


# The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital

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 Fast-tracked article

## Abstract

**Background:** The outbreak of severe acute respiratory syndrome (SARS) in Toronto, which began on Mar. 7, 2003, resulted in extraordinary public health and infection control measures. We aimed to describe the psychological and occupational impact of this event within a large hospital in the first 4 weeks of the outbreak and the subsequent administrative and mental health response.

**Methods:** Two principal authors met with core team members and mental health care providers at Mount Sinai Hospital, Toronto, to compile retrospectively descriptions of the experiences of staff and patients based on informal observation. All authors reviewed and analyzed the descriptions in an iterative process between Apr. 3 and Apr. 13, 2003.

**Results:** In a 4-week period, 19 individuals developed SARS, including 11 health care workers. The hospital's response included establishing a leadership command team and a SARS isolation unit, implementing mental health support interventions for patients and staff, overcoming problems with logistics and communication, and overcoming resistance to directives. Patients with SARS reported fear, loneliness, boredom and anger, and they worried about the effects of quarantine and contagion on family members and friends. They experienced anxiety about fever and the effects of insomnia. Staff were adversely affected by fear of contagion and of infecting family, friends and colleagues. Caring for health care workers as patients and colleagues was emotionally difficult. Uncertainty and stigmatization were prominent themes for both staff and patients.

**Interpretation:** The hospital's response required clear communication, sensitivity to individual responses to stress, collaboration between disciplines, authoritative leadership and provision of relevant support. The emotional and behavioural reactions of patients and staff are understood to be a normal, adaptive response to stress in the face of an overwhelming event.

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The first patient with a probable case of severe acute respiratory syndrome (SARS) in Canada was admitted to hospital on Mar. 7, 2003,<sup>1</sup> in Toronto. SARS is believed to be caused by a coronavirus.<sup>2,3</sup> In the absence of serologic tests, clinicians use a standard case definition.<sup>4</sup>

By April 10, there were 253 suspected and probable cases in Canada. Two hundred and six of these were in Ontario, the majority in the Toronto area. Ten deaths had occurred, all in Ontario.<sup>1</sup> After March 17, most new cases occurred in health care workers.<sup>1</sup> Public health efforts to contain the spread of SARS resulted in infection control measures coming to dominate hospital procedures and policy throughout the Toronto area and selected surrounding regions. Provincial public health recommendations, including restricted access to hospitals, screening of employees entering hospitals, isolation precautions and restrictions on transfers of patients between institutions, changed as frequently as daily early in the outbreak.

How should a hospital respond to the occupational and psychological challenges that such an outbreak poses to its staff and patients? Despite a large epidemiological literature regarding disease outbreaks, there is little information available to guide interventions to support staff and patients. A report of a 1999 community outbreak of meningococcal disease emphasizes that effective management requires coordination, communication and collaboration.<sup>5</sup> A study of a hospital outbreak of vancomycin-resistant enterococci (VRE) describes a severe burden on nursing staff. Nurses assigned to deal with a VRE outbreak were significantly stressed by the sense that they had to function as gatekeepers to the patients for staff and visitors and often felt inadequately supported, blamed for the outbreak and resentful of the increased workload.<sup>6</sup>

Although several recent disease outbreaks have required an extraordinary public health response, including the *Escherichia coli* outbreak in Walkerton, Ont.,<sup>7</sup> bovine encephalopathy<sup>8</sup> and Norwalk virus,<sup>9</sup> the SARS outbreak is unique in recent history in its rapidity of transmission, its concentration in health care settings and the large number of health care workers who have been infected. In this paper, we describe the early experience of a university teaching hospital in responding to the psychological and occupational impact of the SARS outbreak upon hospital inpatients with SARS, inpatients without SARS and health care workers. As cases of probable and suspected SARS are identified in other provinces and countries, our experience

may benefit others who are developing a comprehensive psychosocial response to SARS. Furthermore, this experience may be useful in planning a response to other infectious outbreaks, such as pandemic influenza.<sup>10</sup>

## Methods

Descriptions of the experience of patients with SARS and those without, the experience of health care workers and the institutional response were collected through unstructured interviews by the 2 principal authors (R.M., J.H.) with core team members and mental health care providers at Mount Sinai Hospital, Toronto. The core team members included the Vice-President of Nursing (L.V.), the Program Director of Nursing (J.B.), the Chair of the Medical Advisory Council (J.S.), the Director of Community Health Programs (R.S.), mental health professionals attending patients with SARS and patients without SARS (2 consultation–liaison psychiatrists [J.H., R.M.], a psychiatric clinician nurse specialist [N.P.] and a social worker [L.M.V.]) and a psychiatrist (M.L.) who met with health care workers individually to provide support at their request.

