

Pandemics, place, and planning: *Learning from SARS*

by S. Harris Ali, Roger Keil, Claire Major, and Estair van Wagner

Summary

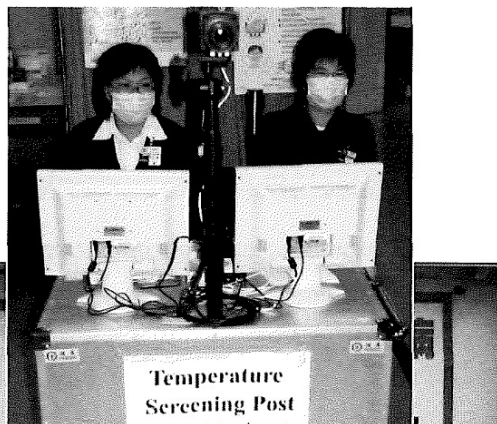
The outbreak of SARS demanded a reconceptualization of our understandings of how risk happens and how to mitigate it. Through our current project "SARS and the Global City: Severe Acute Respiratory Syndrome (SARS) in Toronto", we focus on understanding how pathogens interact with economic, political and social factors to represent a threat to human development and society in an increasingly globalized world. This article highlights for planners the concerns we have gleaned from interviews, and explores three points: global cities and pandemics; the continuous nature of urban places; and municipal emergency planning.

Sommaire

La crise du SRAS nécessite une reconceptualisation de notre façon de comprendre la manière dont le risque survient et les moyens à adopter pour l'atténuer. Dans le cadre de notre projet actuel, «Le SRAS et la ville mondiale : le syndrome respiratoire aigu sévère (SRAS) à Toronto», nous mettons l'accent sur la façon dont les pathogènes interagissent avec les facteurs économiques, politiques et sociaux, constituant une menace pour le développement humain et la société à l'heure de la globalisation. Cet article illustre, au profit des urbanistes, les inquiétudes que nous avons recueillies au fil d'entrevues et examine trois éléments : les villes mondiales et les pandémies, la nature continue des espaces urbains ainsi que la planification municipale des mesures d'urgence.

As recently as the year 2000, we faced the unknowns of the Y2K bug by "building a subterranean bunker and stocking up on bottled water and duct tape".¹ Since then we have come to realize that our vulnerability exists at many levels, including microscopically (within our bodies) and macrocosmically (at many sites around the globe) all at once. Temporally, emerging infectious diseases spread faster than ever before – carried in bodies on airplanes, for example, as in the case of Severe Acute Respiratory Syndrome (SARS), in less than 24 hours of travel time from Hong Kong to Toronto. The outbreak of SARS requires planners to reconceptualize how risk happens and how to mitigate it in individuals, cities, and nations. This situation also affords planners the opportunity to reassess their role in the process of policy making and implementation with regards to the containment and treatment of infectious disease in cities. This should not come as a surprise given the traditional role of planning in the strategies of urban public health. In addition, as urbanization and urban planning were often seen as solutions to the age-old human struggle with infectious disease, we have also come to understand that the building of cities contributes to the emergence of the spread of infectious disease. Specifically, there is indication that land use changes, regulated largely through planning, are a major source of emerging infectious diseases. Deforestation, habitat fragmentation, extractive industries (including those used in the construction of new subdivisions and roads), the rapid acceleration of transportation between urban centres, etc., are all processes in which planning plays a significant part.² Yet, just as planning and city building during the 20th century in Western cities came to rely on 'invisible' technological processes of sanitation infrastructure (water, sewage) and changes in the built environment (zoning, better materials),

Temperature screening posts are set up to screen for epidemics, such as SARS.



A sign warning of the danger of contracting bird diseases, namely avian flu.



it may now have to also reassess its role in the organization and regulation of urban societies. In this brief article, we discuss some of the ways in which planning may be relevant to the fight against emerging infectious disease in the globalized urban environments of today.

“SARS and the Global City: Severe Acute Respiratory Syndrome (SARS) in Toronto” is research funded by a Social Sciences and Humanities Research Council of Canada grant. We focus on understanding how pathogens interact with economic, political and social factors to represent a threat to human development and society in an increasingly globalized world. We recognize that great strides have been made by policy makers learning from the SARS experience, and that Toronto may be the most prepared city in the world for a pending and probable pandemic flu. Yet some of the actions for pandemic flu planning continue to be predicated on actions of hoarding and bunkering, such as that of antiviral drugs which may or may not manage the virus.

