Drawing the Lines: health scares in the age of SARS

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‘It’s really just a question of where people are going to draw the lines.’ Dr Alison McGreer, 2003¹

‘[T]here is also a kind of international biopolitics that governs the movement, transitions, settlement and repatriation of various populations – including refugees, migrants, guest workers, tourists and students. This international biopolitics is a condition of the assignation of populations to states and thus of social government of any form.’ Mitchell Dean, Governmentality, 1999²

‘What issues of public health and surveillance, we may ask, emerge in the wake of September 11th and the subsequent threat of bio-terrorism? How, moreover, might epidemics of fear if not disease be sociologically explained and understood?’ Stephen Williams, From Smart Bombs to Smart Bugs, 2003³

Introduction: Risk, health and borders

Epidemics of fear, perhaps also of disease: here are some important foci for our present anxieties. By ‘us’ I mean the various academics, experts and professionals, who in the ‘western’ nations of North America, Europe and Australia have ongoing conversations on these subjects. Some health professionals are worried about a vast outbreak of a new or re-emerging infectious disease; others are worried about being deliberately attacked with disease or with deadly gas. But also, many health professionals worry about the enormous impacts that these public fears may have on economies and societies: ‘the problem with SARS,’ I have heard several in Canada say, ‘was not SARS itself, but fear’. They meant that the disruptions of SARS were vastly disproportionate to
its body count, a mere 44 deaths, and I know they recall, and would like to prevent, other situations where public worries unjustified by scientific evidence (say, of radiation from powerlines) caused trouble and expense. Yet they seem to make little professional effort to trace the tensions between their fears and their fears of fear. And so we who observe public health from the humanities worry and wonder about their (our) worrying: is ours a ‘risk society’, a ‘culture of fear’?

In this chapter I will join these conversations to reflect on current concerns about, and responses to, the threats of infectious disease. First, I will situate these concerns and reactions in a more general context of concerns about ‘health scares’ — social, as opposed to individual, phenomena, wherein we see a strong reaction to a specific event that appears to threaten the health of some significant social group. This is not the problem of disease but of ‘fear itself’, in the terms used above. I then briefly discuss concerns with epidemics of new and re-emerging infectious diseases as a particular category of health scare. Here I remind the reader of the central role that real borders, and conceived boundaries, play in these concerns: nation states remain the basic units for preventing and managing disease events, and they produce instrumental categories (like ‘susceptible’ or ‘infectious’) whose crossings are cause for concern. I argue that this may be understood in terms of the logic of dangerousness outlined by Foucault, and, after him, Castel, and that this logic has been reasserted amid contemporary ideas of information flow and of risk. With all this in mind, I then retell the story of SARS in Canada, to show how containment strategies such as quarantine, policing air travel and hospital boundaries, and hygiene messaging, which had vast, largely negative social and economic impacts, were determined by the tensions between these logics of dangerousness and risk. Whether one quarantined newly adopted Chinese children or the nurse in a hospital with SARS patients, whether one spent money on thermal scanners in airports or on hospital emergency wards, such decisions depended, given these logics, on where one chose to ‘draw the line’.

The idea that there has been a shift in the basic logic of public health from dangerousness to risk was elaborated in an article by Robert Castel, who argued that until the mid to late twentieth century the central logic of public health governance was one of ‘dangerousness’, in which authorities had to try to identify and neutralise, one by one, any threats to health. He considered that many of the techniques of surveillance that Foucault identified in earlier periods were at basis engaged with examining each individual for signs of dangerousness so that they could be disciplined or excluded. These strategies were limited: firstly, because of the difficulties of locating the dangerous, who, prior to doing those things health authorities wished to prevent, such as committing a crime or transmitting an illness, very often did not show external signs of their threat, and secondly because once identified, they could only be dealt with one by one. Even Nazi eugenics, for all its focus on the concepts of population, was in fact the logic of dangerousness writ large, the Final Solution being an attempt to neutralise all individuals belonging to particular classes of ‘dangerous people’. The terrible scale of the Holocaust was based on the belief that the modern state, with its extensive
resources and bureaucratic machinery, could actually accomplish this elimination of danger.

Afterwards, as new concepts of population and health rose to replace the discredited ones of racial fitness, Castel thought that the logic of intervention came to be based on the calculation of abstract factors - a logic of risk. This move overcame both the limitations of the logic of danger. Instead of scrutinising each person for signs of danger, one merely calculated combinations of risk factors in the population and designed interventions for the resulting, newly ‘identified’, at-risk groups. This was the basis for the rise of the ‘new public health’ at this time, an approach that required that all people exercise a disciplined and responsible autonomy in identifying and correcting those factors that placed them at risk of ill health. It was not lost on commentators that the ‘new public health’ was valorised at the very time that public health funding (and, as a result, infrastructure), were cut in the entrepreneurial Eighties and pragmatic Nineties.

In an article written a few years back, I argued that the infection control strategies of the late nineteenth and early twentieth century were centred around concepts of cleanliness that lay at the heart of ‘sanitary’ public health, and were focused on locating and neutralizing all instances of dirt, in fact, every single bacterium. Part of this process was a brief but fervent attempt to locate, cleanse and control every healthy ‘carrier’ of dangerous, disease-causing bacteria. I argued that as these strategies failed and as issues of population health became more dominant in the early twentieth century, the first risk based public health strategies (mass immunization and the compulsory pasteurization of milk) came into being. To be sure, they were still strategies for eliminating, not merely managing, risk – but their basic logic had shifted, focusing now on population and not on the individual. In this chapter I wish to extend this argument to contemporary times, and rethink it in the light of the perceived resurgence of ‘old’ containment methods in the age of SARS.

