

— Edited by Kristy Buccieri & Rebecca Schiff —

PANDEMIC & PREPAREDNESS & HOMELESSNESS

LESSONS FROM H1N1 IN CANADA



canadian
observatory on
homelessness

PANDEMIC & PREPAREDNESS HOMELESSNESS

LESSONS FROM H1N1 IN CANADA

© 2016 Canadian Observatory on Homelessness

ISBN 978-1-77221-056-9

How to cite this book:

Buccieri, Kristy; Schiff, Rebecca (Eds.) (2016). *Pandemic Preparedness and Homelessness: Lessons from H1N1 in Canada*. Toronto: Canadian Observatory on Homelessness Press

Hosted at the Homeless Hub:

www.homelesshub.ca/lessonsfromH1N1

Canadian Observatory on Homelessness
6th Floor, Kaneff Tower, York University
4700 Keele Street
Toronto, ON M3J 1P3
thehub@edu.yorku.ca
www.homelesshub.ca

Cover and Interior Design: Dylan Ostetto

Copyeditor: Sharon Jessup Joyce

Printed and bound by York University Printing Services



This book is protected under a Creative Commons license that allows you to share, copy, distribute, and transmit the work for non-commercial purposes, provided you attribute it to the original source.

The Homeless Hub is a Canadian Observatory on Homelessness (COH) initiative. The goal of this book is to take homelessness research and relevant policy findings to new audiences. The COH acknowledges, with thanks, the financial support of the Social Sciences and Humanities Research Council of Canada. The views expressed in this book are those of the COH and/or the author and do not necessarily reflect the views of the Government of Canada.

ACKNOWLEDGEMENTS

The COH would like to thank the editors, authors and peer reviewers for their support and contributions to the development of this book.

The COH would also like to thank its staff and students who contributed to the writing, editing and design of the book.

This book was made possible in part by a Canadian Institutes of Health Research Planning and Dissemination Grant (grant 201408PDI) “Pandemic Preparedness: Knowledge Translation in the Ontario Homelessness Sector.”

This research resulted from two team grants: Canadian Institutes of Health Research (grant 200904PAP-203559-PAM-CEPA-119142), “Understanding Pandemic Preparedness in the Context of the Canadian Homelessness Crisis,” Canadian Institutes of Health Research (grant 20100H1N-218568-H1N-CEPA-119142), “Responding to H1N1 in the Context of Homelessness in Canada.” The researchers would like to thank the Canadian Institutes of Health Research for their generous contribution.

ABOUT THE EDITORS

Dr. Kristy Buccieri

Assistant Professor, Department of Sociology, Trent University

kristybuccieri@trentu.ca

Kristy Buccieri researches the intersections between health systems and homelessness in Ontario. Her work is community-based and has involved studies on youth homelessness, pandemic preparedness in the homelessness sector, and collaborative planning initiatives across health and social housing sectors.

Dr. Rebecca Schiff

Assistant Professor, Department of Health Sciences, Lakehead University

rschiff@lakeheadu.ca

Rebecca Schiff researches social and ecological determinants of health with a particular focus on the experiences of marginalized people. She focuses on community-engaged research and has conducted studies on a broad range of topics related to housing and homelessness as well as other areas including food systems, indigenous health research ethics, and northern governance.

CONTENTS

Introduction	1
<hr/>	
1 The Worst of Times: The Challenges of Pandemic Planning in the Context of Homelessness	13
<hr/>	
2 Accessing Justice Amid Threats of Contagion	33
<hr/>	
3 Pandemic Planning and Preparedness in the Context of Homelessness: The Case of Victoria, British Columbia	73
<hr/>	
4 Understanding Pandemic Preparedness by Homelessness Services in the Context of an Influenza Outbreak: The Calgary Response	99
<hr/>	
5 Pandemic Preparedness in the Context of Homelessness in Regina, Saskatchewan: The Case of Small, Isolated Urban Centres	127
<hr/>	
6 H1N1 and Homelessness in Toronto: Identifying Structural Issues in the Homelessness Sector	143
<hr/>	
7 Pandemic Preparedness in the Context of Homelessness: Health Needs and Analysis of Pandemic Planning in Four Canadian Cities	163
<hr/>	
Conclusion	185
<hr/>	
Appendix A: Canadian Definition of Homelessness	193
<hr/>	
Appendix B: Homeless Participant Survey	203
<hr/>	
Appendix C: Homeless Participant Interview	221
<hr/>	
Appendix D: Agency and Service Provider Interview	243
<hr/>	

INTRODUCTION

Kristy Buccieri

Natural and human-induced disasters have become increasingly common in modern society. “Factors such as increased urbanization, critical infrastructure dependencies and interdependencies, terrorism, climate change, environmental change, animal and human diseases and the heightened movement of people and goods around the world have increased the potential for various types of catastrophes” (Public Safety Canada, 2011, p. 3). While some emergencies are relatively localized events, others spread rapidly. Within the past two decades alone, viruses such as SARS and H1N1 have threatened the health and security of people around the world, largely due to technological advances that facilitate travel between global cities (Ali & Keil, 2008). The result is not only an increase in the number of disasters, but also in the potential for damage and loss of life. Large-scale emergencies, such as global pandemics, have become a reality of daily life, but while everyone is affected, not everyone is affected equally (Blickstead & Shapcott, 2009). Vulnerability is increased with inadequate structural and systemic protections, and is also grounded in the greater human, social, economic, physical and environmental capital accorded to some people over others (Canadian Red Cross, 2007). This book brings together findings from a multi-year, multi-site study that examined homelessness as a particular socio-structural vulnerability posing unique challenges to pandemic planning, preparedness and response across Canada.

Pandemic Planning and High-Risk Populations

Historically, influenza pandemics have occurred three or four times a century, with the most recent outbreak, prior to H1N1, being in 1968 (Toronto Public Health, 2009). The World Health Organization (WHO, 2009a) strongly advocates for pandemic influenza planning, warning that pandemics can create many varied challenges, both locally and globally. When we talk

about emergency situations, it is critical to keep in mind the magnitude, scope and duration of impact (Pleet, 2009). Recent emergencies and disasters have highlighted the need to reduce, as much as possible, undue suffering and loss (Canadian Red Cross, 2007). As Kass, Otto, O'Brien and Minson (2008) note of pandemics: "One must recognize that if citizens have limited or diminishing access to usual supplies of food, water, sewage systems, fuel and communication, the secondary consequences of a pandemic may cause greater sickness, death and social breakdown than influenza itself (p. 229)." Thoughtful and informed planning that includes sustained engagement by all stakeholders, even when there is no current emergency, is essential preparation for a pandemic response.

Pandemic preparedness is a collective responsibility. It depends on the government's ability to protect its citizens and critical infrastructure, including the processes, systems, facilities, technologies, networks, assets and services that are essential to the health, safety, security and economic well-being of Canadians (Public Safety Canada, 2009). However, while most plans are organized through government and community agencies, sound pandemic planning must also empower citizens to feel equipped to help themselves, as well as others, when faced with an emergency situation (Ng, 2009). Discussions about health care planning always contain a moral dimension, so that planning presupposes certain ethical values, principles, norms, interests and preferences (Kotalik, 2005). In pandemic outbreaks, health needs often overwhelm available human and material resources, requiring difficult decisions about how, where and to whom resources should be allocated (Thompson, Faith, Gibson, & Upshur, 2006).

Common ethical questions that arise include who will get priority access to medications and vaccines, what obligations health care workers have to care for the ill, despite risks to themselves and their families, how surveillance, isolation and quarantine measures can be undertaken while respecting ethical norms, and the obligations of countries to aid one another (WHO, 2007). As a general guiding principle, measures that limit individual rights and civil liberties must be necessary, reasonable, proportional, equitable, non-discriminatory and in full compliance with national and international laws (WHO, 2007). Decision makers need to recognize that within any

society some members experience vulnerabilities that increase their risk during emergencies. Pandemic plans must identify the barriers that produce such vulnerabilities, and ensure measures are in place to assist those at greater risk (Blumenshine et al., 2008).

All citizens “deserve equal attention when it comes to pandemic planning and pandemic resources, but not all [citizens] are equal when it comes to health status, nor are they equally able to take necessary steps to protect themselves or their families” (Blickstead & Shapcott, 2009, p. 2). The sources of risk may be medical or social, or both. Those who are medically at risk will experience poorer health outcomes following infection; those who are socially at risk are more susceptible to infection because of their life circumstances, but do not necessarily have poorer health outcomes than the general population (International Centre for Infectious Diseases [ICID], 2010). Risk can sometimes be attributed to health conditions, but poor health outcomes are also frequently a reflection of broader social conditions produced by inequities in social, economic, legal and political processes that fail to distribute resources and support equally among citizens (Canadian Red Cross, 2007).

According to leading health researchers Mikkonen and Raphael (2010): “The primary factors that shape the health of Canadians are not medical treatments or lifestyle choices, but rather the living conditions they experience. These conditions have come to be known as the social determinants of health” (p. 7). People who are medically and/or socially at risk because of the determinants identified by Mikkonen and Raphael (2010) and the Public Health Agency of Canada (2003) will not experience a public health crisis in the same way as those who are not considered to be high-risk individuals or part of a high-risk group (Ng, 2009). Being high risk reduces the ability of people to prepare before a pandemic, and cope or adapt once an outbreak has begun. At its worst, the potential for a pandemic to exacerbate existing social and economic inequalities underscores the importance of considering a pandemic, not only as a pressing public health issue, but also as an urgent matter of social justice (Uscher-Pines, Duggan, Garron, Karron, & Faden, 2007).

Who is at risk often depends on the type of emergency and the degree of preparedness (Chen, Wilkinson, Richardson, & Waruszynski, 2009). Researchers have identified a number of high-risk populations: people with disabilities (Campbell, Gilyard, Sinclair, Sternberg, & Kailes, 2009; Martin & the Medical Needs Task Force of the Emergency Preparedness for People with Disabilities Committee, 2009); the elderly (Hutton, 2008); prisoners (Hoff, Fedosejeva, & Mihailescu, 2009; Maruschak, Sabol, Potter, Reid, Cramer, 2009); low-income individuals and families (Blumenshine et al., 2008; Blickstead & Shapcott, 2009); tribal communities (Groom et al., 2009); and Aboriginal populations (Appleyard, 2009; Herring & Sattenspiel, 2007; Ministry of Health and Long-Term Care, 2009; Ng, 2009). Additionally, race/ethnicity, language and culture can be barriers to adequate health care and pandemic readiness (Ng & Bray, 2009). These are not mutually exclusive categories, but represent real people whose lives are shaped by a multiplicity of identities, relationships and living conditions (Canadian Red Cross, 2007). It should also be recognized that people may experience multiple risk factors simultaneously or at different times in their lives (ICID, 2010).

The need to focus on high-risk populations in emergency and pandemic planning is well documented, and policy-makers are continually reminded to identify groups that are socially disadvantaged and create plans with health equity in mind (Hutchins, Truman, Merlin, & Redd, 2009; ICID, 2010; WHO, 2007, 2009a, 2009b). Ng (2009) notes the planning process must also include those who themselves are at increased risk:

We can say that without unambiguous inclusion of the knowledge, experience and needs of the vulnerable and those who work closely with them, such planning will be essentially for the benefit of healthy, able-bodied, English-speaking, Christian, white, literate, middle-aged men with reasonable income and housing. In short...emergency planning for a minority (p. 23).

Emergencies have become a common part of modern life. Planning, preparing and responding to them is a collective responsibility requiring that thoughtful and sustained consideration be given to those who may face

an increased burden as a result of medical or social risks, or both. While pandemic planning may serve as an opportunity to identify sources of risk and think about how to address them, efforts to eliminate social and structural inequalities must continue long after a crisis has passed.

Researching Pandemics in the Context of Canadian Homelessness

The negative health outcomes associated with living on the street or without stable housing are well documented in Canada (Daiski, 2007; Frankish, Hwang, & Quantz, 2005; Guirguis-Younger, McNeil, & Hwang, 2014; Hwang, 2001; Kelly & Caputo, 2007). Yet only a few published studies have focused on homelessness as an issue that poses challenges to pandemic planning efforts (Badiaga, Raoult, & Brouqui, 2008; Brouqui et al., 2010). There are certainly many lessons to be learned from the previously noted literature on high-risk populations that can be applied to planning in the context of homelessness. However, there are many challenges unique to those experiencing homelessness and to the agencies and providers that work with them, and also to the sectors that emerge to coordinate the provision of services to them. To give just a few examples, homeless shelters are often congregate settings, homeless people may be skeptical of health care providers, based on previous negative experiences, and the transience of many homeless people makes sustained contact and medical monitoring difficult.

At the same time that H1N1 emerged as a global influenza pandemic in 2009 and 2010, our team of interdisciplinary Canadian researchers undertook a multi-city study of how the planning and response for this pandemic unfolded within the context of homelessness. A primary research question guided the study: “In what ways does our current emergency response to homelessness impact on the vulnerability of homeless populations in the event of a pandemic, and present challenges to effective pandemic planning?” Supporting this were three sub-questions:

1. What risks does a potential influenza pandemic pose to people who are homeless in Canada?
2. How do the design and structure of emergency homelessness services impact (in both positive and negative ways) the spread of infectious diseases?
3. How adequately prepared are the interdependent infrastructures that work with vulnerable populations, such as the homeless, in the event of a pandemic?

While homelessness exists across Canada, it is not experienced or addressed in a uniform way, as evident in the Canadian definition of homelessness that utilizes a typology approach.¹ To reflect this reality, the research sites selected were diverse in geographic location, size, and demographics. These sites included (from west to east): Victoria, British Columbia (led by Dr. Bernadette Pauly); Calgary, Alberta (led by Dr. Jeannette Waegemakers Schiff); Regina, Saskatchewan (led by Dr. Rebecca Schiff); and Toronto, Ontario (led by Dr. Stephen Gaetz²). A common set of survey and interview questions was asked of homeless participants in all four cities (n=351), and semi-structured interviews were conducted with social service providers and/or key stakeholders in each city as well.³ Although each research site used the same research instruments to guide data collection, the number of participants varied at each site. The specific details are outlined in each city chapter in this book. Research ethics approval was provided by the Research Ethics Board of each lead researcher's respective institution prior to data collection.

¹ Refer to Appendix A for the Canadian Definition of Homelessness document.

² Assisted by Dr. Kristy Buccieri.

³ For research guides, please refer to Appendix B (homeless participant survey), Appendix C (homeless participant interview), and Appendix D (service provider interview).