Our observations were made for the period from Mar. 13, 2003, to Apr. 10, 2003, based on clinical observations of 19 patients with SARS and those without SARS who were also receiving care from the same mental health professionals (N.P., L.M.V., J.H., R.M.), observations by leaders and managers (L.V., J.B., R.S.) of staff, observations by mental health professionals (N.P., L.M.V., J.H., R.M., J.S., M.L.) of staff members who sought psychological support formally and informally, and first-hand observations by leaders (L.V., J.B., J.S.) of the administrative response. A microbiologist (T.M.) provided information about the cases, the disease and its treatment. We met in small groups and communicated by email to review and analyze these observations in order to determine the face validity of our observations by consensus in an iterative process between Apr. 3 and Apr. 13, 2003.

The unexpected onset and rapid expansion of the SARS outbreak over its first 4 weeks, and the clinical responsibilities of the team, precluded systematic data collection. Psychological responses are condensed into narrative descriptions rather than being quantified.

## Results

### Description of cases

The first patient with a case of SARS at Mount Sinai Hospital, Toronto, was admitted on Mar. 13, 2003. By April 10, 19 patients with probable and suspected SARS had been treated (Fig. 1). Of these, 11 were health care workers (5 nurses, 4 physicians, 2 others). Of the 11 health care workers, 9 worked at our hospital.

One case of SARS was diagnosed at autopsy about 1 week after that patient’s transfer from our intensive care unit (ICU) to another hospital. This patient had been in our ICU for about 36 hours (Mar. 22–23). After about 14 hours in the ICU, clinical suspicion of SARS resulted in the use of isolation precautions. Unprotected exposure before the isolation precautions were instituted was the likely source of infection for 6 cases. Likely sources of infection for other cases were exposure to infected patients or staff in other health care settings in 6 cases, domestic exposure to a probable SARS case in 6 and exposure during transport of an infected patient in 1 case. Episodes of unprotected exposure of health care workers are documented in Table 1. As of April 10, there were no cases of secondary transmission to health care workers who were following isolation precautions.

Fourteen patients were treated in the SARS isolation unit that the hospital set up on March 28, 2 were treated initially in the ICU and 8 were treated in isolation rooms on other units. (The number of patients is greater than 19, because of patient transfers between units.)

### The hospital’s response

The timeline of the responsive measures instituted by Mount Sinai Hospital is outlined in Table 2 and the screening questions asked of staff at the hospital entrance are listed in Appendix 1.



Fig. 1: Dates of admission of 19 patients with suspected or probable severe acute respiratory syndrome at Mount Sinai Hospital, Toronto.

The hospital established a command centre, headed by the Vice-President of Nursing and the Chief Information Officer, who led a team composed of key senior administrators and the Chair of the Medical Advisory Committee. The composition of the team was fluid as experts and department heads (e.g., microbiologists, Chief of Medicine, human resources and occupational health personnel) were included as required for a changing list of operational tasks. Administrators received frequent public health directives from the Ontario Ministry of Health and Long-Term Care and participated in daily conference calls with other hospitals in the same network to discuss implementation of the directives, which were increasingly inflexible (e.g., no transfers of critically ill patients between hospitals without prior approval from the province).

The hospital's CEO, the Vice-President of Nursing and the Chief Information Officer sent a daily joint email message to all staff updating SARS information, outlining procedural changes, and providing information about the numbers of patients with SARS, the number of staff in quarantine and the number of staff admitted to hospital for treatment. The email message was used to express praise and gratitude to all staff for their contributions. The hospital's Intranet was also used extensively, for example, to provide instructions on the proper use of face masks.

Administrators faced the emotional challenge of balancing their responsibilities to ensure optimal care for patients with SARS while ensuring the safety and well-being of health care workers. These efforts were complicated by incomplete knowledge about the actual risks, especially about modes of transmission of the infectious agent(s).

On occasion, staff were observed to be not fully complying with infection control procedures. Under the circumstances it could not be determined whether this was due to inadequate communication (especially because of frequently changing guidelines), technical difficulty, or because of psychological responses such as denying risk or simple rebelliousness. Leaders responded with clear, authoritative instructions to inform staff of new directives and maximize compliance. There was minimal resistance to this approach.