In the logic of dangerousness, and the practices and instrumentalities developed in that period, borders and boundaries were absolutely central. Bashford has explained how the boundaries of government have been manifested as and through what she calls ‘lines of hygiene’, a designation that allows us to conceptually link the various practices of detention, segregation, isolation, quarantine, seclusion and bodily purification and management that have been the primary instruments of disease control for most of the past two centuries. Public health has been critical in the imagining and policing of ‘borders’, which I take to refer to the edges of one political entity from another, for example in the various quarantine and immigration restriction acts that excluded unwanted (ie, dangerous) others. As Dean remarks above, biopolitics – of which power these public health strategies were but one expression – is predicated on nationhood, which is significantly conceived of and managed through measures to secure its health.
Boundaries were key to the more complicated public health strategies of the nineteenth and early twentieth centuries, which sought to define and separate the clean from the dirty, the immune from the susceptible, the infectious from the benign - categories that applied to people, objects, and spaces. Lines of hygiene produced boundaries of differing durations that circumscribed the movement and behaviour of individuals and produced new kinds of identities. They also produced new anxieties. We know from many scholars of public health in this period that boundary crossings, and aberrant identities that defied the neat, polar separation of opposing categories, were identified as sites requiring special policing and control. Sexualities that trangressed the boundaries of gender, deformities, emissions or wounds that violated the boundaries of the body, products and viruses that crossed the boundaries between species, entities that had promiscuous contact with unknown others - these defined dangerousness in the past. To a large degree they still do today - though it may be that these days we are far more interested in the crossings than we are in the boundaries. As the story of SARS shows, we are in many ways all too aware that border crossings can and will take place, and afraid, as cultural critic Meaghan Morris suggested, both of boundaries that are too restrictive, and of having no boundaries at all.

SARS drew sudden and close attention to the fact that even if border crossings have become a common and often desirable feature of a globalising world, they are also sites of high anxiety and primary locations for government scrutiny and intervention. Of course this was already obvious from the September 11 2001 terrorist attack on the World Trade Centre (‘9/11’) and the aftermath of national security and invasion, a context self consciously referred to by Canadians during and after SARS. Security concerns have seen a return to logics of infection control that are routed in old notions of boundaries and older instruments invested in national borders. Yet there is also a transition to new metaphors and instruments that are about information flow and surveillance, one version of the logic of risk. I think that the two are in necessary, constant and dynamic interaction with each other, and that their relation can and should be historicized in this light. The ‘new public health’ really does take place, it seems, in a ‘risk society’ where catastrophes, real and as-yet-unrealised, have a huge impact on both the actual instruments of public health, and on the logics of their implementation. One sign of this risk society is a new phenomenon, the health scare.

II. Health Scare

‘Like a haunted house the morning after Halloween, many a bloodcurdling health hazard looks less frightening in the daylight of follow-up studies than it did in the first shriek of publicity.’ Avery Comoraw, Less Than Scary Health Scare: Killer Cranberries?, 2000

‘In U.S., Fear Is Spreading Faster Than SARS’ New York Times Banner Headline, April 17, 2003

Public health responses to SARS can only be fully understood as part of a set of those wider concerns to which I referred in the opening paragraph. Public health professionals are today afraid, both of potential catastrophes (as for example from epidemic disease), yet also of the consequences of our being so fearful. In particular they worry about highly damaging public reactions, such as ceasing to eat beef or suddenly discarding medication or changing their travel plans, to imagination-grabbing risks that are actually extremely small. In this section I argue that a new phenomenon has been born from this tension: health scares. Since the subject has not yet attracted scholarly analysis, in this section I offer some evidence about what kind of social phenomenon health scares are.

Health scares are a new, social phenomenon, a powerful construction that represents new preoccupations with risk and security and influences the playout of real events. A brief search using the term ‘health scare’ on electronic indexes shows that colloquially at least, there is a widely accepted concept of ‘health scares’ as bounded events in which a group of people hold significant fears for their health. This search collected 56 news articles, many of which contained the term ‘health scare’ in their titles, and 160 publications in scholarly and professional literatures. The overwhelming majority of articles in both categories were published in the mid to late 1990s. As the earliest studies in the scholarly/professional collection were published in the early 1970s, this indicates that our preoccupation with health scares is a relatively recent phenomenon. Moreover, although one news article contained references to health controversies from the 1950s and 60s, all the health scares discussed in the scholarly/professional literature occurred in the period after 1970. This period has also seen the growth of scholarly and professional attention to emergency preparedness and planning.

Significantly, health scares are a ‘first world’ phenomenon. I don’t mean that disease outbreaks, industrial accidents, hysterical panics etc don’t happen elsewhere: of course they do. I mean that geographically they were overwhelmingly reported from North America, the United Kingdom, continental Europe and Australia. Notably, aside from one report of a disastrously handled outbreak of cholera in Italy in 1973, the search found no reports of devastating disease in the developing world described as ‘health scares’, with the exception of allusions to HIV/AIDS in some articles. Disasters still happen in the third world, health scares in the first.