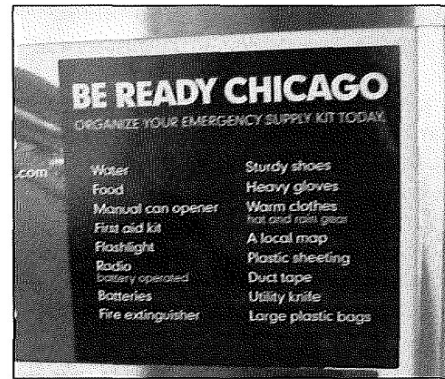
Planning is a practice of assessing and responding to the complexities of contemporary life, and of accounting for nuances of realities and lived experiences.³ In this article, we highlight for planners the primary concerns as we have gleaned them from interviews with policy makers, workers impacted by SARS, senior healthcare officials, and participants of Toronto’s current pandemic flu planning. This overview is not a list of action items for planners, but we do hope it will be useful to enable planners to start to dialogue and consider how to address emerging infectious diseases. We explore the relationship between emerging infectious disease and planning through three points: global cities and pandemics; the continuous nature of urban places; and municipal emergency planning.

Global cities and pandemics:

In networked global cities, people and things are mobile. Global air travel links and interconnects cities directly and rapidly. Vast geographies of the globe come to have relationships with distant locations through the movement of goods and people. SARS was the first case of an emerging infectious disease spreading rapidly and undetected across the globe, the first to travel along the networks of transnational flights. It showed how emerging infectious diseases can be transported from and

thrive in urban centres that are home to millions of people and destinations for millions more every day.⁴

Urban and global intensification accentuates and accelerates the risks of emerging or re-emerging infectious diseases. While the spread of infectious diseases has long been of global concern,



A "sign of the times" indicating the need for civic preparedness.

overly optimistic predictions of its end lead to complacency, particularly in nations with developed public health systems such as Canada and the USA.^{5,6} We cannot assume that emerging infectious diseases are a problem of elsewhere, of distant "others". Representatives from the World Health Organization and from Ontario health policy agencies are fully aware that cities are sites of vulnerability, given that no national, provincial, or municipal border can prevent the entrance of an infectious disease. At best, we should plan for good surveillance and response mechanisms where the diseases occur. Extending from this, we ought to perhaps consider as part of our civic preparedness plans, that communication can and must be enabled between places that seemingly have little, if any, relationship.

Urban places are continuous:

Just as emerging infectious diseases are able to permeate political boundaries and institutional sectors, people and things are also constantly in flux over administrative and ecological borders of urban regions. Because we move, so too do the viruses.

During the SARS outbreak, in York Region alone there were 7,000 people in quarantine at one time. Pandemic flu planners are currently looking at how to keep essential services running, given that a large percent of the working population, in the event of a pandemic, may be unable to work, and, as with

SARS, many of those in quarantine may well be healthcare professionals. This kind of planning is essential. However, from the interviews we've conducted, it seems that there is a missed opportunity for discussion between jurisdictions: because Toronto and the surrounding municipalities and regions function as one larger urban region, planning for the pandemic flu must happen across these boundaries. An essential worker may take residence in another municipality, and viruses know no boundaries. Considering our vulnerability to emerging infectious disease under these conditions of mobility and flux, what is a planner to do?

Working from the maxim that vulnerability is passive, whereas resilience is active, we can find an entry point for planners. Emphasis on resilience serves as the planning foundation of inter-related and increasingly influential paradigms in contemporary times: disaster management and security. Socio-natural disasters have great impacts on municipalities: Hurricane Katrina with its extensive flood damage to communities and infrastructures; the 2003 black-out in Ontario and the northeastern United States which raised specters of continuous urban everyday life under threat of electricity supply problems particularly in the peak periods of summer and winter; and the SARS crisis in Toronto, which paralyzed the healthcare sector. Municipalities are making efforts to converge disaster mitigation techniques with public health's preventative approaches, leading to what could be referred to as a "health security paradigm".⁷ Within this emerging paradigm, infectious diseases are considered threats that potentially undermine national prosperity, governance and the control of state territories and regional authority. Since infectious diseases have impact across various economic sectors, it is clear that an active and effective response, from a municipal planning perspective, requires collaborations between public and private actors.⁸ This must include everything from workplace flu plans, to how to get essential workers to work, to what to do with the kids.