Substantial logistical problems were posed by, for example, the need to screen over 1800 people entering the building daily, or to procure the daily allotment of 5000 masks and 3000–4000 gowns. Staff were redeployed to overtaxed areas to meet these needs. Management staff volunteered to coordinate and supervise screening functions without direct instruction from the command team.

## ***Psychological effects of the SARS outbreak***

### **Patients with SARS**

Hospital inpatients with suspected and probable SARS presented a range of symptom severity from acute respiratory distress syndrome to relatively mild symptoms such as fever, headache and myalgia. Generally, more psychosocial

support was required by patients with mild-to-moderate symptoms, and these patients were in the majority.

Shortly after admission, recent contacts who would require quarantine were identified, resulting in feelings of guilt, anger and fear for the welfare of friends and family. Identifying contacts also raised fear that the patient would be resented. Patients worried that their contacts would be stigmatized and would lose income due to quarantine.

Patients with SARS often had to spend several hours alone between brief contacts with staff. Outside communication was available by telephone and, in some cases, by email. As a result, patients with mild symptoms complained of boredom and loneliness.

The most prominent symptoms were fever, myalgia, cough and fatigue. Patients were treated with ribavirin, often in combination with corticosteroids. Doses of ribavirin varied between 1.5 g and 4 g daily. A typical course was a 2-g intravenous loading dose, followed by 1 g intravenously every 6 hours for 3 days, followed by a lower dose (e.g., 500 mg every 8 h) for 4 more days. Patients were switched to oral dosing when tolerated. Ribavirin caused uncomfortable side effects, especially nausea. Insomnia was common as a result of treatment with corticosteroids, anxiety, physical discomfort and hospital routines.

In the absence of specific laboratory tests to indicate disease progression, each patient's temperature was monitored carefully by staff and patients. Several patients who experienced waxing and waning anxiety throughout their stay in hospital reported that peaks of anxiety coincided with feeling feverish or learning of an elevated temperature. One patient with a pre-existing panic disorder experienced episodes of panic during spikes of fever. Other patients reported feeling discouraged and frightened by the return of fever after an afebrile period.

Most expressed sadness about missing their loved ones. Concern was expressed by health care worker patients about the infectious risk to staff caring for them. Fear of the potential lethality of the illness and anger because their risk of infectious exposure had not been recognized earlier were voiced less often than other concerns.

**Table 1: Events involving unprotected exposure to suspected SARS cases in Mount Sinai Hospital, Toronto**

Event	Approximate no. of staff quarantined	No. of SARS cases among quarantined staff
Undiagnosed case in ICU	65	6
Emergency department exposure	25	0
Exposure to infected member of infection control team	6	0
Failure of an employee to disclose exposure when screened	3	0

Note: SARS = severe acute respiratory syndrome, ICU = intensive care unit.

Family members at home found it difficult that they could not provide direct support to their sick relative by visiting. Child care issues for single parents with SARS who had children in quarantine and management of pre-existing marital tensions were recurrent difficulties.

### Patients without SARS

Hospital inpatients without SARS were concerned about becoming infected. Restrictions on transfer to other institutions, cancelled procedures, the need for quarantine upon discharge or delayed discharge were common frustrations. Patients deprived of family visits experienced insomnia, anxiety and interpersonal friction with staff.

Limited access to external resources resulted in difficulty obtaining items that would usually provide comfort, such as books, music and toiletries. Asian patients reported stigmatization and racist reactions in the community, because the outbreak was thought to have originated in China.

### Health care workers

The SARS outbreak and the public health response to it substantially changed working conditions. The perception of personal danger was exacerbated by uncertainty. Modification of infection control procedures and public health recommendations day by day, and sometimes hour by hour, increased uncertainty. The perception of personal danger was heightened by the known lethality of the syndrome and intense media coverage of the outbreak and its effects (e.g., "Hospital masks are in short supply" — *Toronto Star*, Mar. 29, 2003).

Staff members were discouraged from interacting outside the hospital with colleagues and staff meetings were discouraged, at a time at which people wished to seek each other out for support. Eating and drinking, which require removing a mask, were done alone or outside the hospital. As face-to-face communication became more difficult, email was used extensively.