Health scares are mostly though not always scares in the sense that fears have greatly exceeded actual mortality. All health scare events discussed in the sample could be classified according to three fears/outcomes profiles: A: Fears of large scale destruction but with low actual mortality (so far): eg BSE, inhalation anthrax, SARS, or radiation from powerlines and mobile phones masts; B: Crises, where severe outcomes more or less matched fears: eg contamination of food and water, and HIV/AIDS; C: Low fears and low outcomes: these were all reports of risks of pharmaceutical products. As the numbers of people using these products, and hence potentially at risk, were often very large, yet the risk later turned out to be even small than expected, C may be regarded as a subset of A.
Finally, although they seem unreal because of their low mortality rates, virtually all health scares have commanded attention and concern from journalists and health professionals because of the all-too-real economic cost and social disruption that they have caused. The two are intertwined, of course: often the ‘problem’ was not so much that people ceased eating cranberries or beef, or even that they ceased using oral contraceptives mid-cycle or pulled their child out of a school built near powerlines – in any case most of these behaviour changes were fairly short lived – but the enormous, sometimes devastating, impact these actions had on industries and the communities they sustained. And, while local consumer behaviour has been significant in generating many of these impacts, it was often trade embargoes and drops in tourism that did most of the damage. Consider BSE: it was the context of international trade that made this the costliest health scare the world has ever seen. The trade embargoes first put in place by France as a kind of quarantine, and then strategically implemented elsewhere (as Canada found to its cost in 2003) bound notions of health to national identity and economic power. Trade barriers have to a large extent become the lines of hygiene of the market-driven, deregulated new world order of the late twentieth century, lines that mark nations as pure or as contaminated. Amid an effectively global, interconnected economy, health scares reassert the validity of borders: prosperity is equated with security, which decodes to border control for health.

Health scares are events typically characterised by large-scale fears but very low actual mortality and morbidity. As a recent feature of late twentieth century western societies, their existence supports the contention of ‘risk society’ theorists that we have become very anxious about the intrusion of those catastrophes to which we - as opposed to those ‘Others’ in the ‘third world’ - have hitherto felt immune. This is the context in which responses to infectious disease are created. Health scares are ‘problems’ (as in my opening quotation, ‘the problem with SARS...’) because of their devastating economic (which means, social) consequences. This means that health and economic concerns must be regarded as interdependent and as shaping one another: one cannot understand responses to, and reflections on, SARS, for example, without understanding these connections. Finally, the economic context clearly demonstrates the tensions between the globalising, border-crossing tendencies in economic systems, and the reification of nationhood, of national economies held and patrolled within national borders. This tension operated in responses to contemporary concerns with infectious disease also.

III. Disease Scares: Pandemics

"In a world where diseases respect no borders, it is important that we cooperate across borders internationally as well." Canadian Health Minister Ujjal Dosanjh to the United Nations, November 17, 2004.
‘Our plan of action is designed to recognize that, in this age of global travel and interaction, infectious disease control is paramount to the health of our communities.’ Dr James Young, Ontario Commissioner for Public Security, May 19 2003

‘Planning and preparedness before the next pandemic strikes – the inter-pandemic period – is critical for an effective response ... [preparation] has been done through programs ... focused more generally on increasing preparedness for bioterrorism and other emerging infectious disease health threats.’ United States of America Department of Health and Human Services (HHS), Pandemic Influenza Response and Preparedness Plan, 2004

Among the panoply of health scars, there is a special place reserved in our cultural imagination for fears of a mass outbreak of disease. This is attested to by films such as Virus and Outbreak and novels like Robin Cook's Contagion. When I asked Canadian health professionals and policymakers for examples of health scares, they typically thought first of Ebola, West Nile virus, Norwalk, meningococcal disease, clostridium difficile, SARS, avian influenza, monkeypox.

Above all, right now, the concern is pandemic influenza, defined as an ‘explosive global event in which most, if not all, persons worldwide are at risk for infection and illness’. Health professionals and policymakers will tell you: the issue is not whether there will be another global experience of pandemic influenza, but when it will happen, and how bad it will be. ‘During the last few years, the world has faced several threats with pandemic potential, making the occurrence of the next pandemic just a matter of time,’ says the World Health Organization (WHO)’s website. Accompanied by well-publicised exhortations from the WHO, western nations like Canada, the US and Australia have prepared pandemic influenza preparedness plans, publicly stating strategies on everything from vaccine manufacture and stockpiling to data collection and management systems. Everyone’s saying: ‘remember 1919’. (These memories have caused at least one major health scare in the U.S.A. in the past. Similarly, embedded assumptions and expectations about pandemic influenza strongly influenced responses to SARS.)

One key feature of our current anxiety with infectious disease is encapsulated in the reiterated phrase ‘disease has no borders’. We are constantly told that we need to be prepared, to build new institutions, implement new procedures, because we are living in a world where diseases respect no borders. On the face of it, this phrase is a little puzzling. What other kind of world have we ever lived in? The phrase indicates a perception of recent change among health professionals, who look back with nostalgia to some brief, halcyon period (the 1960s and 1970s, perhaps?) when infectious disease control was so well accomplished that it was no longer the central plank of public health. Circulatory system disorders and cancers do stay nicely within bodily, local and national boundaries and are governed more or less satisfactorily through the logics of
risk; epidemics have recently been confined to the ‘third world’. Now health professionals consciously warn each other and the public that various social, technical and environmental changes, of which the most commonly cited is widespread air travel, mean that infectious disease can no longer be kept within boundaries.