N (%)		N (%)	
City		Sex	
Calgary	118 (33.6%)	Male	238 (67.8%)
Regina	40 (11.4%)	Female	105 (29.9%)
Toronto	149 (42.5%)	Transgendered	4 (1.1%)
Victoria	44 (12.5%)		
Age		Age First Homeless	
Mean (SD)	38.51 (13.18%)	Mean (SD)	28.17 (13.77%)
Youth (16–24)	85 (24.2%)	Range	4–66
Adult (25+)	259 (73.8%)		
Aboriginal/First Nations		Visible Minority	
Yes	110 (31.3%)	Yes	103 (29.3%)
No	214 (61.0%)	No	218 (62.1%)
Sexual Orientation		Immigration Status	
Straight	293 (83.5%)	Canadian Citizen	317 (90.3%)
LGBTQ	42 (12.0%)	Landed Immigrant	16 (4.6%)
		Refugee	5 (1.4%)

Table 1: Overview of Homeless Participants Combined (n=351)

Structure of the Book

This collected volume features chapters that take a broad look at issues involved in pandemic planning for homeless populations, detail city-specific responses to the H1N1 outbreak and provide a collective comparative look at the self-reported health and wellness of homeless individuals in the four cities. Each chapter offers unique insights into the issues of pandemic planning, preparedness and response in relation to homelessness in Canada.

The volume begins with a chapter entitled, “The Worst of Times: The Challenges of Pandemic Planning in the Context of Homelessness,” in which Gaetz and Buccieri consider how the current emergency-based Canadian response to homelessness poses challenges to the health and well-being of homeless people, through an unsustainable system that will become further strained in the event of a serious, deadly pandemic outbreak. The authors propose six considerations for governments and

service providers, including support for planning, infection control, system capacity, inter-sectoral collaboration, communications and training, and unpredictability. In the chapter that follows, “Accessing Justice Amid Threats of Contagion,”⁴ Mosher discusses the common perspective of pandemics as global threats to national security, and proposes an alternative framing that incorporates a social justice lens and a focus on the social determinants of health. These chapters appear at the beginning of the book to offer context and a theoretical structure for the research findings.

The chapters that follow offer individual case studies of how four diverse Canadian cities planned for and responded to the H1N1 outbreak in relation to homeless citizens. These chapters outline, respectively, the experiences of Victoria, British Columbia (authored by Pauly); Calgary, Alberta (authored by Waegemakers Schiff and Lane); Regina, Saskatchewan (authored by Schiff); and Toronto, Ontario (authored by Buccieri). These chapters discuss the experiences of the four cities and outline key lessons learned in each. In the final chapter of the book, “Pandemic Preparedness in the Context of Homelessness: Health Needs and Analysis of Pandemic Planning in Four Canadian Cities,” the researchers consider the data collectively to share findings on the health and wellness of homeless individuals across Canada.

The threat of a pandemic outbreak is always a serious one that challenges the already-strained sectors working with homeless individuals. This book offers insights from a multi-year, multi-site study on how pandemic planning unfolded in cities across Canada for the H1N1 outbreak. It is intended to serve as a resource, to share lessons and to learn from one another’s strategies and strengths. The best response to a pandemic outbreak for people experiencing homelessness is to address the social and structural barriers that produce and reproduce their vulnerabilities in the first place.

⁴ Reprinted with permission. Original citation: Mosher, J. E. (2014). Accessing justice amid threats of contagion. *Osgoode Hall Law Journal*, 51(3), 919-956.

References

- Ali, S. H., & Keil, R. (Eds.). (2008). *Networked disease: Emerging infections in the global city*. Oxford: Wiley-Blackwell.
- Appleyard, T. (2009). *Bridging the preparedness divide: A framework for health equity in Ontario's emergency management programs*. Wellesley Institute: Toronto, Ontario.
- Badiaga, S., Raoult, D., & Brouqui, P. (2008). Preventing and controlling emerging and reemerging transmissible diseases in the homeless. *Emerg Infect Dis*, 14(9), 1353-9.
- Blickstead, J. R., & Shapcott, M. (2009). *When it comes to pandemics, no one can be left out*. Wellesley Institute: Canada.
- Blumenshine, P., Reingold, A., Egerter, S., Mockenhaupt, R., Braveman, P., & Marks, J. (2008). Pandemic influenza planning in the United States from a health disparities perspective. *Emerging Infectious Diseases*, 14(5), 709-715.
- Brouqui, P., Lagier, J. C., Cassir, N., Badiaga, S., & Gadelius, H. (2010). H1N1 2009 pandemic flu vaccination campaign: The homeless lesson. *PLOS Currents Influenza*, 29(1), n.p.
- Campbell, V. A., Gilyard, J. A., Sinclair, L., Sternberg, T., & Kailes, J. I. (2009). Preparing for and responding to pandemic influenza: Implications for people with disabilities. *American Journal of Public Health*, 99(S2), S294-S300.
- Canadian Red Cross. (2007). *Integrating emergency management and high-risk populations: Survey report and action recommendations*. Canadian Red Cross: Canada.
- Chen, J., Wilkinson, D., Richardson, R. B., & Waruszynski, B. (2009). Issues, considerations and recommendations on emergency preparedness for vulnerable population groups. *Radiation Protection Dosimetry*, 134(3-4), 132-135.
- Daiski, I. (2007). Perspectives of homeless people on their health and health needs priorities. *Journal of Advanced Nursing*, 58, 273-81.
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2005). Homelessness and health in Canada: Research lessons and priorities. *Canadian Journal of Public Health*, 96, S23-29.

- Groom, A. V., Jim, C., Laroque, M., Mason, C., McLaughlin, J., Neel, L. ... Bryan, R. T. (2009). Pandemic Influenza preparedness and vulnerable populations in tribal communities. *American Journal of Public Health*, 99(S2), S271-S278.
- Guirguis-Younger, M., McNeil, R., & Hwang, S. W. (Eds.). (2014). *Homelessness and health in Canada*. Ottawa: University of Ottawa Press.
- Herring, D. A., & Sattenspiel, L. (2007). Social contexts, syndemics, and infectious disease in north aboriginal populations. *American Journal of Human Biology*, 19(2), 190-202.
- Hoff, V. G., Fedosejeva, R. & Mihailescu, L. (2009) Prisons' preparedness for pandemic flu and the ethical issues. *Public Health*, 123(6), 422-425.
- Hutchins, S. S., Truman, B. I., Merlin, T. L., & Redd, S. C. (2009). Protecting vulnerable populations from pandemic influenza in the United States: A strategic imperative. *American Journal of Public Health*, 99(S2), S243.
- Hutton, D. (2008). Older people in emergencies: Considerations for action and policy development. Geneva: World Health Organization.
- Hwang, S. W. (2001). Homelessness and health. *Canadian Medical Association Journal*, 164, 229-233.
- Kelly, K. & Caputo, T. (2007). Health and street/homeless youth. *Journal of Health Psychology*, 12, 726-736.
- International Centre for Infectious Diseases. (2010). *Issues in pandemic influenza responses for marginalized urban populations: Key findings and recommendations from consultation meetings and key informant interviews*. International Centre for Infectious Diseases: Canada.
- Kass, N. E., Otto, J., O'Brien, D., & Minson, M. (2008). Ethics and severe pandemic influenza: Maintaining essential functions through a fair and considered response. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, 6(3), 227-236.
- Kelly, K., & Caputo, T. (2007). Health and street/homeless youth. *Journal of Health Psychology*, 12(5), 726-736.
- Kotalik, J. (2005). Preparing for an influenza pandemic: Ethical issues. *Bioethics*, 19(4), 422-431.

- Martin, K., & the Medical Needs Task Force of the Emergency Preparedness for People with Disabilities Committee. (2009). *A shared responsibility: The need for an inclusive approach to emergency planning for people with disabilities*. British Columbia: BC Coalition of People With Disabilities.
- Maruschak, L. M., Sabol, W. J., Potter, R. H., Reid, L. C., & Cramer, E. W. (2009). Pandemic influenza and jail facilities and populations. *American Journal of Public Health*, 99(S2), S339-S344.
- Mikkonen, J., & Raphael, D. (2010). *Social determinants of health: The Canadian facts*. Toronto: York University School of Health Policy and Management.
- Ministry of Health and Long-Term Care. (2009). Guidance on public health measures for the pandemic H1N1 influenza virus in first nation communities. Government of Ontario: Ottawa, Ontario.
- Ng, S. Y. M. (2009). *Emergency preparedness in Canada: Case studies on vulnerable populations in large-scale crises*. Department of Public Safety and Emergency Preparedness Canada: Canada.
- Ng, S. Y. M., & Bray, L. (2009). Appendix II: Toronto's emergency planning & vulnerable populations. In S. Y. M. Ng (Ed.), *Emergency preparedness in Canada: Case studies on vulnerable populations in large scale crises* (pp. 71-91). Department of Public Safety and Emergency Preparedness Canada: Canada.
- Pleet, E. (2009). Appendix I: The evaluative criteria for emergency management. In S. Y. M. Ng (Ed.), *Emergency preparedness in Canada: Case studies on vulnerable populations in large scale crises* (pp. 43-70). Department of Public Safety and Emergency Preparedness Canada: Canada.
- Public Health Agency of Canada. (2003, June 16). *What makes Canadians healthy or unhealthy?* Retrieved from <http://www.phac-aspc.gc.ca/ph-sp/determinants/determinants-eng.php>
- Public Safety Canada. (2009). *Emergency management act*. Retrieved from <http://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/plc-mrgnc-mngmnt/index-eng.aspx>
- Public Safety Canada. (2011). *An emergency management framework for Canada: Second edition*. Public Safety Canada: Ottawa, Ontario.

- Thompson, A. K., Faith, K., Gibson, J. L., & Upshur, R. E. G. (2006). Pandemic influenza preparedness: An ethical framework to guide decision-making. *BMC Medical Ethics*, 7(12), n.p.
- Toronto Public Health. (2009a). *Toronto pandemic influenza plan: A planning guide for community agencies*. City of Toronto: Toronto, Ontario.
- Uscher-Pines, L., Duggan, P. S., Garron, J. P., Karron, R. A., & Faden, R. R. (2007). Planning for an influenza pandemic: Social justice and disadvantaged groups. *The Hastings Center Report*, 37(4), 32-39.
- World Health Organization. (2007). *Ethical considerations in developing a public health response to pandemic influenza*. Geneva: World Health Organization.
- World Health Organization. (2009a). *Pandemic influenza preparedness and response: A WHO guidance document*. Geneva: World Health Organization.
- World Health Organization. (2009b). *Whole-of-society pandemic readiness: WHO guidelines for pandemic preparedness and response in the non-health sectors*. Geneva: World Health Organization.

1 THE WORST OF TIMES: THE CHALLENGES OF PANDEMIC PLANNING IN THE CONTEXT OF HOMELESSNESS

Stephen Gaetz & Kristy Buccieri

In the context of growing concerns about the seeming inevitability of an influenza pandemic, all levels of government in Canada, as well as a broad range of institutions, have been working to develop disaster management plans. The H1N1 pandemic of 2009–2010 put such plans to the test in many ways, as governments, institutions and community agencies had to respond, either through rolling out existing plans, or by developing ad hoc strategies. Homelessness presents a key challenge to effective pandemic preparedness because of homeless people's vulnerability to disease and their socially marginal status and, most significantly, because of the inherent weaknesses in a response to homelessness that relies mostly on the provision of emergency services and supports.

We know that at the best of times, the health of homeless people is compromised by situational factors (such as nutritional vulnerability and compromised immunity), structural factors (such as lack of income and inadequate housing), and pre-existing health conditions. Yet ultimately what underlies their vulnerability is not simply the characteristics and behaviours of the population. We need to consider the ways in which the infrastructure we have built to respond to homelessness — in particular, our reliance on emergency services that are often characterized by overcrowding, congregate living and resources inadequate to maintaining hygiene — organize the lives of people who are homeless to exacerbate this vulnerability and create the possibility of potential disaster in the event of a serious infectious disease outbreak. A key question to ask is whether we are prepared — or more to the point, is it possible to prepare — to adequately respond to the risks faced by the homeless population in the event of a serious pandemic?

This chapter engages with these questions by exploring how the homelessness service infrastructure creates vulnerabilities that may jeopardize the health and well-being of homeless people and their communities in the event of a serious deadly pandemic. Subsequent chapters in this book detail the findings of a multi-city research study, funded by the Canadian Institutes of Health Research, and conducted in Victoria, Calgary, Regina and Toronto. This chapter lays the theoretical framework for thinking about the research findings that follow, by drawing the reader's attention to the key issues that all cities in Canada must consider when constructing their plans and responses to a pandemic within the context of homelessness. Although each city will have developed its own infrastructure, the underlying issues of poor physical and/or mental health, population mobility, inadequate service design and social isolation remain the same in all cities.

Using the analytic framework of social exclusion, we argue that the vulnerability of homeless people to the spread of infectious disease must be understood in terms of that population's profoundly restricted access to a range of social and economic goods, institutions and practices. In addition, homeless people's social exclusion is manifest through spatial marginalization, with segregation into separate sleeping, eating and service provision ghettos. They have restricted mobility and limited access to a range of spaces and places that many citizens take for granted, due to the increased policing and surveillance of homeless people (O'Grady, Gaetz, & Buccieri, 2013). The result is that they have much more restricted choice regarding their mobility, where and with whom they sleep and eat, how they organize their time and where they spend their days, all of which produces a higher risk of homeless people contracting infectious diseases. "The homeless have limited control over whom they are in contact with, while at the same time, the transient nature of homelessness often results in the number of potential contacts changing dramatically on a daily basis" (Ali, 2010, p. 85). Efforts to contain the spread of virulent infectious diseases within the homeless population must therefore address not only public health strategies, but also the need to radically reform our response to homelessness, so that individuals and families have access to safe, secure housing, income and necessary support services.

Background

Previous experiences with pandemics (in 1918–19, 1957, 1967, 2003 and 2009), have offered many lessons about how such disasters evolve and what should be done to prepare for them. However, despite these insights, there remains great uncertainty about when such events might occur or how severe they might be. In Toronto, two relatively recent occurrences have highlighted some of the challenges of preparing for a pandemic, as well as the risks faced by homeless people. The first was the outbreak of tuberculosis in homeless shelters in Toronto in 2001, with 15 people advancing to an active and highly infectious state. Three of these people died during treatment, with one man's death confirmed as being directly attributable to tuberculosis infection (Basrur, 2004; Tuberculosis Action Group, 2003). A Coroner's Inquest was called into this man's death and, in response, the Ontario Ministry of Health and Long Term Care provided Toronto Public Health with funding to develop infection control guidelines for shelters and drop-in centres in Toronto (Basrur, 2004).