**Table 2: Infection control timeline at Mount Sinai Hospital, Toronto**

Date, 2003	Measures taken
March 26	<ul style="list-style-type: none"> <li>• ICU was closed to admissions, discharges and transfers</li> <li>• ED was closed to ambulances</li> <li>• Transfers to and from other hospitals were restricted</li> <li>• Most surgical procedures were cancelled</li> </ul>
March 27	<ul style="list-style-type: none"> <li>• Further measures were taken in response to a provincial directive</li> <li>• Inpatients were not permitted visitors, with rare exceptions</li> <li>• Staff, patients and visitors in the ED were required to wear masks</li> <li>• Nonemergency ambulatory care was cancelled</li> </ul>
March 28	<ul style="list-style-type: none"> <li>• Access to the hospital was limited to 1 entrance and the ED</li> <li>• An 18-bed negative-pressure isolation unit was established in compliance with a directive from the Provincial Commissioner of Public Safety and Security*†</li> </ul>
March 30	<ul style="list-style-type: none"> <li>• All people in the building were required to wear masks</li> <li>• Masks, gowns and frequent handwashing were required for all patient contacts</li> <li>• For contacts with patients with SARS, isolation precautions included wearing gowns, gloves, masks and safety glasses, or masks with an attached plastic eye shield, which were changed after each contact, and handwashing after each contact and hourly</li> <li>• All nonessential rounds and meetings were cancelled</li> <li>• Medical students and volunteers were not allowed in the hospital</li> <li>• Staff whose role was not essential for patient care were asked to remain at home and were paid for scheduled shifts</li> <li>• The cafeteria stopped selling food but remained open for seating</li> <li>• The gift shop closed</li> <li>• The coffee shop remained open</li> <li>• Screening of staff at the hospital entrance began. The screening procedure required handwashing, putting on a mask, answering standard questions asked by screening staff (see Appendix 1), having one's temperature taken, reviewing the completed questionnaire with another staff member and washing hands again.</li> </ul>

Note: ICU = intensive care unit, ED = emergency department, SARS = severe acute respiratory syndrome.

\*Before March 28, patients with SARS were treated in respiratory isolation rooms distributed through the hospital on medical and surgical floors.

†This required close collaboration between the hospital's administration and the departments of Infection Control/Microbiology and Engineering. The unit chosen was a general medical floor staffed by nurses experienced in the care of acutely and chronically ill patients, respiratory distress and infection control procedures (for patients with vancomycin-resistant enterococci and methicillin-resistant *Staphylococcus aureus*).

Staff were prevented by provincial directives from working in multiple institutions, which imposed a financial burden on staff whose income depends on working in several institutions and on doctors who divide duties between settings. Doctors with clinical offices in the hospital were required to cancel their outpatient practices until further notice.

Hospital employees with a potential contact with SARS entered voluntary 10-day quarantine. Quarantined staff had concerns about their personal safety, about transmitting disease to family members, about stigmatization and about interpersonal isolation. Working staff members were concerned about understaffing due to quarantines and about overwork caused by colleagues' calling in sick.

Staff members who were not directly involved in patient care (about 40%–50% of staff) were deemed nonessential and were asked to stay at home indefinitely. Nonessential staff reported feeling isolated and ineffective in contributing meaningfully to the crisis. The term “nonessential” may have contributed to this sense. Some were called back to work in redeployed roles and indicated that it was psychologically more satisfying to work than to stay home.

Public health guidelines indicated that staff did not need to take special precautions such as using masks at home. This left many worried about transmitting illness to loved ones. Instructions to avoid meeting other hospital staff outside the hospital and not to work in multiple institutions left staff members uncertain as to whether or not they were considered potential vectors of disease. Some felt stigmatized within their communities and avoided identifying themselves as hospital workers.

Prominent among the varied responses of individual staff members were themes of fear, anxiety, anger and frustration. Many expressed conflict between their roles as health care provider and parent, feeling on one hand altruism and professional responsibility and, on the other hand, fear and guilt about potentially exposing their families to infection. Some nurses on units that had no patients with SARS felt that their needs became secondary. Collaboration and collegiality were observed in units that volunteered to send staff to other units to assist with care.

Supervisors and leaders expressed difficulty in remaining at home or leaving work because of their sense of responsibility to be present with their staff. Throughout the hospital it was found that many staff required “permission” from peers or supervisors to refrain from doing too much. When returning to work after days off, people felt disconnected from the current state of the organization. Staff reflected on the stark contrast of the seemingly “normal” external environment and a highly stressed work environment. There were wide discrepancies in workload between those subjected by circumstances or personal attitudes to overwork and those prevented from working by quarantine or a “nonessential” designation.