The phrase also evokes those modernist anxieties about transgressions that I mentioned above - the theme, common in stories of health scares, that danger results either from nature’s capacity to elude the artificial boundaries that humans construct, or from human violation of ‘natural’ boundaries. Our fears are of a novel situation in which we are threatened by literally new disease-causing entities (like SARS or prions) and by old diseases in new forms. We believe that this situation has arisen because of our contemporary boundary crossings - the rapid movement of peoples and organisms, agricultural and industrial practices that constantly cross boundaries between species. These deep, old anxieties about new dangers speak to metaphors distinct from expert concerns with miscalculations of risk, which are also present in pandemic preparedness planning.

Borders are meaningless to a microbe, but our security is perceived to rely on our requiring microbes to respect them anyway. (Hence the conceptual and practical entanglement of bioterror – which attacks a state – and influenza preparedness, as shown in the HSS quotation above.) Our first move in combating new and re-emerging infectious diseases has been to double the guard: to put in place more extensive and rigorous quarantine and border screening regimens, to examine prospective immigrants and exclude those believed to harbour illness, to identify, cordon off and patrol dangerous places in the world. Pandemic influenza preparedness at times seems almost wholly defined by the patrol of borders, as scientists watch the virus cross species, then cross the overcrowded urban centers of the third world, and finally cross from the third world to the first. The notion of a ‘pandemic’ itself is defined by the travelling of a disease: the WHO’s stages of pandemic alert are built around a disease’s geographical movement. One outcome is central and explicit preoccupation in influenza preparedness planning with travellers by air, who are identified as a special population in need of careful surveillance and regulation.

Yet while these classic segregationist strategies and ideas are important in contemporary pandemic preparedness planning, the metaphors and practices of risk are central also. If border patrol is important, information flow across borders is equally so. Emergency preparedness planning for infectious disease events is vested in nation states - but is equally importantly managed through global systems and institutions, above all the WHO. At this level the strategies of managerial risk calculation and surveillance are primary, and they shape how, where and with what consequences borders are policed on the ground. Though they are sometimes in tension, the logics of risk and of danger together are productive of, and shape responses to, health scares involving infectious disease.
IV. SARS: An Epidemic

‘At noon, his chief of staff announced that the hospital’s own doctors and nurses had begun filling up the emergency wards--as patients. They reported trouble breathing, severe muscle pain and high fever. Their mystery illness wasn’t responding to treatment. The healthy staff took to dressing from head to toe in protective gear. To avoid infecting his family, Cockram kept to a separate bedroom and wore a surgical mask at home. Many of his colleagues slept in their offices. In a few days, the wards filled up with more than 90 patients. "It was heartbreaking," he says. "This was a new disease, and we didn’t know what to do. We felt so helpless.”’ Dr Clive Cockram of the Prince of Wales Hospital, Hong Kong, quoted in Tracking a Killer Virus, Newsweek, April 7, 2003

‘Handwashing was transformed from an irregular and absent-minded habit to a necessity carried out frequently and deliberately. The proper technique had to be learned, since we had scarcely realized the intricacy of the process. Seven steps in all, continued for at least 15 seconds, making sure that the thumb, the web spaces and the nails were not missed.’ Drs Michael Schull and Donald Redelmeier remember SARS in the Canadian Medical Association Journal, July 22, 2003

What were the logics of risk and danger in operation during the course of the outbreak of SARS in Toronto, Canada? What kinds of anxieties were mustered around SARS as a health scare? What kinds of practices were mobilized for its containment, and what assumptions and expectations were at work during the course of the outbreak and its immediate aftermath?

To public health officials SARS represented the return of an experience that most in the West had consigned to a past beyond memory -- a swiftly spreading outbreak in the general community of an epidemic disease with a significant mortality rate, and no vaccine or specific cure. Canadians had not experienced an epidemic crisis since polio in the mid twentieth century (whatever fears were entertained of HIV/AIDS, its transmission and illness rates were sufficiently slow as to plan interventions and treatment). SARS’ method of transmission was poorly understood, but its threat was all too easily imagined, mentally filtered through images of makeshift Spanish Influenza hospitals, crowded diphtheria wards, hospital rooms full of iron lungs.

Under these circumstances, the SARS outbreak in Toronto saw the whole-hearted return to the logic of dangerousness. Responses were focused squarely on hunting for and isolating dangerous individuals and things. The instruments of segregation and hygiene -- quarantine, isolation, exclusion, disinfection - were writ large in an attempt to accomplish this feat. This return was necessary. Although Castel is right to point out the limits of the logic and practices of dangerousness in governing the health of a population overall, the logic and practices of risk surveillance, obtaining information and from it defining risk factors and calculating risk, are equally too limited temporally and
logistically to respond to a crisis situation, such as SARS. But how necessary this was remains a matter of debate as stakeholders reflect on the consequences of the containment measures used. Where should the lines have been drawn?

To understand why particular containment strategies were used I follow the story of SARS in Toronto as health professionals and policymakers have told it.\(^45\) The story is structured by the tension between the impossibility, yet necessity, of monitoring a nearly infinite multitude of potentially dangerous objects and people. Rather than calculations of risk, it revolves around the unpredictable, the contingent, coincidence. In this story the scary thing, reiterated in event after event, is how momentary, coincidental contact between people and objects that no one suspected were dangerous generated outbreak after outbreak of a deadly disease.