The second event was the SARS outbreak of 2003. This event, in particular, enhanced our understanding of pandemics (Ali & Keil, 2008; Ali, Keil, Major, & Van Wagner, 2006; Keil & Ali, 2006; Leung, Ho, Kiss, Gundlapalli, & Hwang, 2008), and drew many Canadians' attention to the need for pre-existing effective disaster management plans. While no homeless people became infected, those working in the homelessness sector became acutely aware of the risks posed by a potential pandemic, and at the time people voiced concerns about what might have happened had SARS hit a major downtown hospital frequented by homeless people, rather than a suburban hospital. A study of providers of services to homeless populations by Leung et al. (2008) revealed important unique concerns, including aspects of communication, infection control, isolation and quarantine.

Since that time, and in response to heightened institutional and public awareness, preparing for an influenza pandemic has become a focus of disaster management for all levels of government in Canada, as well as for a range of institutions and service providers. A review of current federal, provincial and municipal pandemic plans reveals a lack of knowledge and

preparation in certain areas, specifically for vulnerable populations such as the homeless. In some cities, including Toronto, the municipal government did undertake consultations with the homelessness sector to advise and support pandemic planning, and identified resources for that sector.

The H1N1 pandemic highlighted the degree to which certain underlying assumptions frame our public health response to the spread of infectious diseases, and the ways that response is managed. The first of these assumptions is that self-care is not only necessary, but is possible for individuals to undertake. It is believed that individuals can and should take steps to reduce risks to themselves and others. The second assumption is that a person's home can and should serve as a natural site for effective prevention and recovery from illness. A poster commonly used by the Public Health Agency of Canada during H1N1, and widely reproduced across the country (PHAC, 2009b), highlights some of these assumptions. This poster suggests the most important ways to protect yourself and others are to: wash your hands often and thoroughly in warm soapy water or use hand sanitizer; keep common surfaces and items clean and disinfected; cough and sneeze into your arm, not your hand; stay home if you are sick; and contact a health care provider if your symptoms worsen. Another poster advises people to plan ahead, with advice to stock up on essentials such as pain and fever medications and easy meals; and to have important telephone numbers on hand, such as those for your doctor, local public health clinic and information lines (PHAC, 2009a).

These are well-thought-out, practical suggestions that are likely meaningful to most Canadians. Unfortunately, very little of this advice is helpful if you are homeless. Homelessness literally means being 'without a home' within which to recover and convalesce, and the poverty associated with homelessness usually means lacking the necessary resources to engage in the kind of self-care that is promoted in such public health campaigns. Planning ahead and stockpiling are not realistic for people who must, because of their poverty, focus on the immediate. The range of charitable services such as emergency shelters and day programs designed to support homeless individuals does not make up for these material deficits.

In thinking about pandemic preparedness and disaster management, it is increasingly understood that effective responses pertain not only to disease transmission, but also to broader social and structural factors. These include who has access to resources, and the degree of trust citizens have in the capacity of the state to respond adequately to protect them (and their subsequent willingness to cooperate and comply with requests). Consideration of vulnerability during an influenza pandemic must go beyond a concern about disease transmission to incorporate a social determinants of health perspective that explores how social and structural factors such as poverty, inadequate housing and income inequality contribute to the vulnerability of sub-populations (Commission on the Social Determinants of Health, 2008; Mikkonen & Raphael, 2010). The experiences of SARS and H1N1, as well as the ongoing battle against tuberculosis, have shone a light on the need to assess not only our emergency plans and responses, but also to consider the vulnerability of certain sub-populations, such as homeless populations (Hwang, Kiss, Gundlapalli, Ho, & Leung, 2008; Leung et al., 2008).

The Experience of Homelessness and Vulnerability

In Canada, it is estimated there are between 150,000 and 250,000 homeless people at any given time (Laird, 2007; Yalnizyan, 2005). Although the faces of homelessness vary from city to city, it is a challenging issue throughout the country, particularly in major urban centres. We argue in this chapter that homelessness presents a key challenge to effective pandemic preparedness because of homeless people's vulnerability to disease and their socially marginal status and, most significantly, because of the inherent weaknesses in the current national response to homelessness.

There is considerable evidence that homelessness is associated with poor health, a compromised immune system and barriers to accessing health services (Boivin, Roy, Haley, & Galbaud du Fort, 2005; Frankish, Hwang, & Quantz, 2005, 2009; Hwang et al., 2001; Khandor & Mason, 2007; Kulik, Gaetz, Levy, Crowe, & Ford-Jones, 2011). Negative outcomes include, but are not limited to, greater incidences of illness and injury, chronic

medical conditions, including heart disease, diabetes, seizures, arthritis and musculoskeletal disorders (Harris, Mowbray, & Solarz, 1994; Frankish et al., 2009), dental and periodontal disease (Gaetz & Lee, 1995; Lee, Gaetz, & Goettler, 1994), nutritional vulnerability (Gaetz, Tarasuk, Dachner, & Kirkpatrick, 2006; Tarasuk, Dachner, Poland, & Gaetz, 2009, 2010) and higher mortality rates (Baggett, et al., 2013; Cheung & Hwang, 2004; Hwang, 2000, 2001; Hwang, Wilkins, Tjepkema, O'Campo, & Dunn, 2009).

In addition, there is a body of literature on homelessness and health that highlights the increased prevalence of communicable diseases such as Hepatitis A, B and C (Roy et al., 2001, 2002), sexually transmitted diseases, including HIV infection (DeMatteo et al., 1999; Spittal et al., 2003) and, not insignificantly, communicable airborne diseases such as tuberculosis (Ali, 2010; Khan et al., 2011; Yuan et al., 1997). In a recent document, the World Health Organization explicitly named homeless people as among the most vulnerable populations when it comes to the spread of infectious disease (Biopole & WHO, 2008). Finally, approximately 30% of people who are homeless suffer from mental illness, which may undermine their ability to obtain and/or maintain housing, income and other necessary supports (CPHI, 2010; Nelson, Aubry, & Lafrance, 2007). Poor physical and/or mental health is a clear challenge in the event of a pandemic.

Further complicating these risks is the fact that homeless populations are often quite diverse. Several sub-populations, including Aboriginal peoples, youth and women, face special challenges because of their unique status, and may experience additional barriers to accessing health services and social supports. In addition, the characteristics of a particular pathogen must be considered. For instance, during H1N1, young people (and young pregnant women in particular) were considered highly vulnerable, which is generally not the situation in the case of seasonal influenza.

The experience of being homeless contributes to negative health outcomes (Story, 2013). Social and economic marginalization structures lifestyle choices and opportunities in ways that have a direct impact on health and access to health care. For people who are homeless, the clearest manifestation of their social exclusion is their limited access to safe, healthy, private

and affordable places to stay. Some people who are homeless may live temporarily with friends, partners and family members (a practice known as couch-surfing), while others will take their chances sleeping outside in parks, doorways, alleyways or rooftops. Most, however, wind up staying in emergency shelters.

The poverty that characterizes the lives of people who are homeless also shapes their income-generation strategies. Because obtaining and maintaining regular employment is difficult when you are homeless (Gaetz & O'Grady, 2002; Hagan & McCarthy, 1997; Hagedorn, 1998), many meet their needs by engaging in illegal or quasi-legal money-making strategies, including the sex trade, panhandling, squeegeeing, 'binning' and minor criminal acts, many of which involve direct contact with a large number of potentially dangerous or infected strangers.

Maintaining personal hygiene is also problematic when you are homeless. This includes not only washing clothes and showering on a regular basis, but also everyday hygiene practices such as brushing one's teeth or being able to regularly wash one's hands. Another manifestation of the degree of social exclusion experienced by homeless people is that they are often discouraged from using washrooms in stores, restaurants and public buildings — a right most people take for granted.

Finally, the biggest impact on health is caused by the barriers many experience in accessing health care (Frankish et al., 2005; Hwang & Bugeja, 2000; Hwang & Gottlieb, 1999). Access to coordinated primary care and specialists becomes problematic when you lack a health card, an address or a place where you can be contacted. In addition, because of real or perceived discrimination, many homeless people are often unable to see health care providers in traditional health care settings. The cost of medication and the inherent instability of life on the streets may make treatment plans designed for domiciled persons with a daily routine and incomes and/or benefits impossible for persons who are homeless. As a result, many homeless people are frequently unable to access health services until their often complex health problems become acute, resulting in their hospitalization.

The Response to Homelessness and the Production of Vulnerability

The day-to-day experience of homelessness is, in many ways, shaped by how we as a society structure and organize social services. Unlike other countries that have developed more aggressive strategies to prevent homelessness and rapidly rehouse individuals, the Canadian response to homelessness continues to emphasize an emergency response that ‘manages’ people while they are homeless (Gaetz, 2010). This management, organized at the local level through charitable organizations, the non-profit sector and local government, includes the provision of a range of emergency services such as temporary places to stay at night (for example, emergency shelters) and a range of programs or ‘drop-ins’ that operate during the day.

While these services have been designed to meet the immediate needs for shelter, warmth, food and companionship, these same services are constituted in ways that undermine individual autonomy, privacy, safety and freedom of movement. The design of these services often places people in vulnerable circumstances that may exacerbate the spread of infectious disease. One such example of the social exclusion of people who are homeless is that many depend on services that are in some ways highly rule-bound (with curfews, rules about substance use, etc.), but at the same time are chaotic and contribute to a lack of control. In the City of Toronto, for instance, over 4,000 of the roughly 5,253 homeless people stay in any one of over 60 shelters and hostels, for an annual total of over 27,000 different individuals who use the shelter system (City of Toronto, 2013). Most of these emergency shelters are in the downtown core of the city and vary in size (from 20 to 600 beds), capacity, programming and target population. Many, if not most, homeless shelters are characterized by congregate living and dangerously overcrowded situations (with sleeping quarters ranging in capacity from 3 to 50 persons per room), inadequate access to hygiene maintenance, and poor air quality (Cheung & Hwang, 2004; Dachner & Tarasuk, 2002; Hwang, 2000).

During certain times of the year, many shelters become overcrowded and residents are often required to sleep side by side on cots or on mats on the floor. In addition to official shelters, many cities, including Toronto, provide ‘out

of the cold' programs that operate through the winter months and are run by church groups and local charities. It is not unusual to find 100 people sleeping in a church basement side by side. It is not clear whether such volunteer-based services would continue to operate in the event of a pandemic, which would put further pressure on the publicly-funded shelter system.

Most shelters are mandated and funded to provide a place for people to stay only at night. They typically have restricted hours of operation, meaning that residents must leave the premises by a set time in the morning and cannot re-enter until the evening, even if they are ill, disabled or otherwise incapacitated. The resulting enforced movement means that people who are homeless spend much of their time in public spaces such as the streets, city parks, and shopping centres, and at least part of their time in drop-ins, soup kitchens and other places where people who are homeless receive services.

Day programs, such as drop-ins, provide a low-threshold environment where people can rest, get food, socialize with friends and potentially access counselling and support. These programs also play an important role in providing a sheltered environment for people wishing to escape the cold or the heat. Drop-ins can become a place where relationships are nurtured, not only between people experiencing homelessness, but also with staff. While largely designed to meet the needs of people who are homeless, drop-ins also attract a large number of domiciled people who are living in poverty and may be socially isolated. This is important, because it is in these settings (which, like shelters, are also often overcrowded, chaotic, poorly ventilated and without adequate hygiene facilities) that there is a high degree of interaction and contact between the homeless population and the under-housed poor.

When not actually at the agencies set aside to serve them, people who are homeless must also navigate public spaces that are highly policed. They are often discouraged from accessing restaurants and shopping areas, and police and private security guards play a role in limiting the spaces and places that homeless people can inhabit, even to rest for a moment. Legal restrictions that target homeless individuals, such as the Ontario Safe Streets Act, add to the difficulties (Gaetz, 2004; O'Grady et al., 2013). The enactment and enforcement of these laws are exacerbated by the increasing gentrification

of the downtown cores of many Canadian cities. These laws also further restrict the available spaces for people who are homeless, increasing the likelihood of encounters with police, and resulting in pressure to live in the most marginalized and often most dangerous places in the downtown core. The containment and criminalization of homelessness is as much a part of the response to homelessness as the provision of shelters and day programs.

The lives of homeless people can be characterized by generalized instability and chaotic day-to-day experiences. This means that when one is homeless, long-range planning becomes extremely difficult, and much time is spent tending to immediate needs, such as identifying where one can eat, drink, sleep and rest in safety. The spaces and contexts within which homeless persons are expected to operate inevitably produce a greater risk of illness, injury and assault and, not incidentally, rarely provide the opportunity for uninterrupted sleep or a hygienic lifestyle. The fact that most homeless people circulate through many of these shelter situations contributes to the inherent instability of their lives. For example, people who are homeless often do not know where they are going to sleep on a given night, who will be there, and whether they will be safe. One of the cumulative results of how the homelessness sector is organized is that people who are homeless are forced to spend much of their time, both day and night, in the company of other homeless people who, like them, are more likely to be sick and have communicable diseases. In the context of a pandemic, one has to question whether it is even possible to make many — if not most — of these environments safe.

Helping Homelessness Sectors Prepare

While pandemic planning is mandated by governments, a network of non-profit and charitable services is at the front lines of the work with homeless people in most municipalities. Until there is a dramatic shift in the Canadian response to homelessness, this will be the system we have in place, and it will need to be well prepared. The organizations of services and the sector as a whole, as well as the highly structured yet chaotic nature of the world that homeless people inhabit, raises important questions about what might happen in the event of a pandemic.

There are some positive attributes to the existing system that can be built upon. As front-line service providers for people who are homeless, support agencies have pre-existing expertise in working with marginalized populations. They have generally also established strong relationships with client groups, including potentially ‘hard to reach’ groups, if their work contains an outreach component. At the same time, agencies serving homeless people tend to be poorly funded, operate with minimal staff and suffer from inadequate supports for workforce development. In the event of a serious deadly pandemic, there are a number of factors to be considered to help service providers and their clients be well prepared. Six factors that are particularly important are: support for planning; infection control; system capacity; inter-sectoral collaboration; communications and training; and the heightened challenges of unpredictability faced by the homeless population.

Support for planning

Many organizations in the homelessness sector do not have a strong culture of planning or much planning capacity due to limited and/or contract budgets. Because of the nature of their day-to-day work dealing with emergencies in a chaotic environment, long-range planning is often not a priority. The organizational structure of many of these service providers is often flat, meaning there may be only a manager and front-line staff, which can hinder effective planning. To develop appropriate pandemic plans, agencies may need to reach out to external supports, such as their city’s public health unit. Establishing connections when there is no current pandemic is one way to build relationships that will serve as an important resource in the event of a pandemic.

Infection control

In overcrowded shelters and drop-ins, infection control becomes an obvious challenge (Duchene, 2010), as does the issue of quarantine and isolation, since most shelters have not been designed with infection control in mind. Increased attention to supporting hygienic practices and better ventilation will be necessary, along with plans to ensure that agencies have quick access to medical and hygiene supplies and food, and space to store them. All these needs have resource implications for a sector with inadequate funding.