Municipal emergency planning:

Planning remains an important practice in this process. But in contrast to traditional notions of top-down, military-style disaster planning which

often subordinated community and civic concerns to functional considerations, planning needs to respond to growing public awareness and attention to the maintenance of civil rights even in crisis situations (*viz* the aftermath of Katrina). Planning for emergencies occurs less in the arcane backroom conversations of public agencies but increasingly in the public domain, as citizens express their concerns about which measures to take and which strategies to pursue. It is gratifying to see that the City of Toronto is undertaking a consultative process with their Pandemic Flu Plan. However, a couple of factors could make this process more effective. Consultative practices may not be new news for progressive municipal planners, but for disaster managers, traditionally trained in the hierarchical Command-Control-Communicate model of emergency management, a deliberative, democratic mode of operation may appear alien. Public health officials, municipal planners and emergency managers may need to dialogue to ensure that everyone is on the same page before consultations with other sectors begin. Furthermore, there is the possibility that individual civil rights may need to be temporarily

suspended so that public authorities can arrive at an effective collective response to the emergency. In the case of a disease outbreak, these issues are even more pressing because of public measures of surveillance and quarantine to contain the spread. Public health, as part of the medical establishment, has well-established protocols – like patient confidentiality – to protect individual rights. The protection of sensitive data may not exist in other sectors. In planning for a future infectious disease pandemic, planning officials may need to access data from various sectors and organizations. The need to gather such information ought to be questioned publicly, and if emergency planners opt to use such data it should be tightly protected, with measures taken to prevent abuse of this data. In general, planners should ensure that data for “public health security” is not appropriated by other political interests in the name of “security” – a real concern in today’s “new normal” and geopolitical climate predicated on the “war on terrorism”.⁹

Through this discussion we can see that the messiness of urban life requires a dynamic understanding of the complexity of time and place in contemporary

urbanity, and that within any one place “there are many kinds of space[s]” because there are many kinds of concerns.¹⁰ In short, we have highlighted that the ways in which we respond,


collectively, to disease is an issue of the maintenance of life in the city – not just in the biophysical but also in the socio-cultural and civic sense. The presence of emerging infectious diseases focuses our attention on the ways in which the social can be disrupted and how not all groups – by gender, race, immigration or citizenship status, or work status – are affected in the same way. Any one region must be in dialogue both with its immediate neighbours and with distant relatives around the globe. There must be the balance between vulnerable workers doing their jobs and their not being at unnecessary risk. Children must be cared for if schools are shut. Public health workers must have the infrastructure and resources they need. Clear communication orders and authoritative voices must be in place. Planners can be at the edge of these considerations, on the interface between the global and the local, to facilitate clarity in otherwise messy, dense, and occasionally conflicting relationships. ■

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References

- George L. The real epidemic is fear. *Maclean's* 2005;118(40):46-52.
- Patz JA, Daszak P, Tabor GM, Aguiar AA, Pearl M, Epstein J, et al. and Members of the Working Group on Land Change and Disease Emergence. Unhealthy Landscapes: Policy Recommendations on Land Use Change and Infectious Disease Emergence. *Environmental Health* 2004;112(10). Available at: <http://www.ehponline.org>
- Bryne D. Complexity theory and planning theory: a necessary encounter. *Planning Theory* 2003;2(3):171-178.
- For a more extensive discussion of this see: Ali SH, Keil R. Global cities and the spread of infectious disease: the case of Severe Acute Respiratory Syndrome (SARS) in Toronto, Canada. *Urban Studies* 2006;43(3):491-509.
- Garrett L. The return of infectious disease. *Foreign Affairs* 1996;75(1):66-79.
- Lashley FR. Factors contributing to the occurrence of emerging infectious diseases. *Biological Research for Nursing* 2003;4(4):258-267.
- Caballero-Anthony M. The threats of infectious diseases: why not 'securitize'? *PacNet Newsletter*; 2005. Washington: Center for Strategic and International Studies. Available online at: <http://www.csis.org/media/isis/pubs/pac0527.pdf>
- Matthew RA, McDonald B. Cities under siege: urban planning and the threat of infectious disease. *Journal of the American Planning Association* 2006;72(1):109-117.
- Wekerle G, Jackson PSB. Urbanizing the security agenda: anti-terrorism, urban sprawl and social movements. *City* 2005;9(1):33-49.
- Smith RG. World city topologies. *Progress in Human Geography* 2003;27(5):561-82.

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