On medical wards that treated patients with SARS, some staff reported anxiety about infection and resentment about being chosen for the task. Nurses who were assigned to pa-

tients with SARS were not allowed to refuse the assignment (except for accommodations that could be made for pregnant nurses to avoid potential exposure to the teratogenic effects of ribavirin). Although there were incidents of professional and nonprofessional staff refusing to care for patients with SARS in respiratory isolation on general medical floors, there was no refusal of work assignments by nurses on the SARS unit. Staff attributed this to feeling confident about being well-equipped, maximally protected by isolation precautions and well supported in the hospital.

On the SARS isolation unit, spikes of anxiety occurred in association with several events: when isolation precaution procedures changed, when infectious disease staff entered quarantine or treatment, when health care workers were admitted with an unclear source of infection, when one of the SARS-unit nurses developed a fever (not due to SARS) and when a discharged patient with SARS was readmitted with fever. Staff reported fatigue, insomnia, irritability and decreased appetite.

SARS staff had the emotionally complex task of caring for patients who were themselves health care workers. The clear line between patients and staff became blurred as staff experienced a strong emotional identification with colleagues who were now patients. Caring for colleagues increased the anxiety of some staff regarding their competence and skills.

## *Psychological support*

### **Patients with SARS**

Patients with SARS received an initial visit from the psychiatric clinician nurse specialist, the consultation–liaison psychiatrist and/or a social worker familiar with the intensive care setting. In these screening assessment interviews, it was emphasized that a wide range of emotional responses is to be expected in the face of such an extraordinary situation. Concerns and feelings expressed were interpreted as expected, normal responses. Immediate concerns were reviewed, especially the patient's family situation, relationship with people on his or her “contact list,” expectations and fears about their own medical condition, and current symptoms.

When indicated and desired, subsequent supportive psychotherapy aimed to balance a permissive approach to expression of feelings with pragmatic attention to the particulars of the patients' external reality. For the patients who were both parents and health care providers, particular attention was given to issues of powerlessness and the conflicting responsibilities of these 2 roles. In some cases, the simple presence of a person with the time and willingness to visit was identified as most valuable, especially for patients with SARS who were “doing well” and thus receiving relatively less nursing contact.

Some useful interventions were straightforwardly pragmatic, such as arranging for pizza to be delivered to a house

under quarantine, or making a trip to the drug store for hygiene supplies for a patient in isolation. In response to the social isolation and boredom experienced by patients with SARS, an attempt was made to provide access to the Internet, telephone, newspapers, television and books.

Identifying families' needs, offering an opportunity to express feelings, and supporting effective coping strategies helped to enhance the families' sense of competence and control.

Pharmacological and behavioural interventions to treat insomnia were used extensively.

### Support of staff

On units that received patients with SARS, the initial reactions of uncertainty and fear of the unknown among the staff were met with immediate clear information in repeated, succinct messages, staff meetings, and provision of appropriate equipment and supplies. Occupational therapists developed a pamphlet identifying signs of anxiety and stress and information about support resources, which was distributed to every nursing unit and program area.

Psychiatric staff who were on the units to see patients lingered to chat with staff. Informal individual contacts occurred between psychiatric staff and colleagues in medicine, surgery and administration in which simple gestures of support and advice, for example, about sleep, were offered. When it became apparent that some staff were reluctant to talk about personal concerns with psychiatrists with whom they had working relationships, another psychiatrist offered time to any staff at the request of the nursing unit administrator. This resource was used briefly during a period in which nurses' anxieties were high after several staff had become ill over a short period.

A drop-in support centre in the now-vacant medical ambulatory care clinic was provided immediately and then modified because it was not being used. It was replaced with a drop-in lounge in an open setting with soothing music, comfortable chairs and snacks. Senior staff acted as role models by making use of this support service and bringing others with them.

A confidential telephone support line staffed by inpatient psychiatric nurses was set up for all hospital staff and was used particularly effectively by those in quarantine. An informal network of mutual telephone contact and support was arranged by quarantined staff of the intensive care unit. Staff on home isolation who had email access were able to receive all communications from the hospital.