The coordination of supports for infected individuals must also be considered. Agencies should know their proposed role in identifying and/or diagnosing infected clients, providing quarantine and respite care, and offering general access to services for the broader population in a way that does not increase clients' vulnerability. One example of a collaborative strategy, where the homelessness sector worked collaboratively in Ottawa during H1N1, designated one shelter to have responsibility for infected clients. The effectiveness of this plan was not put to the test because the outbreak was not severe.

System capacity

Pandemic preparedness includes a need to consider the robustness and resilience of systems, critical factors that determine vulnerability. During a pandemic, homelessness sector agencies — like all institutions — will be severely stressed and challenged, and will be potentially vulnerable to staff shortages and breaks in the chain of supplies. Many front-line agencies have policies regarding minimum staffing requirements to operate services, so an inability to maintain adequate staffing may present an added challenge during an outbreak. This poses a question for serious consideration: where will people who are homeless go to get their needs met if services are insufficiently staffed to operate?

Inter-sectoral collaboration

Agencies serving homeless people will not only have to work collaboratively among themselves, as in the Ottawa case previously cited, but will also have to engage other sectors, such as public health units, regional health authorities (to ensure access to immunization and other medical needs), local hospitals (to ensure that infected clients are not discharged into homelessness), social services and the police, all at a time when those systems will also be under stress. There has been almost no detailed mapping of critical dependencies within and between these sectors, though it is well known they are highly dependent upon each other. An effective response to a pandemic requires coordination of effort, and this will always be a challenge. Again, developing these relationships before a pandemic is essential for more cohesive operations in an emergency.

Communications and training

During SARS, one of the key complaints of agencies in Toronto was their difficulty receiving timely communications from public health (Leung et al., 2008). During H1N1, Toronto Public Health actively engaged the sector with updates, Q&As and other communications supports. This was a very positive development, but it is not known whether this active effort in Toronto was replicated in other communities across Canada. In preparing for future pandemics, a solid plan will require that attention be focused on ongoing staff training, preparation and communication that is both timely and accurate. Agency staff will also need training and support for dealing with respite care, acute illness and death.

Having a well-thought-out plan for communications, training, and support for people who are homeless will be important as well, and will be a key challenge when dealing with a mobile and dispersed population that may experience language, cultural or mental health barriers. Traditional methods of communication and public health messaging through mass media may be of little use in communicating with the homeless population. We also learned from H1N1 that people in general, not just this population, have access to many sources of information that can confuse the issue in a context where ‘what we know’ can change rapidly and continuously. This would be exacerbated in a serious pandemic if people who are homeless began avoiding services, which would possibly create the need for a stronger outreach effort, putting further strain on agencies’ staff.

Unpredictability

One lesson emergency planners have learned is that complex disasters have a way of evolving along unanticipated lines — and a pandemic is certainly a complex disaster. Compromised health and overcrowded living conditions may make people who are homeless particularly vulnerable in the event of a pandemic, forcing them to make different decisions because of their circumstances. Factors that impact on decision-making include having fewer options (for example, regarding shelter and transportation), limited access to resources or the ability to prepare in advance (by stockpiling food and other necessities), and being unable to adhere to forced or voluntary quarantine without a home of their own. Because of overcrowded conditions and safety

concerns, many people who are homeless will limit their use of such services or avoid them altogether. This presents additional challenges for infection control, tracking and follow-up.

One final area of unpredictability has to do with stigma and discrimination. During a serious deadly pandemic, if the public began to identify homeless people as a potential source of contagion, it is not clear if and how their rights would be protected or, conversely, violated. As Mosher (2014) has pointed out, both substantive and procedural rights of marginalized populations are often set aside for public safety claims. In a post-911 world, people have been shown to support a trade-off that restricts rights in the name of safety when the rights at issue are those of others. There is a need to consider how this perceived balance would be approached in relation to marginalized groups, such as these who are homeless.

Conclusion

The Canadian response to homelessness continues to emphasize providing community-based emergency services characterized by congregate living, overcrowded conditions, inadequate access to hygiene maintenance and poor air quality. The lives of people who are homeless are regulated and controlled through the institutional organization of emergency services in a way that exacerbates their social exclusion. This ordered world also creates chaos in their lives. For example, homeless people have little choice about when to access services, with whom they room or eat, what they eat, when they go to bed or when they must wake. Compromised health and well-being are a consequence of overcrowded living conditions, lack of access to safe and private spaces, reliance on shelters and drop-ins to meet daily needs, and barriers to accessing services.

There are important issues to be raised about how we plan for future pandemics to ensure the health and well-being of homeless populations. This chapter identifies a number of points that governments and service providers will need to consider as part of their future planning efforts. At the same time, this may simply be a case of ‘rearranging the chairs on the

Titanic.’ If we really want to protect the health and well-being of people who are homeless, we need to move away from a heavy reliance on emergency services and toward a response that focuses on prevention, to stop people from becoming homeless in the first place, and to help people move quickly and with necessary supports into housing when they do become homeless. Planned approaches to ending homelessness are emerging elsewhere in the world (for example, in the United States, Australia, and the United Kingdom), supported by investments in affordable housing. Housing First (Gaetz et al., 2013a), both as a philosophy and an intervention, should be fundamental to how we respond to the situation of people who fall into homelessness, so their time on the street is as short as possible. If people have homes and supports, it reduces the need to force large numbers of Canadians (over 30,000 people experience homelessness on a given night (Gaetz, et al., 2013b)) into emergency shelters or other inhospitable situations. The best solution to concerns regarding homelessness and pandemics is to ensure that people are not homeless.

References

- Ali, S. H. (2010). Tuberculosis, homelessness and the politics of mobility. *Canadian Journal of Urban Research*, 19(2), 80-107.
- Ali, S. H. & Keil, R. (Eds.). (2008). *Networked disease: Emerging infections in global cities*. Oxford: Wiley-Blackwell.
- Ali, S. H., Keil, R., Major, R., & Van Wagner, E. (2006). Pandemics, place, and planning: Learning from SARS. *Plan Canada*, 46(3), 34-36.
- Baggett, T. P., Hwang, S. W., O’Connell, J. J., Porneala, B. C., Stringfellow, E. J., Orav, E. J., ... Rigotti, N. A. (2013). Mortality among homeless adults in Boston: Shifts in causes of death over a 15-year period. *JAMA*, 173(3), 189-195.
- Basrur, S. (2004). *Tuberculosis prevention and control services for homeless/underhoused persons and inmates of correctional facilities*. Toronto: City of Toronto, Medical Officer of Health.
- Biopole, L. & WHO. (2008). Concept note: International technical conference: Cities and public health crises. Lyon, France: WHO Office.

- Boivin, J. F., Roy, E., Haley, N., & Galbaud du Fort, G. (2005). The health of street youth: A Canadian perspective. *Canadian Journal of Public Health*, 96(6), 432-437.
- Cheung, A., & Hwang, S. (2004). Risk of death among homeless women: A cohort study and review of the literature. *Canadian Medical Association Journal*, 170(8), 1243-1247.
- City of Toronto. (2013). *Street needs assessment 2013*. Toronto: City of Toronto, Shelter, Support and Housing Administration.
- Commission on the Social Determinants of Health. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health. Final report to the Commission on Social Determinants of Health*. Geneva: World Health Organization.
- CPHI (Canadian Population Health Initiative of the Canadian Institute for Health Information). (2009). Mental health, mental illness and homelessness in Canada. In J. D. Hulchanski, P. Campsie, S. Chau, S. Hwang, & E. Paradis (Eds), *Finding home: Policy options for addressing homelessness in Canada* - revised edition. Toronto: Cities Centre Press, University of Toronto.
- Dachner, N., & Tarasuk, V. (2002). Homeless “squeegee kids”: Food insecurity and daily survival. *Social Science & Medicine*, 54(7), 1039-1049.
- DeMatteo, D., Major, C., Block, B., Coates, R., Fearon, M., Goldberg, E., ... Read, S. E. (1999). Toronto street youth and HIV/AIDS: Prevalence, demographics, and risks. *Journal of Adolescent Health*, 25(5), 358-366.
- Duchene, M. (2010). Infection control in soup kitchens and shelters. *Home Healthcare Nurse*, 28(8), 471-478.
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2005). Homelessness and health in Canada. *Canadian Journal of Public Health*, 96, S23-S29.
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2009). The relationship between homelessness & health: An overview of research in Canada. In J. D. Hulchanski, P. Campsie, S. Chau, S. Hwang, & E. Paradis (Eds), *Finding home: Policy options for addressing homelessness in Canada* - revised edition. Toronto: Cities Centre Press, University of Toronto.
- Gaetz, S. (2004). Safe streets for whom? Street youth, social exclusion and criminal victimization. *Canadian Journal of Criminology and Criminal Justice*, 46(4), 423-455.

- Gaetz, S. (2010). The struggle to end homelessness in Canada: How we created the crisis, and how we can end it. *The Open Health Services and Policy Journal*, 3, 21-26.
- Gaetz, S. & Lee, J. (1995). Developing dental services for street youth. *Ontario Dentist*, 72(9), 34-37.
- Gaetz, S. & O'Grady, B. (2002). Making money: Exploring the economy of homeless workers. *Work, Employment and Society*, 16(3), 433-456.
- Gaetz, S., Tarasuk, V., Dachner, N., & Kirkpatrick, S. (2006). "Managing" homeless youth in Toronto: Mismanaging food access and nutritional well-being. *Canadian Revue of Social Policy*, 58, 43-61.
- Gaetz, S., Scott, F., & Gulliver, T. (Eds.) (2013a). *Housing First in Canada—Supporting Communities to End Homelessness*. Toronto: Canadian Observatory on Homelessness Press.
- Gaetz, S., Donaldson, J., Richter, T., & Gulliver, T. (2013b). *The State of Homelessness in Canada—2013*. Canadian Observatory on Homeless / Canadian Alliance to End Homelessness.
- Hagan, J., & McCarthy, B. (1997). *Mean streets: Youth crime and homelessness*. Cambridge: Cambridge University Press.
- Hagedorn, J. M. (1998). The business of drug dealing in Milwaukee. *Wisconsin Policy Research Institute Report*, 11(5), 1-30.
- Harris, S. N., Mowbray, C. T., & Solarz, A. (1994). Physical, health, mental health, and substance abuse problems of shelter users. *Health & Social Work*, 19(1), 37-46.
- Hwang, S. W. (2000). Mortality among men using homeless shelters in Toronto, Ontario. *Journal of the American Medical Association*, 283, 2152-2157.
- Hwang, S. W. (2001). Mental illness and mortality among homeless people. *Acta Psychiatrica Scandinavica*, 103, 81.
- Hwang, S. W., & Bugeja, A. L. (2000). Barriers to appropriate diabetes management among homeless people in Toronto. *CMAJ*, 163(2), 161-165.
- Hwang, S. W., & Gottlieb, J. L. (1999). Drug access among homeless men in Toronto. *CMAJ*, 160(7), 1021.

- Hwang, S. W., Kiss, A., Gundlapalli, A. V., Ho, M. M., & Leung, C. S. (2008). Infectious disease exposures and contact tracing in homeless shelters. *Journal of Health Care for the Poor and Underserved*, 19, 1163-1167.
- Hwang, S. W., O'Connell, J. J., Lebow, J. M., Bierer, M. F., Orav, E. J., & Brennan, T. A. (2001). Health care utilization among homeless adults prior to death. *Journal of Health Care for the Poor and Underserved*, 12(1), 50-58.
- Hwang, S. W., Wilkins, R., Tjepkema, M., O'Campo, P. J., & Dunn, J. R. (2009). Mortality among residents of shelters, rooming houses, and hotels in Canada: 11 year follow-up study. *BMJ*, 339, n.p.
- Keil, R., & Ali, S. H. (2006). The avian flu: The lessons learned from the 2003 SARS outbreak in Toronto. *Area*, 38(1), 107-109.
- Khan, K., Rea, E., McDermaid, C., Stuart, R., Chambers, C., Wang, J., ... Hwang, S. W. (2011). Active tuberculosis among homeless persons, Toronto, Ontario, Canada, 1998-2007. *Emerging Infectious Diseases*, 17(3), 357-365.
- Khandor, E., & Mason, K. (2007). *The street health report 2007*. Toronto: Street Health and the Wellesley Institute.
- Kulik, D., Gaetz, S., Levy, A. S., Crowe, C., & Ford-Jones, L. (2011). Homeless youth's overwhelming health burden—a review of the literature. *Pediatrics and Child Health*, 16, 43-47.
- Laird, G. (2007). *Shelter—homelessness in a growth economy: Canada's 21st century paradox*. Calgary: Sheldon Chumir Foundation for Ethics in Leadership.
- Lee, J., Gaetz, S., & Goettler, F. (1994). The oral health of Toronto's street youth. *Canadian Dental Association Journal*, 60(6), 545-548.
- Leung, C. S., Ho, M. M., Kiss, A., Gundlapalli, A. V., & Hwang, S. W. (2008). Homelessness and the response to emerging infectious disease outbreaks: Lessons from SARS. *Journal of Urban Health*, 85(3), 402-410.
- Mikkonen, J., & Raphael, D. (2010). *Social determinants of health: The Canadian facts*. Toronto: York University School of Health Policy and Management.
- Mosher, J. (2014). Accessing justice amid threats of contagion. *Osgoode Hall Law Journal*, 51(3), 919-956.

- Nelson, G., Aubry, T., & Lafrance, A. (2007). A review of the literature on the effectiveness of housing and support, assertive community treatment, and intensive case management interventions for persons with mental illness who have been homeless. *American Journal of Orthopsychiatry*, 77, 350-361.
- O'Grady, B., Gaetz, S., & Bucciari, K. (2013). *Tickets...and more tickets: A case study of the enforcement of the Ontario Safe Streets Act*. *Canadian Public Policy*, 39(4), 541-558.
- Public Health Agency of Canada. (2009a). *Poster: Know how to prepare for the H1N1 flu virus*. Canada: Public Health Agency of Canada.
- Public Health Agency of Canada. (2009b). *Poster: Know what to do to fight the H1N1 flu virus*. Canada: Public Health Agency of Canada.
- Roy, E., Haley, N., Leclerc, P., Boivin, J., Cedras, L., & Vincelette, J. (2001). Risk factors for hepatitis C virus infection among street youths. *Canadian Medical Association Journal*, 165(5), 557-560.
- Roy, E., Haley, N., Leclerc, P., Cedras, L., Bedard, L., & Allard, R., (2002). Seroprevalence and risk factors for hepatitis A among Montreal street youth. *Canadian Journal of Public Health*, 93(1), 52-53.
- Spittal, P. M., Bruneau, J., Craib, K. J., Miller, C., Lamothe, F., Weber, A. E., ... Schechter, M. T. (2003). Surviving the sex trade: a comparison of HIV risk behaviours among street-involved women in two Canadian cities who inject drugs. *AIDS Care*, 15(2), 187-195.
- Story, A. (2013). Slopes and cliffs in health inequities: Comparative morbidity of housed and homeless people. *The Lancet*, 382(S3), S93-S93.
- Tarasuk, V., Dachner, N., Poland, B., & Gaetz, S. (2009). Food deprivation is integral to the 'hand to mouth' existence of homeless youths in Toronto. *Public Health Nutrition*, 12(9), 1437-1442.
- Tarasuk, V., Dachner, N., Poland, B., & Gaetz, S. (2010). The "hand-to-mouth" existence of homeless youths in Toronto. In J. D. Hulchanski, P. Campsie, S. Chau, S. Hwang, & E. Paradis (Eds), *Finding home: Policy options for addressing homelessness in Canada* - revised edition. Toronto: Cities Centre Press, University of Toronto.
- Tuberculosis Action Group. (2003). *TB or not TB? There is no question. Report of a public inquiry into the state of tuberculosis within Toronto's homeless population*. Toronto: Tuberculosis Action Group.

