported that she was not contacted by the hospital to advise her about what was happening, and that she heard about it on the news on Saturday afternoon:

And on that famous Friday, when we were all put into quarantine, more than half of us were not even called to inform us of the quarantine. So a lot of us exposed the community prior to finding out on the news. I never got called. I was driving, Saturday afternoon I was driving home and I heard it on the news. They just said there were too many people to call ...

Even some of the nurses who worked on 4 West, an area that was of particular concern on May 23, were left out of the communication loop. On May 23, it became apparent that one of the key areas for potential exposure to SARS was the orthopedic floor on 4 West. That being the case, one would expect that the staff working in this area would receive priority in respect of focusing efforts at notification. But not all the nurses who worked in 4 West were notified of what was happening. In the all the rush and confusion of this frantic activity, an emergency procedure for which there was no plan and no experience, many of the nurses who had been working on 4 West but who did not happen to be working when the news broke in the hospital were not contacted. This meant that those nurses who were not contacted went about their normal day-to-day lives, in contact with their family and others, potentially putting them at risk, until they learned of the outbreak, to their surprise, through rumour or the media.

One 4 West nurse who had worked the week of the 19th recalled hearing about the outbreak on May 23 on the late-night news. She had not been feeling well and had gone to hospital that day but was sent home. She recalled having to call the hospital to find out what was happening:

I saw on the news that my hospital had been closed, so I checked my temperature and it was 39, so I called my floor and one of the girls told me that a bunch of people I work with were already in emerg and I should go into our hospital, so I drove up to our hospital.

One nurse who had worked on 4 West on May 22, 2003, also recalled hearing about the outbreak on the news. She had worked without protection in the unit now known to the hospital and Public Health officials to be an area where there were previously unidentified cases of SARS. Despite her obvious potential exposure, no one contacted her to advise of her risk and to give her direction on what to do and how to protect herself and family. As she recalled:

On the 24th, I heard the news at six o'clock in the morning, I heard the news about the SARS outbreak in North York. Anybody who was in from 13th to the 23rd, had been quarantined.

Another 4 West nurse who worked May 22, 2003, told the Commission that she learned about the outbreak when she went to work on May 24:

Question:	Do you remember when you went in on the 24th, do you recall if you aware that SARS was back by that point? Or did you learn about it when you went into work?
Answer:	Learned.
Question:	And how did you find out about it?
Answer:	I walked into the unit.

Another 4 West nurse who worked May 22 was not contacted and told about the outbreak until Monday, May 26, at which time she was told she had to go into quarantine. She told the Commission that no one from the hospital contacted her between May 22 and May 26, and that she heard about the outbreak from a colleague and from seeing it on the news.

One part-time 4 West nurse, who had worked the previous weekend, May 17 and 18, told the Commission that she did not know that the unit had been shut down until she went to work on Monday, May 26. No one had called her to tell her what was happening, even though she had worked on the unit that was believed to be the epicentre of the outbreak.

Toronto Public Health officials told the Commission that it was their understanding that the occupational health department would contact staff and communicate with them. As Dr. Berger told the Commission:

Dr. Berger:	What I recall, is that occupational health was notified, so the division around contacting, I don't know exactly how they did it, but the division was that Public Health would not deal with staff, but that would fall to the occupational health and safety department of the hospital, to follow the staff and communicate with them. Part of the whole press release also was to anybody who had been there, but the actual directives around what we were doing was given to the senior management team, of the SARS Senior Management Team, the senior admin at the hospital, so the chiefs of staff of every department were given all this information and then they had to take it and carry it to their various departments. They were responsible for passing those decisions on.
Question:	So, when you do go home at some point on the night of May 23rd, is it fair to say that in your mind, the job of

contacting either sick health care workers or health care staff on 4 West was in the hands of the hospital?

Dr. Berger: Yes.

Ms. Adamson, the CEO of the North York General, told the Commission that the hospital did begin to call staff that day and continued into the early morning hours, to tell them to quarantine themselves and to stay away from their families:

It wasn't until later on in the afternoon, the latter half of the afternoon when Sue [Kwolek] called me to the boardroom, and it was realized that we had the staff, their illnesses were presented for 4 West, the patients from 4 West that were in question and we'd have to put everyone into

quarantine. We were taken up to the other boardroom, the Ministry of Health people were on the phone. There was going to be a press conference at seven o'clock that I would need to attend to. It never happened, it was cancelled, so we began to do exactly as they told us to do, call everyone, everyone at home were quarantined. We began to communicate and that's when the greatest trauma for the staff happened. We were there until two o'clock in the morning trying to find people and had to leave messages if we couldn't find them. You would wake them out of their sleep and ask them to leave their families and children. We got back the next morning and just tried to continue to make sure people were safe and understood what they needed to do.