The story begins with the failure of risk-based public health – the failure of surveillance. Canada’s much publicised Global Public Health Intelligence Network (GPHIN) received a Chinese-language report of an influenza outbreak in mainland China in November, 2003 - but it was never translated. On February 14 2004, the World Health Organisation (WHO) reported in its weekly newsletter the occurrence of an outbreak of an unusual acute respiratory illness, thought by the Chinese authorities to be atypical pneumonia, in Guangdong province. By February 21 ProMED-Mail, an internet reporting system, noted that only two tissue samples from deceased patients in Guangdong had shown evidence of the pneumonia bacterium, and that the illness might not be pneumonia at all. This too passed without commentary, in part because the Chinese government suppressed information about the extent of the outbreak at this stage.\(^46\)

Travellers, and cross-species influenza viruses, were and remain the model for a pandemic outbreak of respiratory illness, informing what information was identified as relevant and what was not. On February 14 officials in Hong Kong had reported a case of avian influenza. On February 19 Health Canada recommended that all provinces be vigilant for influenza-like illnesses in travellers returning from Hong Kong or China, and had issued a written statement to the Pandemic Influenza Committee, the Council of the Chief Medical Officers of Health, the Canadian Public Health Laboratory Network, the FluWatch network (including hospital infection control practitioners), and veterinarians, warning all recipients to be alert for avian flu. No further warnings were issued, and the disease was not identified as new by Canadian officials or health care providers.\(^47\)

A single moment of coincidental contact and interaction allowed the disease to spread. A doctor who had treated patients with atypical pneumonia in Guangdong then travelled to Hong Kong to attend a wedding, staying in the Metropole Hotel, where he became unwell and infected at least 12 other people. One was an elderly Toronto woman who became ill two days after her return home, and who died at home on March 5\(^{th}\) of apparently normal causes. On March 7\(^{th}\) her 44 year old son, Mr K., arrived in the emergency waiting room of a major Toronto hospital, Scarborough Grace, with high fever and difficulty breathing. He shared the open observation ward of a busy
emergency department for 18 to 20 hours while awaiting admission. He was later admitted to intensive care, where he required intubation. Though he was later isolated (on suspicion of tuberculosis), many patients, staff and visitors were exposed to him. He received oxygen and vaporized medications, which are potentially capable of transforming infectious droplets into an infectious aerosol. Health professionals in Toronto were thus ‘taken completely by surprise’ by SARS, for though by March 13 the WHO had issued a global alert about the mysterious illness (characterized as primarily affecting health care workers in Hanoi and Hong Kong, where it has spread to several hospitals), physicians in Toronto were not formally advised of it. However it was not long before Toronto epidemiologists ‘connected the dots’ themselves.48

As the story of SARS in Toronto progresses, the emphasis remains on its terrifying contingency, eluding control because it was transmitted by people and objects not suspected to be dangerous. Mr K died and his family, now ill, were isolated in negative pressure rooms in various Toronto hospitals, but the disease continued to spread. All kinds of people were infected (‘his wife infected seven visitors to the emergency department, six hospital staff, two patients, two paramedics, a firefighter, and a housekeeper’) and all kinds of equipment became suddenly suspect (‘the physician who intubated Mr. P in the ICU wore a mask, eye protection, gown, and gloves while performing the procedure, but he developed SARS’).49 A new cluster of cases occurred at yet another hospital when an unrecognized SARS patient was treated there for apparent myocardial infarction. The committee of senior physicians and medical officers for health that advised the Ontario government about infection control measures during the outbreak, already fearful that they were witnessing ‘another 1919’, were particularly worried by the March 30 outbreak of 324 SARS cases amongst residents of vertically linked apartments in a Hong Kong complex. Started by a single resident’s casual contact with a SARS patient, this outbreak led the advisory committee to believe they were witnessing fast-paced community spread, with transmission adaptive to varying circumstances. Their worst fears were confirmed on April 12 when a cluster of cases occurred in a Toronto Catholic sect.

Since danger seemed, potentially, everywhere and catastrophe was genuinely feared, the advisory committee recommended containment measures on an enormous scale. On March 26, with one hospital (Scarborough Grace) closed, all negative pressure rooms in the city in use, and 10 infected hospital staff waiting for admission while others waited to be examined, a state of emergency was formally declared. The containment measures were no different to those invoked against the infectious diseases of a century earlier. First, basic hygiene - hand washing and handkerchief use - was emphasised as the primary forms of prevention that every Canadian should undertake. Secondly, situations of mass contact were avoided. Some schools closed – for example, one in Scarborough closed after a nurse’s child exhibited symptoms. Excursions were cancelled. At Easter, the Ontario Department of Health sought and received the cooperation of religious leaders, requesting they place communion wafers in hands
rather than in mouths, refrain from using a common cup, hold confessions outside booths, and have parishioners exchange smiles rather than kisses or handshakes.