- Yalnizyan, A. (2005). *Divided and distracted: Regionalism as an obstacle to reducing poverty and inequality*. Canada: Canadian Centre for Policy Alternatives, Social Watch.
- Yuan, L., Simor, A. E., Louie, L., Pollock, S., Gould, R., & Jamieson, F. (1997). Tuberculosis clusters among the homeless in Toronto, Canada. *37th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)*. Toronto, Canada.

2 ACCESSING JUSTICE AMID THREATS OF CONTAGION

Janet Mosher*

While plans for the containment and control of new and potentially deadly pathogens have long existed, pandemic planning and preparedness efforts proliferated rapidly after the outbreak of SARS (severe acute respiratory syndrome) in 2003, the emergence of the looming threat of H5N1 (avian influenza), and the declaration by the World Health Organization of an H1N1 (swine flu) pandemic in 2009. The projection of 62 million deaths and devastating economic consequences arising from the next influenza pandemic is frequently cited (The Lancet, 2009).¹ Importantly, plans to respond to the worrisome possibility of a global influenza pandemic have been developed in an environment significantly influenced by the events of 9/11 and subsequent anthrax attacks in the United States. “Legal preparedness,” understood as the enactment of the necessary constellation of law and legal authority, has emerged as a critical component of pandemic preparedness. Yet, this description invites the question of precisely what laws are indeed necessary — a question that can only be answered by interrogating more closely how the threat is conceptualized and who is understood to be threatened.

Pervasive in the pandemic planning literature is an analogy between contagious disease and terrorism; between the individual carrier of disease and the terrorist intent on destruction. Both are depicted as threats to national

* Reprinted with permission. Original citation: Mosher, J. E. (2014). Accessing justice amid threats of contagion. *Osgoode Hall Law Journal*, 51(3), 919-956. This chapter derives from two research projects on pandemic planning and homelessness in which I was a co-investigator (principal investigator, Dr. Stephen Gaetz). The two projects, *Responding to H1N1 in the Context of Homelessness in Canada* and *Understanding Pandemic Preparedness within the Context of the Canadian Homelessness Crisis*, involved several academics, and included interviews and surveys of people experiencing homelessness, as well as service providers and public health officials in four Canadian cities. In this article I draw upon the data derived from the Toronto component of the projects. The funding for these research projects from the Canadian Institute for Health Research (CIHR) is gratefully acknowledged. An earlier version of this article was originally presented at the Symposium in Honour of John McCamus: Scholarship, Teaching and Leadership (7 February 2013), hosted at Osgoode Hall Law School, York University, Toronto.

¹ Citing Christopher Murray and colleagues who used data from the 1918–20 Spanish influenza pandemic as the basis for this prediction. Others predict that the number of deaths globally will be as high as 369 million (Gostin & Berkman, 2007).

security, and best managed through surveillance, borders, containment, and control (Mariner, Annas, & Parmet, 2009).² Given the stark threat posed by contagious disease in the context of an environment depicted as increasingly risky, the role of law is first and foremost to confer sufficient legal authority upon public health officials (aided by police where necessary) to engage in surveillance, apprehend and detain carriers or suspected carriers of disease (that is, to quarantine or isolate), and compel treatment. While not criminal law *per se* (although certainly some commentators have argued for the expansion of criminal law powers to respond to pandemics), this approach shares many features of the law-and-order framework that has dominated neo-liberal governance (Attaran & Wilson, 2007). The approach positions public health in opposition to individual rights to privacy, liberty, and security of the person, and accepts that infringement of the latter is justified to secure the former. In keeping with other laws enacted in the name of national security, the curtailment of the rights of some promises safety and security for others (Toope, 2002).

As one might anticipate, this approach to pandemic planning has evoked critical responses from civil libertarians, who rightly worry that in a climate of fear and where national security is understood to be threatened, the curtailment of individual liberties will almost invariably be seen as justified (Annas, Mariner, & Parmet, 2008). Assurances that voluntary compliance and individual responsibility will be widespread, that compulsion will be rare and invoked only when necessary, and that procedural rights of review will guard against abuses of power, for reasons elaborated below in the The Promise of Procedural Justice section, do little to placate these worries.

Yet, a more fundamental critique of the conceptualization of pandemics as national security threats directs attention to the question of who, precisely, is the subject of the promised safety and security. Critical purchase on

²Wendy Mariner, George Annas, and Wendy E Parmet draw upon Priscilla Wald's work in their description of this response as an "outbreak narrative." People with contagious diseases are characterized as a threat to society, and the threat is countered by giving scientists control, which includes the authority to monitor and manage people, and requires people to obey strict regimens of isolation or treatment (Wald, 2008).

this issue is grounded in the lived realities of those persons and groups who experience social marginalization (Young, 2011).³ In what follows I turn to the experiences of persons who are homeless in order to delineate the differential and harmful impact of approaching pandemics as a matter of national security.⁴ To develop this analysis I draw from accounts of past pandemics and disasters as well as from recent empirical research into the experiences of homeless individuals in Toronto during the H1N1 pandemic, including their access to information about the pandemic, to vaccines, and to trusted medical personnel. With limited ability to stockpile resources, self-quarantine, or follow public health advice on preventative measures such as hand washing, those who are homeless are among the least likely to be in a position to comply voluntarily with public health edicts. This reality renders the homeless particularly vulnerable to coercive state action, especially when considered together with the possibility that the stereotyping and social stigmatization of homeless people may mark them as vectors of disease. Moreover, there is good reason to conjecture that procedures for judicial review of coercive state action will be of limited assistance to most people in the context of an actual pandemic, and of virtually no assistance to the homeless. The law-and-order/containment approach arguably promises more harm than good for those who are homeless.

Attention to marginalized populations exposes additional flaws in the pandemics-as-national-security frame, and suggests an alternative approach grounded in principles of social justice. Shifting the focus from abstracted, undifferentiated individuals to marginalized individuals and groups makes it abundantly clear that social, economic, and geographic position matters enormously in the distribution of the burdens of pandemics and of the benefits of medical and non-medical countermeasures. It exposes the reality that those who are most socially vulnerable are likely to bear the greatest burdens

³I use “marginalization” in the sense articulated by Iris Marion Young to capture the social processes that exclude members of particular social groups from, or limit their participation in, economic, political and social spheres. Processes of marginalization result not only in material deprivation but, as Young argues, deprivation of the rights and freedoms others enjoy, the denial of opportunities to develop and exercise capacities, and the erosion of dignity.

⁴There is currently no accepted pan-Canadian definition of homelessness. The Canadian Observatory on Homelessness has developed a useful definition and topology that importantly moves beyond only those who are visibly homeless on the streets or utilizing emergency shelters. A broader definition is particularly important to capture women’s homelessness; given the violence women face on the streets and concerns to retain custody of their children, women’s homelessness is far less visible than men’s. For the COH’s definition, see Appendix A.

of a pandemic. The homeless, given already compromised health and living conditions conducive to the spread of disease (for example, over-crowding, poor ventilation, and limited access to running water), are at greater risk of acquiring a communicable disease (Leung, Ho, Kiss, Gundlapalli, & Hwang, 2008). They have the fewest resources to protect themselves (including access to housing, food, information, and health care), and little capacity to shoulder the social and economic impact of measures such as quarantine. Countless historical (and indeed contemporary) examples demonstrate that pandemics are not equal opportunity events. Social vulnerability increases the likelihood of disease acquisition, reduces access to both medical and non-medical forms of remediation, and tightens the grip of morbidity and mortality. In virtually all forms of disasters and emergencies, marginalized groups, both globally and domestically, bear the largest burden, yet they continue to be routinely overlooked in pandemic plans (Kerridge, & Gilbert, 2014; Gostin, Lucey, & Phelan, 2014).⁵ Unless attention is paid to social vulnerability in pandemic planning, such plans are likely to not only replicate, but exacerbate, existing inequality and deepen social injustices. The national security frame positions the “nation” as under threat, obscuring the reality that the likelihood and severity of the threat materializing depends very much on one’s social location.

Approaching pandemic planning with those who experience social marginalization clearly in view also prompts a shift in temporal focus. The national security approach to pandemic planning is temporally concentrated upon the moment of crisis — that is, upon the containment and treatment of those exposed to disease. Here too, foregrounding the needs and experiences of the homeless exposes the limitations of this gaze. Rather the gaze must be expanded outwards to the pre-crisis period — to the long haul — and to the necessity of building trust, and the capacity to fulfill the social determinants of health.

⁵ While not a pandemic, the current outbreak of the Ebola virus in West Africa makes clear the critical role inequality plays not only in the acquisition and spread of disease, but in explaining the little attention Ebola has garnered since its first outbreak in 1976. Ebola is spread through close contact with the blood or body fluids of an infected person. Inadequate infection control in rural hospitals, and more broadly an under-resourced health care infrastructure, have been blamed, in part, for the spread of the disease.

Finally, an approach to pandemic planning that takes the needs and experiences of socially marginalized populations seriously prompts us to think anew about the nature of the rights at stake, the ethical values that ought to guide decision-making, and our choices about the role of law. Without a doubt, rights to privacy, liberty, and security of the person (usually defined in negative terms, as limits on the state) are implicated by current approaches. But consideration of the needs and experiences of marginalized populations suggests that a positive conception of rights — for example, of the right to health — might serve us all much better in preparing for and responding to a pandemic. It also stresses engagement with law's role in furthering a substantive vision of social justice. It moves us beyond procedural justice — that is, beyond rights of review to test the balancing of individual rights and public health — and indeed beyond the coercive power of law. It moves our attention from national security to the role of law in securing social justice.

Pandemics as a National Security Threat

Many commentators have documented the emergence of a new paradigm in which public health emergencies and public health policy more broadly are filtered through “the prism of national security and law enforcement” (Annas, Mariner, & Parmet, 2008, p. 5).⁶ A prism of precisely this sort is found in Canada's 2004 National Security Policy, the Executive Summary of which cautions:

But as all Canadians know, we live in an increasingly interconnected, complex and often dangerous world. The increase in terrorist acts and the threat of rapid, globalized spread of infectious disease all challenge our society and the sense of security that is so critical to our quality of life. Canadians understand this new reality (Government of Canada, 2004, p. vii).

⁶They also note that “President Bush's first suggestion to contain a bird flu pandemic was to call in the military to quarantine large sections of the United States”. Gostin and Berkman describe how, in the United States, H5N1 was regarded by policy makers as a threat to national security (2007). Benjamin and Mouton suggest that “public health emergencies are now seen under the intense spotlight of national security concerns” (2008, p. 13). Selgelid references the World Health Organization's description of pandemic influenza as “the most feared security threat” (2009, p. 255).

The policy continues:

Terrorism is a global challenge that has been recognized by the United Nations as a crime against humanity. Canada is not immune to this threat.

But the threats we face are not limited to terrorism. The SARS (severe acute respiratory syndrome) outbreak demonstrated the power of individuals to unintentionally transmit threats around the globe at the speed of air travel.

The Government is determined to pursue our national security interests and to be relentless in the protection of our sovereignty and our society in the face of these new threats (Government of Canada, 2004, p. 1).⁷

...

The world is a dangerous place, even if the relative safety of life in Canada sometimes obscures just how dangerous it is. As recent events have highlighted, there is a wide range of threats facing Canada from pandemics to terrorism. These threats can have a serious impact on the safety of Canadians and on the effective functioning of our society (Government of Canada, 2004, p. 6).

The Policy renders the risky and threatening environment as taken for granted, a matter of common sense, and cautions the reader not to be lulled into complacency by the relative safety we may, in fact, temporarily experience. The Policy depicts the environment as equally risky for all. In their portrayal of that risky environment the authors of the Policy collapse acts of terrorism,

⁷The various threats identified are terrorism, the proliferation of weapons of mass destruction, failing states, foreign espionage, natural disasters, critical infrastructure vulnerability, organized crime, and pandemics. In Chapter 5, which addresses public health, the context is described as follows:

A robust public health system is a critical line of defence in protecting Canadians against many current and emerging threats, including contamination of our food and water, major disease outbreaks such as SARS, natural disasters, major accidents like chemical spills, and even the terrorist threat of a chemical, biological, radiological or nuclear attack. The complex, multijurisdictional nature of such threats also speaks to the necessity for Canada's approach to public health emergencies to be more than strictly local or national in its orientation, and to proactively contribute to the building of a more resilient international public health architecture (Government of Canada, 2004, p. 29).

failing states, foreign espionage, natural disasters, organized crime, critical infrastructure vulnerability, the proliferation of weapons, and pandemics into a singular “all-hazards approach,” and then locate these threats within a framework of national security.⁸ More broadly still, the Policy calls for the continuous inclusion of “the public health dimension in the ongoing national security debate” (Government of Canada, 2004, p. 29).

While the physical borders of the nation state are certainly important in this account (one need think only of the airport surveillance of passengers’ body temperatures during the SARS crisis), the relevant borders are also internal. Quarantine and isolation — the power to construct internal borders to seal off and contain those infected or exposed to disease — have emerged as critical tools in the legal preparedness toolkit.⁹ Individuals carrying disease, or indeed even exposed to disease, can be apprehended, detained, and treated without consent. They are explicitly recast within Canada’s national security policy as threats to Canada’s sovereignty, and as persons against whom the state must act in order to secure the life, liberty, and security of Canadians.

This approach has been operationalized in a variety of ways, but significantly through the framework of legal preparedness. As the post-SARS Commission of Inquiry chaired by Justice Archie Campbell (the “Campbell Commission”) observed, legal preparedness has increasingly come to be viewed as a critical component of public health preparedness.¹⁰ The definition of legal preparedness first developed in 2003 by Moulton et al as “the attainment by a public health system ... of specified legal benchmarks or standards essential to the preparedness of that system” (Benjamin & Moulton, 2008, p. 14)¹¹ has been widely adopted, as has their elaboration of its four core elements.