Despite these efforts by the hospital, vital information about their potential risk of exposure to SARS did not get through to many of the 4 West nurses.

The coordinator of the occupational health department was asked by the Commission to describe the process by which 4 West staff were notified of the outbreak:

Question:	And do you know what system was in place to contact staff who were not necessarily recorded in sick but were on their time off? For example the 4 West nurses?
Answer:	Well, we've got a whole list of the unit names, so we phoned everybody.
Question:	Did you call even those who were on their days off?
Answer:	Yes.
Question:	And was there a way to track to ensure everybody was contacted?
Answer:	Yes, we do it through occupational health.
Question:	And you made all those calls?
Answer:	Our staff did, yes.
Question:	So if there were a number of nurses who worked on 4 West who weren't notified until May 26th as to what

was happening at the hospital, was that something that just fell through the cracks?

Answer:	That was the weekend?
Question:	Right.
Answer:	So, we probably didn't work until Monday and that's when we put people on home quarantine.
Question:	So, then the calls started on the 23rd and whoever didn't get reached on the 23rd was left until the Monday?
Answer:	Yes.
Question:	If you were to do it all over again, was that ?
Answer:	We'd probably do it on Saturday.
Question:	Yes.
Answer:	And there was, I guess, there was no direction as to
Question:	Who was giving you direction on how this was supposed to be handled?
Answer:	It would have been the SARS Committee.

When asked to explain how someone who worked on 4 West might not be contacted, she said:

Question:	So if someone who worked on the 4th floor didn't get contacted, it was because it was the weekend and there was nobody was making those calls?
Answer:	Yes, I have to go back and think about that.
Question:	There aren't that many nurses on the 4th floor, so wouldn't the priority have been given to them?

Answer:	It's more than nurses.
Question:	Even if it's just the staff, how many staff on the 4th floor, 40, 50?
Answer:	Maybe, I'm not sure.
Question:	Maybe not even that many. Was priority given, did you know at that point that the 4th floor was really sort of the epicentre of the outbreak?
Answer:	Well, no, I guess I didn't.
Question:	So, who was being phoned?
Answer:	The eight nurses that called in sick. But I know we came in on that weekend.
Question:	But outside of the eight nurses, who was being phoned? That's what I am trying to get at. I'm not talking about eight nurses, I am talking about
Answer:	Nobody during that weekend, because we came in and we were trying to put contact lists together, because there were 13 ill patients and we were trying to match exposure, so that we could make those calls. So what was decided with Public Health is that this is an oner- ous task for one or two people to do and they felt that they would self-identify, and that's why they put them on home quarantine on Monday, because they were working on the weekend.
Question:	Okay, some of them were working?
Answer:	Some of them were working, yes. And the quarantine period would be approximately would be 10 days, 11 in one case, I think. So, Public Health said they would self-identify, so when we went up Monday, we went to the unit, we spoke to the nurses and said, you are all

going home on home quarantine. And that was a deci-

	sion made by the SARS Task Force and so everybody agreed to that. They staffed the unit with agency nurses. We called every day to make sure they didn't have any signs and symptoms, if they did, they were admitted. If they came into emerg, they were assessed and admitted or sent home or whatever.
Question:	These are nurses on home quarantine?
Answer:	Yes.
Question:	Just so I am clear, the 23rd, the calls you made were to the eight
Answer:	Just to those eight that they said bring in, because they didn't know.
Question:	Okay, fair enough. But on the 23rd, eight ill nurses were called, did anybody call or think to call the rest of their colleagues on those days?
Answer:	I think [the unit administrator] may have. I think she did but, I can't answer that. But I didn't.
Question:	Certainly there was no process in place to ensure that was done, to your knowledge?
Answer:	No.

The lack of any such process, the systemic failure to have such a process in place, is unacceptable and indeed appalling.

Toronto Public Health told the Commission that they understood that the 4 West staff would be contacted. Senior hospital officials told the Commission that they understood that staff were being contacted. The occupational health department understood that the unit manager was contacting staff and that ill staff would selfidentify. And the nurses remained in the dark.

This is not to blame those working in the occupational health department. As the

above testimony shows, they lacked direction and clarity over who was to be called and what those called were to be told. They were working hard over the weekend trying to identify exposure and contacts for those who were ill. As noted earlier in this report, the unit administrator was unable to be interviewed by the Commission and so has been unable to shed any further insight into why not all of the 4 West nurses were contacted.

What is clear is that there was no consistent approach to contacting staff and that no consistent message was provided to staff. Whatever confusion was present at the time, whatever challenges communicating with staff presented, it is difficult to understand how the 4 West nurses and health workers could not all be contacted and how such a critical task could be left as it was. By the afternoon of May 23, 2003, it was clear there was a big problem with illness among staff, patients and visitors. The 4 West nurses were at the greatest risk for possible SARS exposure and many of them were already ill. The 4 West nurses, all of them, whether they were working or not, ill or well, were entitled to know that they could be at risk so that they could take steps to monitor their own health and to ensure the well-being of their families.