### Interpretation

The psychosocial response to an infectious event of this magnitude is complex. In the SARS outbreak, as in previous outbreaks of disease,<sup>5</sup> the hospital's response emphasized clear communication of directives and disease information and a high degree of collaboration between

disciplines. In addition, our experience highlights the importance of leadership during times of crisis, consistent with group psychology theory, which emphasizes the effect of leadership on maintenance of team cohesion.<sup>11</sup>

Although systematic methods of study and longer follow-up are required to determine the burden of the SARS outbreak on nursing staff, our immediate experience suggests that SARS-unit nurses may have experienced less distress than nurses on other medical wards caring for patients with SARS. This may be because, in contrast to the burden reported previously upon nurses acting as VRE gatekeepers,<sup>6</sup> the "gate" was at the hospital entrance, education was institutewide, the SARS-unit nurses had a greater sense of competency and multiple support measures were quickly put into place.

The most prominent emotional effects upon patients with SARS were feelings of fear, loneliness, boredom and anger. Patients with SARS worried about the effects of quarantine and contagion on loved ones. They also experienced the psychological effects of physical symptoms, especially anxiety about fever, dysphoria due to nausea and the effects of insomnia on mood and coping. Staff were adversely affected by fear of contagion and of infecting loved ones. Caring for health care workers as patients increased discomfort for many. Uncertainty and stigma were prominent themes for both staff and patients.

The validity of these observations is limited by the non-systematic methods of data gathering and interpretation of data by expert opinion and consensus. Information was collected quickly over a period of 4 weeks in which there was much uncertainty about the nature of the disease being observed. The virtue of rapid communication of our experience is accompanied by the expectation that further experience over the coming weeks will bring greater clarity about the phenomena reported here. Furthermore, the observations were made in one large teaching hospital and may not be generalizable to other settings. An outbreak in a smaller community, for example, would probably present different challenges.

In intervening with staff and patients, we found the stress-adaptation model particularly relevant. According to this model,<sup>12,13</sup> the experience of stress is taken to be understandable as a universally experienced response to extraordinary life circumstances. Stressors must be identified, articulated and normalized as much as possible. The range of normal reactions, including anxiety and preoccupation, is not viewed as pathological but is, rather, encompassed, supported and realigned where appropriate, in order to facilitate adaptation. In our experience, support services for staff needed to be flexible, collegial and unintrusive. The presence of psychiatrists at nursing stations and at staff meetings helped to foster communication. Just the knowledge that support is available may suffice for many resilient staff members. There is an opportunity for leadership by example, when leaders advocate and use peer support.

In this outbreak, the Department of Psychiatry was in-

cluded in the command team not by design but by circumstance, because the Chair of the Medical Advisory Committee was the Chief of Psychiatry. Our experience suggests that psychiatry may have a special role to play in supporting institutional leadership during an outbreak, especially through the assessment of special staff and patient needs and the organization of a supportive institutional response. At our centre, strong pre-existing relationships among psychiatrists, administrators, nurses and social workers were very helpful in crafting flexible and responsive solutions to changing demands and stresses on staff, patients and families.

Our experience in the early days of this outbreak taught us the paramount importance of a few frequently recurrent clinical themes. First, restorative sleep may be the first casualty of such an outbreak for all concerned and merits aggressive attempts to educate staff and patients about the impairment that results from sleep deprivation and to treat insomnia. Second, most people cope very well in their own way and benefit a great deal from a relatively small quotient of shared concern, good information and support. Third, when facing such a crisis it is crucial to feel that one is not alone. All efforts to overcome interpersonal isolation, from sharing jokes on the nursing station to conference calls, serve an important role in times of intense strain and stress.

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## Appendix 1: Screening questions\* for all staff entering the hospital

Have you had unprotected contact with a person with SARS in the last 10 days?

In the last 10 days, have you been in a hospital closed due to SARS?

Have you been to China, Hong Kong, Vietnam, Singapore or Taiwan in the last 10 days?

Are you experiencing any of the following symptoms: myalgia (muscle aches) or malaise (severe fatigue or feeling unwell) or severe headache (worse than usual) or cough (onset within 7 days) or shortness of breath (worse than is normal for you)?

Please record temperature now.

Have you worked at another hospital, long-term care facility, home care agency, nursing agency or for any other health care employer in the last 10 days?

Have you been a patient or visitor in another health care facility in the last 10 days?

Have you been in quarantine?

\*All questions, apart from the last one, were provided by the Ontario Ministry of Health and Long-Term Care.