⁸This all-hazards approach has been described and critiqued by a number of American and Canadian authors. For examples in the Canadian context, see Van Wagner, 2008. For examples in the American context, see Mariner, Annas, & Parmet, 2009; Kamoie, et al., 2008. In this all-hazards approach “no matter what happens ... a law enforcement/national security approach is required” (Annas, Mariner, & Parmet, 2008, p. 16).

⁹The terms quarantine and isolation are not used consistently in the cited literature. I use the terms in a manner consistent with the definitions offered by the World Health Organization: isolation is defined as “the separation, for the period of communicability, of infected persons”; quarantine as “the restriction of the movement of healthy persons who have been exposed to a suspected or confirmed case of infection with a highly communicable disease during the likely infectious period”; and social distancing to include “a range of community-based measures to reduce contact between people (e.g., closing schools or prohibiting large gatherings)” (2007, p. vi).

¹⁰An independent Commission was established by the Government of Ontario to investigate the introduction and spread of SARS. Justice Archie Campbell of the Ontario Superior Court of Justice was appointed Commissioner. The Commission released three reports, totaling some 1,500 pages and published in five volumes. Throughout this chapter, I focus on the *Second Interim Report: SARS and Public Health Legislation* (Government of Ontario, 2005).

¹¹See also Moulton, Gottfried, Goodman, & Murphy, 2003; Kouzoukas, 2008.

1. The creation of laws and legal authorities conferring necessary powers on various levels of government and in particular, on public health officials;
2. Competency in using these laws effectively (competencies of public health professionals, among others, to know when and how to apply their legal powers);
3. The coordination of legally based interventions across jurisdictions (horizontally and vertically) and sectors; and
4. The sharing of information about public health laws and best practices (Benjamin & Moulton, 2008; Moulton, Gottfried, Goodman, & Murphy, 2003; Kouzoukas, 2008).

While in theory the concept of legal preparedness leaves open a multiplicity of possibilities for the sorts of laws one might argue are warranted to prepare for a pandemic, legal preparedness has generally been taken up in a manner in keeping with the national security account (Kouzoukas, 2008).¹² In practice, what one sees is the call for — and in many jurisdictions the adoption of — legal frameworks that expand the ground for disease surveillance, the control of movement through quarantine, isolation, and other social distancing measures, and forced assessment and treatment.¹³ A brief overview of *Ontario's Health Protection and Promotion Act (HPPA)* elucidates the nature of the powers granted to public health officials to control the movement and behaviours of persons infected, or assumed to be infected, with a communicable disease (Government of Ontario, 2015).

¹² Kouzoukas, Deputy General Counsel in the United States Department of Health and Human Services, identifies the first element as the “central, substantive aspect of public health legal preparedness” and notes that the need for additional federal laws in the United States to respond to the threats of bioterrorism and pandemics led to the passage of the Pandemic and All-Hazards Preparedness Act of 2006; the Public Readiness and Emergency Preparedness Act of 2006 and the Public Health Security and Bioterrorism Preparedness Response Act of 2002. Similarly, in the Canadian context, Attaran and Wilson make an argument for the need for a greater role of the federal government in the management of pandemics (2007). In both Canada and the United States, issues of the scope of federal jurisdiction are debated. Attaran and Wilson suggest that the federal head of power under the Constitution in relation to quarantine has been read far too narrowly, limiting the role of the federal government solely to the regulation of national borders. They advance a further argument grounding increased federal jurisdiction in regulating pandemics within the federal criminal law power.

¹³ Authority to detain and treat does not exhaust the role envisioned for law; jurisdictional clarity (within and between nations), surveillance, and patenting have also received attention within the national security framework.

Ontario's legislative regime

Pursuant to subsection 22(1) of the HPPA, a Medical Officer of Health (MOH) may, by written order, “require a person to take or to refrain from taking any action that is specified in the order in respect of a communicable disease” (communicable diseases are identified by regulation) (Government of Ontario, 2015a, s. 22[1]).¹⁴ Section 22 orders, as they are known, may be issued if an MOH believes, upon reasonable and probable grounds,

- A) that a communicable disease exists or *may exist* or that there is an immediate risk of an outbreak of a communicable disease in the health unit served by the medical officer of health;
- B) that the communicable disease presents a risk to the health of persons in the health unit served by the medical officer of health; and
- C) that the requirements specified in the order are necessary in order to decrease or eliminate the risk to health presented by the communicable disease (Government of Ontario, 2015a, s. 22[2]).

Such orders may require, among other things, that a person who “has or may have a communicable disease or is or may be infected with an agent of a communicable disease” isolate himself or herself; submit to an examination by a physician; conduct himself or herself in such a manner as to not expose another person to infection; and where the disease is identified by regulation as virulent, place himself or herself under the care and treatment of a physician (Government of Ontario, 2015a, s. 22[4]).

A significant reform introduced in Ontario between the first and second wave of SARS cases in 2003 was the expansion of the power of a MOH to direct an order against a class of persons (Government of Ontario, 2015a, s. 22[5.0.1]). The HPPA provides no definition of “class” and, consequently, a MOH retains broad powers to determine the contours of the class that constitutes the subject of the order. If notice to members of the class is likely to cause delay that “may significantly increase the risk to the health of any person,” notice may be given through “any communications media” deemed appropriate by a MOH, although the MOH must post the order at an address

¹⁴ Boards of health in Ontario are municipally based and each has a medical officer of health.

or addresses where it is most likely to be brought to the attention of the members of the class (Government of Ontario, 2015a, s. 22[5.0.2 - 5.0.3]).

A person who is the subject of a section 22 order is entitled to a hearing before the Health Services and Appeal Board established under the *Ministry of Health and Long-Term Care Appeal and Review Boards Act, 1998* (Government of Ontario, 2010). A request for a hearing must be made in writing within fifteen days of notice of the order, and the Board must hold a hearing within a further fifteen days. An appeal is available to the Divisional Court, from where yet another appeal is available by leave to the Court of Appeal. Although the Appeal Board may stay an order pending its decision, this is a matter of discretion (Government of Ontario, 2015a, s. 44).

An entirely different procedural route exists should a MOH wish to take steps to enforce an order he or she has issued. The MOH must apply to the Ontario Court of Justice, seeking an order pursuant to section 35 requiring a person to isolate himself or herself, submit to an examination by a physician, place himself or herself under the care and treatment of a physician, and/or conduct himself or herself in a manner that avoids exposing other persons to infection (Government of Ontario, 2015a, s. 35[2]). The coercive powers of the court include the potential to order that a person be taken into custody, admitted and detained in a hospital or “other appropriate facility,” (a provision added during SARS) and be examined and treated for a period of up to six months (which may be extended, on motion, for further periods, each of not greater than six months) (Government of Ontario, 2015a, s. 35[3;4;5;7;11]).¹⁵ A section 35 order may be directed to any police force in Ontario for enforcement (Government of Ontario, 2015a, s. 35[6]).¹⁶ An appeal of a section 35 order to the Court of Appeal is restricted to questions of law alone and subject to a “special leave” requirement that the circumstances of the case are such that it is “essential in the public interest or for the due administration of justice that leave be granted” (Government of Ontario, 2015a, s. 35[18;19]).

¹⁵ Prior to SARS the HPPA referred only to hospitals.

¹⁶ Prior to an amendment in 2007, the order was only enforceable by the police force in the health unit of the Ministry of Health.

Justifying Limits on Individual Rights

Significantly, section 22 and 35 orders override provisions of the *Health Care Consent Act*, which would otherwise require consent to an examination by a physician and to treatment (Government of Ontario, 2015b, s. 102[3]). Needless to say, orders requiring isolation, submission to a medical examination without consent, or detention for treatment (again absent consent) reflect the exercise of extraordinary state powers. The circumstances in which infringements of rights may be justifiable in order to protect public health is a much debated issue. In the Canadian context, limitations on *Charter* protected rights, such as liberty and security of the person, are scrutinized under section 1 to determine whether they are reasonable and demonstrably justifiable in a free and democratic society (Government of Canada, 1982).¹⁷ Without embarking on that analysis here, it is nevertheless important to note two sources that might usefully guide such an analysis in the context of a pandemic, the International Covenant on Civil and Political Rights (ICCPR) and the Siracusa Principles, a set of non-binding guides to the interpretation of the limitation clauses contained in the ICCPR (United Nations, 1966; 1984).¹⁸ While no derogation is permitted of particular rights (for example, to life or to freedom from torture and slavery) the ICCPR contains both a general derogation clause related to public emergencies (Article 4) and specific provisions regarding limitations on specified rights in order to protect, among other interests, public health.¹⁹ Article 4 requires that the public emergency be of a nature that “threatens the life of the nation,” the emergency must be officially proclaimed, and the measures taken must be “strictly necessary” and must “not involve discrimination solely on the ground of race, colour, sex, language, religion or social origin.” In addition, a state taking such measures is obligated to inform other states parties to the Convention.

¹⁷ See Ries, 2005.

¹⁸ The Siracusa Principles were developed during a meeting of international experts in Siracusa, Italy in 1984 and subsequently adopted by the United Nations Economic and Social Council. Although a non-binding set of interpretive principles, they are widely referenced in the academic literature and in international jurisprudence. Note that Canada is a signatory to the *Covenant*.

¹⁹ Limitations of the rights to freedom of movement and to leave one’s country, to peaceful assembly, to association, and to manifest one’s freedom of religion and of conscience in order to protect public health are all recognized. While the provisions vary somewhat, common features are the requirement that such limitations be provided by law, are necessary in order to protect public health, and are consistent with other rights recognized by the *Covenant* (United Nations, 1966: Articles 12; 18; 19; 21; 22).

Informed by the interpretive guidelines provided by the Siracusa Principles, the derogation of rights guaranteed by the ICCPR in order to protect public health is commonly understood to require that restrictions be provided for and carried out in accordance with law, directed towards a legitimate objective of general interest, strictly necessary to achieve the objective, based on scientific evidence, the least intrusive or restrictive means available, neither arbitrary nor discriminatory, of limited duration, respectful of human dignity, and subject to review (World Health Organization, 2007, p. 9).²⁰

More particularly, in the context of a pandemic, these principles require clear and convincing evidence that the person whose rights are to be curtailed is infected with a contagious disease (or at a minimum, is reasonably suspected of being infected) and poses a demonstrable threat to others; that the intervention is an effective means of combating the public health threat; that the burden is proportionate to the expected benefit; that the measure is the least restrictive of the options available; and that the measure is applied in a non-discriminatory manner (Gostin & Berkman, 2007).²¹

Difficult questions will no doubt arise in the application of these principles to an actual pandemic, particularly in the context of an emerging disease about which little is known. How effectiveness is understood and operationalized will be important. In relation to isolation and quarantine in particular, one might insist upon scientific evidence demonstrating that the disease is contagious and that isolation and/or quarantine stand a “reasonable scientific chance of substantially diminishing the spread of disease” (Bensimon & Upshur, 2007, s. 6). But as Bensimon and Upshur caution, the effectiveness of quarantine “depends as much on evidence from epidemiological studies as it does on explicitly identifying and addressing the preferences and cultural commitments of affected and involved communities” (Bensimon & Upshur, 2007, s. 47-48).

²⁰ In the context of the current outbreak of the Ebola virus and the mass quarantine of the West Point slum in Liberia arguably none of these conditions have been satisfied. The quarantine, originally to last for 21 days, ended after 10 days of escalating protest, violence and food scarcity and likely did more to spread the virus than to contain it; see Rothstein, 2015.

²¹ The World Health Organization’s ethical guidelines on pandemic planning provide that “public health measures that involve significant costs and/or burdens should be reserved for situations where they can be reasonably expected to make a difference to the consequences of a pandemic” (2007, p. 3).

The importance of considering the role of social, economic, and cultural factors in assessing the efficacy of quarantine and social distancing measures is underscored by the experience of SARS in Ontario. There is considerable post-SARS evidence of the tremendous challenges even relatively well-resourced people faced in maintaining quarantine. Reynolds et al surveyed some 1,057 people who had experienced quarantine in Toronto during SARS. Compliance with quarantine behaviours varied from 50.4% (use of mask when other household members were present) to 99.4% (did not go out of the house to socialize) (Reynolds et al., 2008).²² The proportion reporting compliance with all household protective measures was 38.4%, and with all community protective measures 54.1%. Quarantine also came with costs, both financial (although the Ontario and federal governments later introduced financial compensation that partially addressed this issue) and health (symptoms of depression and posttraumatic stress disorder were commonly reported). The data on compliance led Reynolds et al to contemplate the need for the expansion of coercive measures to shore up the effectiveness of quarantine, including quarantine facilities, compliance hotlines, and the immediate issuance of legal orders (Reynolds et al., 2008).²³ This suggestion for an escalation in measures of compliance enforcement is particularly troubling in light of the widely shared medical view that quarantine and isolation will be of limited utility in controlling the transmission of the flu virus (Gostin & Berkman, 2007).²⁴ Escalating compliance measures are rendered all the more concerning by the possibility that, because quarantine creates the impression that the state is actively pursuing the public's health, its use may be driven by its political, rather than scientific, value (Garoon & Duggan, 2008).

²² See also Hawryluck et al., 2004. The latter study involved a survey of 129 persons quarantined in Toronto during SARS. As many as 50% felt they had not received adequate information about infection control, and, as in the Reynolds study, compliance rates varied. As a further consideration, Ries notes the challenge of locating the contacts of those infected; of the twenty-three thousand people who were contacts of SARS patients, approximately nine thousand could not be reached or were only reached after the ten day quarantine period had passed (Ries, 2005).

²³ In Singapore and Hong Kong, measures to enforce compliance were much stronger and more coercive than in Toronto and included cordoning off buildings, electronic monitoring and the use of surveillance cameras.

²⁴ In a recent editorial, Richard Schabas (Ontario's chief medical officer of health from 1987-1997) and Neil Rua had this to say about quarantine: "Quarantine didn't help control SARS and it won't help control Ebola. Because of fear of Ebola, whole areas of West Africa are being cordoned off and airlines are cancelling services. These are forms of quarantine. They will hinder the flow of aid without stopping the disease's spread" (Schabas & Rau, 2014).