The horror stories of front-line staff – those health workers who learned about the outbreak on May 23, 2003, and wondered if they should have known sooner; those health workers who scrambled to use precautions, who worried about whether they had the right equipment and if they were using it properly; those health workers who learned about the outbreak from television and then had to wonder if they had just exposed their family to SARS; those nurses who were brought into the hospital on May 23, 2003, having no idea that they were going to be assessed for SARS and admitted and then lying in isolation, wondering if their families were safe – are undeniable.

Post-SARS, it is essential that the lessons learned from the terrible stories of these brave health workers be used to ensure that these communication breakdowns never happen again. It is essential that a system be put in place in all hospitals to ensure that front-line health workers directly at risk from a recently discovered infectious outbreak are informed in a timely fashion of what they need to know to protect themselves, their families and the community.

It must be clear who bears the responsibility for notifying staff at the earliest possible opportunity. There must be a clear plan to effectively communicate risk without delay. There must be clear lines of authority, clarity around roles and responsibilities, and an understanding among all managers and supervisors as to what information must be conveyed to staff, such as their risk and how to protect themselves and their families. Hospitals must have up-to-date contact lists for staff, and as part of their emergency preparedness there should be a clear plan to let staff know how they can expect to be informed about what is happening in the hospital and how those at risk will be notified and protected.

Conclusion

After the second outbreak was discovered, front-line staff, managers and administrators mobilized to provide care to SARS patients, including their colleagues. Whether they were angry, disappointed, exhausted or afraid, they stepped up and did what had to be done to contain SARS. As one doctor said:

What went right: in a situation where so little was known and when you are in the midst of it, so very little was known, was that the people who were involved, right across the board, the ones that were going to step up, you knew who they were and they did so. And they did so in an open manner and knowing as we went along that it was not without risk. And I'd say the people who were going to step up, it was right across the board because it went on and on, they were a smaller group of people involved in stepping up and are then consistently stepping up. But that's a reflection of professionalism, of human nature.

Another doctor agreed that the response of North York General to the second outbreak was one of the things that went right:

What went right is how North York General responded to SARS II. They quickly shut the hospital down and contained what could have been a really truly devastating epidemic. And that's something that I believe was the right thing to do. They did the right thing and it was a big step. They altered a lot of how they affect and contained infection. We had a complete revamping of our emergency department and negative pressure rooms and directives of how to deal with suspected infectious diseases.

Another doctor said that when the hospital knew it had SARS cases or that SARS was around, it did a superb job:

I've got to tell you, apart from my comments which are somewhat negative, North York did a superb job in every other way. In fact, I can tell you, it's the best job I've seen amongst all the hospitals. Superb job, in terms of training, outfits, and the communication from the staff meetings and the physicians and the administration. They did a superb job.

During the first outbreak and the second outbreak ... North York General did a great job. During those times when we believed as a community, as Canadians, that SARS was around, North York General did a great job.

Since SARS, the hospital has made improvements to many important areas, including infection control, occupational health and safety and communication with staff. Many health workers interviewed by the Commission pointed to improvements in these areas and say that they feel the hospital has learned many important lessons from SARS and, as a result, it is now a much safer place to work.

Ms. Adamson told the Commission that the hospital did learn many lessons from SARS and they have implemented many of the lessons:

Many of the lessons learned from SARS are being implemented right now and we are better prepared to deal with SARS if it should happen again; better positioned to handle new infections or new permutations of existing diseases. We have already made significant changes based on the knowledge gained from SARS. A sophisticated patient screening and triage system in our emergency department is one example of how we are moving forward from SARS ensuring that we continue to provide a high level of protection for patients, staff, volunteers and visitors entering our hospital. We've increased the number of isolation rooms with improved ventilation. We have tripled the size of our infection control team and continue to recruit. We've expanded educational programs in infection control for our staff, including instructions on CD-ROM. We now have the capacity to establish an assessment clinic quickly. Our occupational health policy is now more stringent. We are actively improving communication with our staff, increasing management visibility and accessibility and implementing a new participative committee structure.

North York General should not be remembered for the tragic mistakes and errors that took place there during SARS as a result of a province-wide failure to ensure appro-

priate standards and systems for infection control, worker safety, and communications and accountability.

North York General Hospital should be remembered not for those system-wide errors and mistakes but for the skill, devotion and remarkable courage, as described in this report, of the physicians, nurses, and other health workers and members of the hospital community who gave so much of themselves to help those afflicted with SARS.