Thirdly, quarantine was used as a primary containing mechanism, and was imposed on close to 30 000 people in Toronto.\textsuperscript{50} Anyone who had entered the affected hospitals after March 16 was asked to adhere to a 10 day home quarantine. Attendees of funerals were sent into quarantine; when an employee of a large information technology firm broke quarantine and returned to work with respiratory symptoms, two hundred fellow employees were sent into home quarantine; when screening picked up a fever in a nurse caring for SARS patients, all the passengers who shared her train carriage that day were identified for possible quarantine. There were two levels of quarantine: 10-day home quarantine, and 10 or more day ‘work’ quarantine where those affected could move between their workplace and their home, but go nowhere else. In addition, many of those in quarantine self-imposed extra barriers between themselves and their family, sleeping in basements and preparing and eating food alone.\textsuperscript{51}

In point of fact, of course, the epidemic was almost wholly confined to health care settings, and those primarily affected were exposed and vulnerable patients and health care workers. That led to an unprecedented focus on health care settings, especially hospitals, which were suddenly identified as dangerous places instead of as sanctuaries. Hospitals across Ontario - well outside the affected area - ceased undertaking non-emergency procedures, and closed their doors to visitors. Their borders were patrolled – sometimes literally by police, but at all times by staff who were deputed to temperature screen all those who entered their doors and to require handwashing in alcohol based antiseptic. Within, hygiene protocols received minute scrutiny. Particular life-saving practices such as intubation became identified as immensely risky for the physicians performing them. Standard protective clothing protocols quickly became double gown and glove. Health care workers worried anyway that they might contaminate themselves or others as they removed this clothing, or by other minor and inadvertent breaches of protocol. Masks became the focus of a lengthy and sometimes acrimonious debate over whether and to what degree fit-testing was required to make masks protective rather than an actual transmitter of infection, whether or not only the N95 mask (which filters out 95% of all particles larger than 1 micron) was effective in preventing transmission, and how to manage the logistics of distribution and fitting.\textsuperscript{52}

In addition to these local measures, from the beginning air travellers were identified as a special group in need of intense surveillance. In Canada, all passengers from SARS-affected countries were issued with a yellow leaflet, and outgoing passengers from Toronto with a red leaflet, containing a questionnaire of symptoms and recent activities. (These leaflets were available at some land border crossings also). Those that answered ‘yes’ to any questions were examined by a nurse. By July one million people had received the leaflets and 3000 had been examined by a nurse. In addition, 800 000 people had been thermally scanned for raised temperatures and 200 had been examined further. None of these people were sent to seek further medical treatment.
As it turned out, between March and May only 5 people infected with SARS entered the country, and none were symptomatic whilst flying or in airports. Nevertheless air travel continued to be a strong focus for concern, as demonstrated by the controversial travel advisory issued against Toronto by the WHO (which required thermal scanning be implemented at all international airports) and backed by the US Centres for Disease Control (CDC).

These containment measures had enormous negative social impacts, which were later decried by some as ‘the problem’ with SARS. Saturation media coverage, especially the ‘SARS soap’ - the daily 2 pm press briefing - and the disruptions wrought by school closures and Easter contributed to a sense of crisis. Quarantine was immensely stressful, leading to anxiety attacks, nightmares and raised blood pressure in many subjects. Quarantine also adversely affected already overstrained health resources. Four members of the advisory committee were quarantined when one of their number fell ill with SARS. Hospitals quickly lost staff with any experience to either illness or quarantine. Tracking those in quarantine was an enormous undertaking for public health officials. The WHO travel advisory against Toronto, which was issued in late April as the first outbreak was terminating, sparked off such a large number of self-reported ‘possibles’ that the masses of data helped obscure the case of the medical student who caused the second outbreak in May.

The new protocols required in health care settings also generated negative impacts. More people died from their inability to access full care during this period than died from SARS. Family members prevented from visiting patients all over Ontario suffered anguish. Hospitals felt unable to implement all the Health Department directives, such as isolating all inpatients with fever or respiratory symptoms. Several family doctors were infected by their patients, leading to (highly unsatisfactory to all parties) discussions as to what protective clothing family doctors should use, and how it should be distributed to them.

And, as in other health scares, the impact of SARS soon came to be significantly measured in economic terms. Airlines were nearly bankrupted. Tourism to Ontario was decimated – one health professional recalled staying at one of Toronto’s major hotels, which was entirely vacant. Chinatown was emptied of shoppers and restaurant goers, with many Torontonians identifying as asian or of asian descent complaining of feeling stigmatized. Nurses and their families also felt socially isolated by nervous workmates and were refused service by frightened shopkeepers or taxi drivers. Quarantined workers and their industries lost significant income. Government spending on the crisis put a strain on the next budget. So prominent were concerns about the economic impact of SARS that by the end of April the provincial government was already planning a multi-million dollar tourism promotion campaign (whose message was mostly loss in the outbreak of SARS II), and consequently being accused of taking containment measures too lightly in order to minimize lost revenue.
SARS turned out not to be highly contagious, nor especially virulent in healthy people aged under 65. In the end, about 250 people were infected, and 44 died, a very small number in comparison with (for example) preventable deaths from tobacco smoking or road accidents. On reflection, therefore, government and health professionals sometimes feel that there was a great disparity between SARS’ actual severity, and the impacts of the outbreak. They sought answers as to why this had occurred at the commissions of inquiry, where many criticisms were aired over issues specific to the situation (eg, how fast information was gathered and relayed to the scientific advisory committee) and about whether different communication methods might have calmed public fears (eg, whether the daily press briefings calmed or raised concern).  