But beyond this concern, assessments of what actions are necessary — and of what restrictions on various rights are justified — are substantially impacted by perceptions of risk, and these perceptions are often anything but evidence-based. As Parmet has argued, disease is not only biological, but social and political; as such, the level of fear may have little to do with actual lethality or incidence. She maintains that especially as contagious disease has become less common in developed countries, the fear of such diseases those of us living in such countries experience has increased. Pandemics, by definition, are global outbreaks caused by a strain of virus not already known to be circulating in the human population. The unknown quality of the virus (how it is transmitted, and its impact on morbidity and mortality), the absence of immunity in the population, and the unavailability of vaccines combine with anxieties related to global travel and trade to render pandemics particularly threatening in the Western public imagination. The intensity of this fear creates pressure for state action, which frequently takes the form of strong social controls and, occasionally, extreme measures. By contrast, Parmet points out, “common and deadly diseases, such as childhood diarrhea or cardiovascular disease, elicit little concern and frequently are met with neglect by state officials” (Parmet, 2009).²⁵

Sunstein offers important insights into our perception of risk, delineating two potential sources of error at play when public fear leads to support for the erosion of civil liberties. He calls one error the “availability heuristic” to capture the potential of salient incidents (i.e., incidents that stand out due to vivid imagery or recent occurrence) to generate an exaggerated sense of risk (Sunstein, 2004, p. 969). If the harm is easily imagined, public demand for state action increases, leading to potentially excessive precautions. If not easily imagined, the risk may be neglected (Sunstein, 2004). He also points to the role of “availability entrepreneurs” who actively “drive public fear in their preferred directions” (Sunstein, 2004, p. 970). The second error is “probability neglect,” where focus is directed to the worst-case scenario, regardless of how likely it is to happen (Sunstein, 2004, p. 971).

²⁵ A similar point has been made about the Ebola virus: In the same time period that the Ebola virus is estimated to have caused 1,000 deaths, malaria is estimated to have killed 300,000, and tuberculosis is estimated to have killed 600,000. See Kerridge & Gilbert, 2014.

Sunstein and Parmet both identify the important role of the media in the construction of risk and fear. As Sunstein argues, “[m]any perceived ‘epidemics’ are in reality no such thing, but instead a product of media coverage of gripping, unrepresentative incidents” (Sunstein, 200, p. 976). Indeed the whipping up of fear and of concerns about safety is a common technique of governance (Morley, Hermer, & Mosher, 2002; Parnaby, 2003). The expanding reach of criminal law, the recent proliferation of mandatory minimum sentences, and the creation of quasi-criminal ‘safe streets’ legislation and by-laws, for example, have all been justified by ‘claims-makers’ or availability entrepreneurs as necessary for the safety and protection of the public (or more aptly, some members of the public) (Roach, 2002). Claims of threats to safety, rather than empirical data, have propelled these reforms. With the production of fear comes increased demand for government action and the very real possibility of disproportionate responses and unnecessary curtailment of civil liberties (Sunstein, 2004). Fear, as Gagnon, Jacob, and Holmes maintain, is inherently political, invoked by the state as a tool of governance. They suggest that fear is invoked in public health campaigns (they examine campaigns regarding sexually transmitted diseases in particular) as a “strategy to create a state of permanent (in)security and manipulate people into becoming calculating, rational and self-interested subjects who avoid the perils of human desires and contagion” (Gagnon, Jacob, & Holmes, 2010). In summary, there is good reason to think that assessments of the measures considered strictly necessary to protect public health may be driven more by fear and political expediency than by science.

Another set of questions concerns who will most likely be affected and how readily their rights, in particular, might be ignored. In the ‘preparedness’ environment, responsibility is seen to rest with individuals, as well as governments, to adequately prepare for hazards of all sorts. Individuals are expected to stockpile food and other necessities, wash their hands, disinfect surfaces, and obtain seasonal vaccinations. Voluntary compliance with public health orders — be they for quarantine, isolation, school closures or

a prohibition on social or religious gatherings — is assumed to be a widely accepted norm and practice (Government of Canada, 2015).²⁶ As such, resort to coercion is understood to be exceptional and thus, infringements on rights rare. Moreover, given the emphasis on individual responsibility to prepare, avoid, and comply, those who fail to take these precautionary measures are faulted and blamed for their own neglect.²⁷ Both the SARS and the H1N1 outbreaks made clear that those without resources, such as a home in which to isolate themselves, stockpiles of food, running water and soap for regular hand washing, or access to trusted medical personnel, are less able to protect themselves. Their ability to comply is structurally limited; they are unable, and presumptively not unwilling, to comply. But their lack of compliance renders them more vulnerable to the coercive arm of law.²⁸

Volumes of historical evidence of pandemics tell us that those who are socially marginalized bear the greatest burden in terms of disease acquisition, death, rights deprivations, and depletion of resources and assets.²⁹ History also tells us, repeatedly, that marginalized social groups —

²⁶ See Public Health Agency of Canada, Canadian Pandemic Influenza Plan for the Health Sector, online: www.phac-aspc.gc.ca/cpip-pclpci. The plan emphasizes personal preparedness but does, in Annex O, detail a coordinating role for the Council of Emergency Social Services Directors in organizing volunteers, distributing food, and creating temporary shelters. The May 2009 editorial of *The Lancet*, issued in the midst of the H1N1, urges readiness to self-isolate at home if flu-like symptoms appear (*Lancet*, 2009). Ontario has produced a series of one page fact sheets about pandemic flu, these include: “Taking Care of Yourself and Your Family: What to Do If You Get Pandemic Flu” (stay home, rest, take a warm bath); “Preparing for a Pandemic Flu: Making Individual and Family Plans” (including a series of questions to consider, such as what to do if your child’s daycare closes, but provides no solutions); and “Staying Healthy During a Flu Pandemic” (the advice is to eat well, drink lots of water, exercise regularly, stay home, wash your hands often, stay away from people, and avoid public gatherings and crowds). Clearly, this advice presupposes access to considerable resources; the overwhelming majority of these recommendations are simply impossible for the homeless to implement.

²⁷ A 2007 New York Academy of Medicine study concluded that “planners are developing emergency instructions for people to follow without finding out whether it is actually possible for them to do so or whether the instructions are even the most protective action for certain groups of people to take” (Annas, Mariner, & Parmet, 2008). The study further notes that the administration’s preference for market-based health care leaves individuals to fend for themselves.

²⁸ This is evident in the case of *City of Newark v JS*, 279 NJ Super 178, 652 A.2d 265 (1993) (holding that illness alone does not permit confinement, but that a homeless person suffering from active tuberculosis could be confined because other accommodations were insufficient).

²⁹ See for example Batlan, 2007. Annas, Mariner, & Parmet conclude that “[m]easures like quarantine, surveillance, and behavior control have historically been targeted at people who are already disadvantaged, those on the margins of society, especially immigrants, the poor, and people of color” (2008, p. 358-59). Gostin & Berkman express concern that “governments would use social distancing in a discriminatory fashion, scapegoating ethnic or religious minorities, or using social distancing to pretextually crack down on dissidents who assemble to protest” (2007, p. 165). And Annas, Mariner, & Parmet remind us that:

Highly discriminatory and forcible vaccination and quarantine measures adopted in response to outbreaks of the plague and smallpox over the past century have consistently accelerated rather than slowed the spread of disease, while fomenting public distrust and, in some cases, riots. The lessons from history should be kept in mind whenever we are told by government officials that “tough,” liberty-limiting actions are needed to protect us from dangerous diseases. (Annas, Mariner, & Parmet, 2008, p. 5-6).

the poor, immigrants, particular racialized groups — have been identified as vectors of disease, scapegoated, blamed, cordoned off, and banished. The inculcation of fear of the homeless and of squeegee workers used to justify Ontario's *Safe Streets Act* (Government of Ontario, 2005b), combined with the fear of contagion and the absence of resources to protect themselves, may render homeless people scapegoats during the next pandemic. These are the 'foreigners' — the internal and external enemies³⁰ — who, as outlined in Canada's National Security policy, pose a threat to national security and who must therefore be contained and neutralized. The willingness to curtail rights arises not only from flawed perceptions of risk, but as Toope reminds us, from an implicit assumption "that 'we' are giving up somebody else's rights for a perceived improvement in our security" (Toope, 2002).

The promise of procedural justice

As noted at the outset, in response to concern over the violation of individual rights in the name of public health (reinscribed as national security), the availability of judicial review of public health orders is proffered as a means to guard against abuses of power and to ensure the proper balance is struck between individual rights and "the right of the public to be protected against infectious disease" (Government of Ontario, 2005a, p. 335). The Campbell Commission, in its Final Report, *Spring of Fear*, identified a host of "glaring deficiencies in Ontario's health protection and emergency response laws" (Government of Ontario, 2005a, p. 3). Many of these glaring deficiencies relate to failings in procedural justice, where "confusion and uncertainty are the only common threads throughout the legal procedures now provided by the *Health Protection and Promotion Act* for public health enforcement and remedies" (Government of Ontario, 2005a, p. 9).³¹

For the person seeking to challenge a section 22 order, a fifteen day period to file a written notice, and a further fifteen day period during which the Board must hold a hearing, creates the absurd result that the time period of the original order may well have expired. For example, during the SARS period,

³⁰ See also Dhamoon & Abu-Laban, 2009.

³¹ In addition to the powers reviewed above there are separate powers to make orders and to enforce them for occupational and environmental hazards (Government of Ontario, 2015a, s. 13) and where the Chief Minister of Health needs to act in the face of a health risk (*ibid*, s. 86).

quarantine was usually for a ten day period, so the period of containment and restricted mobility would in all likelihood have expired before an order was subject to review.³² The Campbell Commission also notes the further delay caused by an appeal to the Divisional Court, a leave application, and a further appeal to the Court of Appeal. As such, most rights violations — if subject to review at all — will occur only after the period of isolation, quarantine, or treatment has been completed. The response of the Coalition of Muslim Organizations to Canada's anti-terrorism legislation captures well the unsatisfactory nature of an *ex post* review:

The adverse impacts of this Bill [C36] will not be remedied by judicial oversight and post-facto vindication. Stern judicial sanctions of the State's violation of rights make great case law...[.] However, case law will not put together ruined families, regain lost livelihoods, or rebuild friendships and trust, which were fractured by the suspicion, innuendo, and stigmatization sown by the overly zealous acts of the State (Roach, 2002, p. 193).

Moreover, the restriction of appeals of section 35 orders to the Court of Appeal to questions of law alone, and then only with "special leave" is deeply troubling in light of the real possibility, canvassed above, that the evidentiary threshold for resorting to coercive measures may be driven more by fear and political expediency than by science.³³

Further procedural challenges relate to the opportunity for those who are the subject of orders to participate in the processes for review. Given the short timeframes for action and the nature of the rights in issue — security of the person, autonomy, and liberty — and the complexity of the legal regime, it is

³² During the SARS period, between fifteen thousand to twenty thousand people with epidemiologic exposure to SARS were instructed to remain in "voluntary" quarantine, meaning they were to remain in their homes, avoid having visitors, wash their hands frequently, wear masks in the same room with other household members, avoid sharing personal items, sleep in separate rooms, and measure their temperature twice daily. Some health care workers were on "work quarantine" and permitted to travel only between their homes and the health care facilities where they were employed. In total, only twenty-seven section 22 orders were issued during the SARS period. While many characterize the quarantines during SARS as voluntary (apart from these few instances where orders were issued), others question this characterization given that non-compliance would lead quickly to the issuance of an order.

³³ The Campbell Commission describes this as a restriction of access to justice of a person whose rights have been significantly infringed. Campbell Commission (Government of Ontario, 2005a, p. 332).

hard to imagine effective participation without access to counsel. For those without resources to hire counsel, rapid access to state-funded legal counsel will be critical, but nowhere is this assured.

Moreover, a further quandary identified by the Campbell Commission in its work is that of respecting the participatory rights of those subject to orders, while simultaneously preventing the “court process from becoming a vector of infection” (Government of Ontario, 2005a, p. 352). The need to protect the health and safety of court staff may well require specific procedural modifications, such as the ability to conduct hearings via videoconference. A related, but broader, concern is the potential closing of courts; as a Florida bench guide concludes, “[i]f the courts fail to open or to function for any reason, the revered concept of ‘access to justice’ becomes meaningless. To ensure that access to justice is, in fact, a reality, it is essential to make sure that the courts have in place deliberately-designed strategies for addressing potential court-closing emergencies of all kinds” (Florida Court Education Council’s Publications Committee, 2007, p. 4). But as the Florida bench guide and others have acknowledged, in the context of a serious pandemic, access to meaningful procedures may simply be non-existent.

The need for clarity and speed for all concerned leads the Campbell Commission to recommend the creation of a single, simple, codified, self-contained, and complete set of procedures in the Superior Court. As envisioned it would include special procedures, such as *ex parte* applications for interim and temporary orders, and video and audio hearings.³⁴ Significantly, consistent with recommendations of the Commission, the HPPA has been amended to enhance the powers of Medical Officers of Health, to allow for the mandatory surrender of premises for use during an outbreak, to facilitate the sharing among state officials of personal health information, to obligate doctors and nurses to report a patient with a communicable disease who refuses or neglects to continue with treatment, and to expand the police services vested with powers to enforce section 35 orders, yet virtually none of the recommendations of the Commission for procedural reform has been

³⁴ The Campbell Commission also makes a broad range of additional recommendations regarding the HPPA that speak to employment protections and the conditions of detention, which I review in further detail below.

adopted in Ontario (Government of Ontario, 2015a, ss. 26; 29.2; 35[6]; 77.6; 77.9). The legislative reforms implemented during the unfolding of the SARS outbreak — the expansion of places of detention beyond hospitals to include other “appropriate facilities,” and the ability to issue orders against a class — remained unchanged, notwithstanding the Commission’s recommendation that, with regard to class orders, the legislation be changed to require reasonable efforts be made to consult with the class prior to the issuance of an order (Government of Ontario, 2015a, ss. 5.0.1-5.0.5; s. 35[3]).

As such, we are left in Ontario with a regime in which a person — or indeed an entire class of persons — can be ordered detained and medically examined without consent, and required to take steps to avoid exposing other people to infection, including through quarantine. Beyond this, where the communicable disease is categorized as virulent, persons can be detained for treatment, absent consent, for six months at a time. Notwithstanding these significant infringements of rights to security of the person, liberty, and autonomy, the procedures to challenge such orders are woefully inadequate; they remain the “confusing maze of overlapping and uncertain judicial powers and procedures best described as a legal nightmare” (Government of Ontario, 2005a, p. 337).