Many of the particular answers proffered by the stakeholders involved do explain particular problems and will no doubt be useful in emergency preparedness planning in Ontario and elsewhere, but only one person queried the logic of the response. Dr Richard Schabas, a former Chief Medical Officer of Health in the province and now Chief of Staff of a SARS affected hospital, questioned the use and extent of quarantine and contact tracing during SARS on the basis that epidemiologically, the disease had never looked like a highly contagious epidemic, even in Guangdong. Quarantine was also criticized for being at best, a poorly understood and at worst largely useless infection control instrument. Its imposition was rather arbitrary, its length – and its subjects - being determined by social rather than scientific factors. Further, tracing the epidemic curve – a primary epidemiological tool – showed the outbreak had peaked and was declining by the end of March. Though he himself also acted on the principle of precaution, entering voluntary quarantine throughout the duration of his holiday in France when he became aware that SARS had entered his hospital around the time he left Canada, Schabas was publicly skeptical of what he saw as a kind of disaster mindset in the scientific advisory committee: ‘you can worry about the hundred year flood every time it starts to rain.’ Schabas felt fears of worst-case scenarios and of unlikely contingencies were being chosen over the more minimal rationales of suggested by risk assessment. In my terms, the scientific advisory committee was trying to eliminate all potential sources of danger, rather than accepting the possible casualties of an approach based on calculating probabilities. And the committee felt justified when the second outbreak in May, SARS II, occurred after two full incubation periods had passed with no new cases, transmitted by a medical student - this was exactly the kind of tiny probability / high consequence event they were worried about. (I make no judgement as to who - if anyone - was ‘right).  

The year before SARS, West Nile virus had come to Canada for the first time amid discussions of the consequences of global warming. In May 2003 the case of BSE that led to the US closing its borders to Canadian beef, with devastating effects, was discovered. And directly after SARS II, the eastern seaboard was struck by a major blackout attributed to faults in Canada’s aging energy delivery infrastructure, leaving Torontonians feeling that the future was indeed one of likely catastrophe. Amid the risk society, the logic of dangerousness continued to inform reactions to many
immediate crises, as the mass slaughter of cattle in Alberta and, in early 2004, birds in British Columbia to annihilate avian influenza – a sort of final solution or pre-emptive strike - sadly demonstrated.

VI. The ‘new normal’? An insecure conclusion

"We are living in a new normal ... The old days where an infection might emerge every now and again and capture our attention really has changed." Dr Julie Gerberding, Director, US Centres for Disease Control, February 25, 2004

‘[I]t is time to return to the old standbys to combat SARS: wash hands frequently, stay home when sick and avoid hand shakes and other similar physical contacts during flu season. "You've heard of the 'new normal'?" Patrick asks. "Well, that's a bit of a misnomer. It's actually the old normal."’ Dr David Patrick, director of epidemiology at the British Columbia Centre for Disease Control, October 14, 2003

Since SARS - since 9/11 - it seems we are living in a ‘new normal’. The term has had wide circulation in the media and in specialist circles after both the attacks on the World Trade Centre on September 11, 2001 and after SARS. It is impossible to dissociate SARS from 9/11 – both are consistently used, often together, as emblems for the novel, catastrophic threats that North America and the ‘west’ are considered to be facing. The words ‘new normal’ speak to the new discourses of (in)security and the methods used to combat danger in an era defined by these two events. Responses to SARS in North America have resembled those of the Bush administration to 9/11 in some important literal and discursive ways: minute and scrupulous border patrol, the notion that security is vested in and reinforces the nation / ‘homeland’, the imposition of governing power - the sword - to find and neutralise danger.

In the US after 9/11 the ‘new normal’ is a state of constant insecurity and instability. Originally used well over a decade ago to refer to perceived new instabilities in global economies, the term has come to refer particularly (though not exclusively) to terrorism. One of the most central and public responses has been to step up border control in order to identify and exclude dangerous individuals. Air travellers have been especially targeted and monitored, as anyone who has spent hours in the queues to be fingerprinted at US airports or filled out an identification card for merely passing through US air space without landing can attest. The other chief instruments have been the doctrine of ‘pre-emptive strikes’ and the detaining of terror suspects, which - apart from any other considerations - are similarly based on the logic of dangerousness. Consider the close resemblance between these concerns and the question Foucault described as preoccupying law enforcement in the nineteenth century: how do we prevent the terrible crimes of the pathological murder, a person who by definition seems utterly normal until they commit their dreadful acts? Only by identifying and neutralising them before they do so. My argument is that now just as then, the sense of
insecurity has seen instruments based on the logic of dangerousness not merely complementing, but often intruding in or replacing, those based on risk.

The ‘new normal’ means more than fears of terror - it connotes a more generalised sense of being under constant potential threat. The author of one article, lamenting the lost innocence of her children in the year of the world trade center attacks, the anthrax letters, reports of child abductions, war and shooting deaths, summed up the ‘new normal’ as ‘a sniper day’. This state of insecurity requires constant vigilance and preparedness in response, made manifest in the increased calls for emergency preparedness, plans that require citizens to be constantly alert also. The American Red Cross, for example, has produced a new initiative called ‘Together We Prepare’, which ‘champions Individual Preparedness’. The initiative ‘empowers people to prepare themselves, their homes, schools, businesses, and neighbourhoods for the unexpected.’

This sense of a novel insecurity and the requirement to be prepared continue to be echoed in the economic realms, where airlines are told that they have hit a ‘new norm, where crises like war and health scares are no longer unusual blips to be quickly forgotten, but a permanent part of the business cycle’, and business are exhorted to put in place their own plans for management in the event of a terrorist attack or outbreak of disease.

In Toronto, the ‘new normal’ refers particularly to health issues. In its broadest terms, it refers to the context of new and re-emerging diseases that are believed to pose novel and terrifying threats to western societies, alongside terrorism. Insofar as SARS represented this threat, border patrols and detaining the dangerous have likewise been central instruments. This is literal - one of the outcomes of SARS has been the alteration and strengthening of old national and provincial Quarantine Acts. Air travellers were identified as a population in need of particular surveillance, both through self-report and through screening. The discursive fit between border patrol and security was so close that Ontario’s provincial health minister during SARS, Tony Clement, made more extensive thermal and health screening at all borders an election promise, despite the fact that this measure was extremely expensive and utterly useless during SARS, and estimations that in general 1 in 8 travellers experience respiratory infections that could lead to detainment before a SARS diagnosis could be ruled out.

During and after the outbreak, however, the term ‘the new normal’ had more specific meanings, referring to (1) new directives for infection control within hospitals, and (2) a call for all members of the public to a return to the principles and practices of basic hygiene, which were considered to have lapsed under conditions of false security. (These were emphasized in the emergency preparedness plans for businesses, also). The new directives aimed specifically for hospital infection control had been issued and updated by the Ontario Ministry for health during the course of the outbreak, and centred on more scrupulous sterilization procedures, the wearing of new multiple layers of protective clothing and especially fit-tested N95 masks, and the isolation in negative pressure rooms of all patients with fever or respiratory illness. Although they were
devised in part to respond to the fears of frontline health care workers, these directives were initially found unworkable in existing hospital conditions and with existing resources, and since then have been revised with input from public health officials, doctors and nurses. This ‘new normal’ of increased vigilance over a range of tiny details that formerly went unscrutinised – a hospital version of border security – continues to be operational.

In both contexts, all sides agree that security comes at the price of a vanishing innocence. Practitioners wonder if they should greet all their patients swathed in greens, their faces sweating and itchy, their expressions masked: "The bare-faced examiner of coughing children should be considered an image of the past, seen only in Norman Rockwell paintings of a simpler time," wrote one doctor. "Believe me it's not ideal, and if I had the choice I wouldn't be doing it. But I think we have an obligation to protect ourselves and our patients given what we know," commented another. Many physicians, underscoring the impossibility of perfect danger control, were pragmatic:

I'll have to try to figure out what to do when I get to work. It looks like we're going to have the sign-in sheets for everyone, and I have masks and alcohol gel at the front door for patients. I still don't know if I should be wearing a mask all the time - they're very uncomfortable. I think I'll have a look at what the patient has written on the sheet before entering the room, and put on a mask if I'm worried. Not very high tech, but I hope it works.

I guess this is the new normal I've been hearing about.

The truly healthy subject-citizen of the ‘new normal’ is a person who not only exercises a disciplined and responsible autonomy, managing and minimizing the risks to their health from their lifestyle, as described by Lupton, Petersen and others, but is someone who is also constantly vigilant for catastrophe, and immediately obedient to the return of older forms of imposed government in such situations. And the new era of emergency preparedness sees the eruption of old fashioned, imposed, face to face techniques of locating and averting danger – border controls, quarantine, isolation, mandated hygiene - alongside the continued operation of the managerial machinery of surveillance and risk. The dilemmas on both sides remain: the impossibility of locating and neutralising all dangerous individuals and objects in real time, the inappropriateness of making judgments based on risk calculations where mistakes cost lives in a crisis.

Health scares like SARS can be profitably understood as the outcome of these dilemmas. They are, perhaps, to be expected in a world discursively and instrumentally preoccupied with emergency preparedness - or if not that, then as the outcome of the principle of precaution followed by health professionals conscious of the weight of their responsibilities. Often, like SARS, they are shaped by the tensions between the realities of a globalising world - fast and common travel, investment in global information systems - and our continued social and governmental reliance on nation states. There
are many who, seeing this, dissent from the border-patrolling version of security to argue that a better response is to reinvest in public health systems that will have the capacity to respond in the event of a pandemic in western nations, and to alleviating the conditions of social inequality, poverty and environmental devastation that are identified as the conditions under which new threats to health emerge. ‘The final resting place where things will end up, or what they call a new normal, certainly hasn’t been determined yet’, as one doctor said. It’s really just a question of where we are going to draw the lines.

3 Simon Williams, "From Smart Bombs to Smart Bugs: Thinking the Unthinkable in Medical Sociology and Beyond," Sociological Research Online 6, no. 4 (2003).
11 Castel, "From Dangerousness to Risk."
15 Dean, Governmentality : Power and Rule in Modern Society.


19 Ibid.


25 Abt, "Coping with the Risk of Cancer in Children Who Live near Powerlines.”


28 Abt, "Coping with the Risk of Cancer in Children Who Live near Powerlines.”


41 *Estimating the Impact of the Next Influenza Pandemic: Enhancing Preparedness* ([cited]), *Pandemic Influenza Preparedness and Response Plan* ([cited]).


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