This brings us to what is perhaps the crux of the matter: where persons who either have or potentially have a communicable disease are cast as a threat to the public (rather than respected members of that public), and where fear is cultivated, the ‘necessary’ transgression of individual rights becomes all too readily accepted. Given the dominant narrative propelling this account, the outcome of the “delicate task of balancing individual rights against the right of the public to be protected against infectious disease” (Government of Ontario, 2005a, p. 335) identified by the Campbell Commission, or the justifiable derogation of rights envisioned by the ICCPR and Siracusa Principles, may be already largely predetermined. Mariner, Annas, and Parmet identify the edict that we must “trade liberty for security”³⁵ as the signature phrase — or we might say, the central moral lesson — of the national security approach to

³⁵ In the Canadian context, Toope asserts that a culture of rights is being replaced by a culture of security (2002, p. 283).

pandemic planning (Annas, Mariner, & Parmet, 2008, p. 354). The approach implores us to take for granted (or assume that “all Canadians know” and accept) the imperative to trade individual rights for national security.³⁶ Fear is promoted and safety is promised in return; the violation of individual rights is a collateral, but necessary, outcome (Annas, 2003).³⁷

While we could craft procedures that are more appropriate and responsive, provide timely notice and quick access to hearings, fund access to counsel, delineate clearer evidentiary standards, and undertake other measures to better safeguard individuals rights — steps the Campbell Commission suggests we should take — these measures are unlikely to make a substantial difference for marginalized groups or to the health of the population.³⁸ Indeed, that the Ontario government has failed to act on the recommendations of the Commission for procedural reform is a disturbing signal that those whose rights will be at stake are not worthy of protection. Just as we ought to be skeptical of claims that national security is attained by limiting the rights of those suspected of terrorism, so too should we be skeptical of the claim that public health is protected by the limitation of the rights of those who have (or may have) acquired a communicable disease (Roach, 2002; Paciocco, 2002; Smith, 2003). Rather, a fundamental reorientation is required, one that moves beyond a narrow focus on individual autonomy, brings social context and marginalized populations fully into the foreground, and prioritizes public health preparedness.

Securing Public Health

Rather than accepting the catastrophic events of 9/11 as the backdrop and impetus for its framework, a consideration of past pandemics and the current social context is the starting point in this alternative conception. As noted

³⁶ Annas, Mariner, and Parmet persuasively argue that “the notion that we must “trade liberty for security” is both false and dangerous”; false because “coercive actions are seldom conducive to public health protection” and dangerous “because it provides a never-ending justification for the suppression of civil liberties while failing to safeguard public health” (2008, p. 8).

³⁷ More pointedly Annas argues that the approach can be described as “scare them to death and then take power” (2003, p. 1175).

³⁸ Parmet expresses a similar concern about the limitations of judicial review and the inability of existing legal and ethical frameworks to secure human rights (Parmet, 2009). And many have expressed the broader worry that the culture of security threatens human rights. See e.g. Toope, 2002, p. 4. Toope, however, is more optimistic about the potential of the courts.

briefly above in the Introduction and Justifying Limits on Individual Rights, history reveals that the burdens of pandemics — indeed of virtually all forms of disasters — have not been borne equally; those who are the most socially and economically disadvantaged have suffered the greatest burdens, their interests largely disregarded.³⁹ Of the 62 million deaths projected for the next major influenza pandemic, it is estimated that 96% will be in low- and middle-income areas (both nationally and globally) (Lancet, 2009). In Canada, the H1N1 pandemic in 2009 had a disproportionate impact on Canada's aboriginal population: 25.6% of those hospitalized were of Aboriginal ancestry, although they comprise only 4% of the Canadian population (University of Toronto Joint Centre for Bioethics, 2000; Patterson, 2009⁴⁰). During the influenza pandemic of 1918–1919 the death rate among Aboriginal peoples was five times that of the non-Aboriginal population (Appleyard, 2009). In the aftermath of Hurricane Katrina in 2005, it was clear that income differentials, which in New Orleans were heavily correlated with race, led to significantly disparate outcomes (Purtle, 2012; Kayman & Ablorh-Odjidja, 2006). It is worth underscoring that these burdens include not only death but also serious illness, depletion of resources, forced separation, restrictions on movement, and stigmatization.

These disparate outcomes can be traced to the social processes that construct disadvantage, marginalization, and exclusion (Canadian Red Cross, 2007; Viens, 2013). They are shaped, as Tierney suggests, by the “same dimensions of stratification and inequality that influence people’s lives during non-disaster times,” such as wealth, poverty, age, race, ethnicity, gender, and disability (Tierney, 2006, p. 110). Inadequate shelter and income, illiteracy, poor health, food insecurity, and political marginalization all contribute to social vulnerability. These factors, in turn, are connected to larger social and economic structures and processes — for example, the lack of affordable housing, the declining value of the minimum wage, the growth in precarious work, growing income inequality, and discrimination.

³⁹ Harvey Kayman and Angela Ablorh-Odjidja note that in the “absence of social, political, and economic equality, racial and ethnic minorities and individuals of low socioeconomic status are left extremely vulnerable to every threat that may become apparent” (2006, p. 376).

⁴⁰ Kevin Patterson documenting the impact of epidemics (including H1N1) on Canada's First Nations communities and concluding that “the main reason native people die of infections, at rates that would be inconceivable and entirely unacceptable to other Canadians, is because they are poor”.

Linking the differential impact of pandemics to patterns of systemic and structural inequality repositions pandemics as problems not of national security but of social injustice. Here, scholarship that frames public health generally as a matter of social justice, and that calls for ethical frameworks that would displace the primacy of individual autonomy, help to flesh out an alternative approach to pandemic preparation.⁴¹ The identification of social determinants of health has been central to the framing of public health as a matter of social justice. This approach challenges the narrow framing of the dominant bio-medical view by underscoring the importance of access to adequate housing, income, food security, and social networks, along with the absence of discrimination and social exclusion, in maintaining health (Mikkonen & Raphael, 2010). Cast as a “health equity” approach, it seeks to redress “differences in health outcomes that are avoidable, unfair and systematically related to social inequality and disadvantage” (Appleyard, 2009, p. 3). Significant here is the shift from the physical body and medical expertise as the loci of health, to the impact on health of the social, economic, and political context.

The dominant approach to ethics in health care is principlism. Grounded in the clinical relationship between doctor and patient, and rooted in liberal individualism, this approach emphasizes respect for autonomy, beneficence, non-maleficence, and justice as its guiding ethical values (Baylis, Kenny, & Sherwin, 2008; Cheyette, 2011). Principlism’s focus upon the individual and its prioritization of autonomy lead, not surprisingly, to identification of the potential infringement of privacy, liberty, and security of the person through quarantine, isolation, and forced treatment as one of the pressing ethical issues posed by pandemic planning. In their critique of principlism, Baylis, Kenny, and Sherwin advance a particularly insightful conceptualization of relational autonomy and social justice (2008). Liberal conceptions of autonomy presuppose persons as self-made and self-governing. Relational autonomy, by contrast, understands persons to be constituted by and through social relations, and their ability to self-govern to be shaped by social structures. Social position or location — race, gender, socio-economic status, immigration status, for example — places people differently in their access to and ability to benefit from social structures and resources. This interface reflects and reinforces the distribution of social disadvantage and privilege,

⁴¹ See the literature on social justice approaches to public health, for example Kayman & Ablorh-Odjidja, 2006; Purtle, 2012; Gostin & Powers, 2006.

including access to health and well-being. As such, our framework of public health ethics needs to be expanded beyond the doctor-patient relationship to take into account the manner in which social structures, systems and policies create options and the means to secure health for some, but not others.

As Baylis, Kenny, and Sherwin suggest, this approach to public health moves beyond a conception of distributive justice as the fair distribution of benefits and burdens, to a conception of social justice. Social justice, in contrast to distributive justice, draws attention to how membership in social groups creates disadvantage. It stretches the conceptualization of benefits and burdens to include not only material resources but also participation, power, and self-respect. This offers, in turn, an alternative framework for the conceptualization of pandemic planning.

Voice and participation

The political exclusion of marginalized social groups has meant that their distinct circumstances and needs have been largely invisible within pandemic and other disaster management plans. Of the 37 national pandemic plans (including Canada's) reviewed by Uscher-Pines et al, only ten plans identified groups whose members might be socially disadvantaged or have special needs, and not a single plan systematically identified and addressed the needs of disadvantaged groups. Only one plan identified a need for temporary housing for disadvantaged groups, and discussion of the impact of social distancing measures such as school closures on families dependent upon the food their children receive at school were rarely identified. None mentioned the broader issue of the need to ensure access to food and water or addressed the disproportionate impact of the loss of income on those who are already socially disadvantaged (Uscher-Pines, Duggan, Garoon, Karron, & Faden, 2007).

Based on surveys of voluntary and emergency management organizations, the Canadian Red Cross concluded that significant gaps exist in emergency management plans at the federal, provincial, and territorial levels in addressing the needs of marginalized populations, with the needs of women, transient populations, and new immigrants/cultural minorities the least likely to be considered (Canadian Red Cross, 2007). Importantly, workers in the voluntary sector expressed little confidence that the needs of such populations

would be addressed during a disaster (Canadian Red Cross, 2007). A 2010 Canadian survey of public health staff regarding the responsiveness of plans to “marginalized urban populations” came to a similar conclusion: community groups have not been engaged early enough in planning and as a result, plans are too generic in nature, with inadequate attention to the needs of marginalized groups (International Centre for Infectious Disease, 2010).⁴² Street nurse Cathy Crowe captures the consequences for the homeless of these gaps within pandemic plans:

When SARS hit Toronto it was evident within weeks that shelters and drop-ins and all the people in them would have to fend for themselves. The City's best plan in the event that homeless people were exposed to SARS included a proposed 'lockdown' of Seaton House — the largest men's shelter in Canada — and 'home' quarantine in the same shelter. No plans for proper quarantine facilities. No plans for drop-in centres. No plans to stop the night-by-night movement of people who are homeless and forced to use the volunteer based Out of the Cold emergency shelter sector. This lack of planning would have made it impossible to contain the outbreak should SARS have entered this population (Canadian Red Cross, 2007, p. 15).⁴³

Redressing the invisibility of the distinct needs of marginalized groups and the often misplaced assumptions underlying existing plans requires the active participation and collaboration of marginalized groups in the planning process.⁴⁴ Collaboration is essential to the creation of plans that move beyond an undifferentiated ‘public,’ that are attentive to the distinct needs, expectations and perceptions of marginalized groups, and that ensure “equal protection and quality of services during a pandemic ... regardless of social

⁴² The survey was sent to 288 public health staff and 96 responses were received. Massey et al similarly conclude that the comprehensive plans developed by most countries neglect the needs of marginalized populations. In particular, they note the failure to include the Indigenous people of Australia in a respectful partnership. While the Australian plan recognizes the increased risk for Indigenous people, it does not adequately attend to the specific context of their lives, including profound social inequality, poor access to health care, and institutionalized racism. They urge a respectful and genuine partnership, grounded in respect for human rights, and they warn that “the consequences of inflexibly enforcing a non-Indigenous model of containment will be dire” (Massey et al., 2009).

⁴³ As SARS unfolded in Toronto, the city struggled to find a quarantine site for homeless people, eventually settling on one floor of an existing shelter. Leung et al report that efforts were “hampered by the limited availability of suitable facilities and concerns regarding negative reactions from the community near such a facility” (2008, p. 408).

⁴⁴ The central importance of community engagement, and in particular of disadvantaged communities is advocated by, for example, the American Civil Liberties Union (Annas, Mariner & Parmet, 2008, p. 5) and the Canadian Red Cross (2007). See also Saunders 3rd & Monet, 2007.

difference” (Kayman & Ablorh-Odjidja, 2006, p. 83). Such engagement also enables those involved in the planning process to understand and consider local knowledge, skills, and networks, all of which will be critical in a pandemic (Canadian Red Cross, 2007).

The Bellagio Principles, derived during a meeting of public health practitioners to discuss social justice and pandemics, echo this imperative (Bellagio Group, 2006). These principles would require explicit identification of disadvantaged groups, their engagement in the planning process, identification of the distinct needs of diverse disadvantaged groups in the context of a pandemic, and concrete plans to meet those needs.

Engaged conversation and collaboration in pandemic planning are also vehicles for building trust. Many of those who experience profound social marginalization have experienced repeated betrayals of trust, including by state actors. They have little reason to trust that the state will act in their interest. This distrust will, of course, not be mended through a few conversations. Rather, it requires ongoing and sustained opportunities for those who experience social vulnerability to participate, not only in conversations about pandemic planning, but in a vast array of areas of legal and social regulation.

Recalibrating the responsibility mix

Pandemic planning invariably entails decision-making regarding the allocation of responsibility for action not only between differing levels of government, but as between the state, community-based organizations, and individuals. As noted in the Justifying Limits on Individual Rights section, current pandemic plans allocate significant responsibility to individuals to be personally prepared and to voluntarily comply with the advice, directives, or orders of state agents; people are expected to stockpile food, shelter or quarantine themselves in their homes, and faithfully practice germ elimination methods.⁴⁵ These expectations are premised upon a number of assumptions regarding the capacity of individuals, which as the Wellesley Institute concludes in relation to Canada’s federal plan and its campaign

⁴⁵ See footnote 26, above, for particulars of the expectations regarding personal preparedness.

for personal preparedness, may be “unrealistic, unfair and inequitable” (Appleyard, 2009, p. 13). Surveys and interviews conducted with homeless individuals in Toronto after the H1N1 pandemic revealed just how unrealistic and unfair these expectations often are.

Between October 2010 and April 2011, 149 homeless individuals in Toronto completed a detailed survey and participated in a structured interview covering matters such as general health, access to shelter, food, and water, and the use of services, including emergency shelters for drop-ins. The interviews also included questions specifically focused upon the two waves of the H1N1 pandemic in the spring and fall of 2009, exploring such issues as access to reliable information, vaccines and health care.⁴⁶ Among the sample, 64.4% identified as male, 30.2% as female, and 2.7% as transgendered; 45% were street-involved youth (age 24 and under), and 24.8% identified as Aboriginal or First Nations. Ninety-six per cent of those in the sample reported being homeless during the H1N1 pandemic. The homeless individuals who participated in the study reported heavy reliance on shelters (59% used shelters between once per month and most of the time, a percentage that rose to 62.4% during the H1N1 pandemic) and drop-in centres to meet basic needs (48.3% reported accessing these every day, 18.1% more than twice per week, and 71.8% during the H1N1 pandemic). Not only do they not have access to a private sphere over which they can exercise control, they are forced to survive within a homelessness infrastructure in which they frequently sleep and eat in over-crowded conditions (for example, 33.7% reported in the survey sleeping in overcrowded conditions once a week or more often) and where constant mobility is necessary to meet basic needs (travelling to drop-ins, engaging in street-level subsistence activities, seeking protection from the elements).⁴⁷ Social distancing measures designed to limit the spread of contagious disease are fundamentally at odds with the structures, institutions, and routines necessary to access food, shelter, and

⁴⁶ The survey and interviews were components of the two CIHR funded projects mentioned in the acknowledgements at the outset, *Responding to H1N1 in the Context of Homelessness in Canada and Understanding Pandemic Preparedness within the Context of the Canadian Homelessness Crisis*. In addition to the surveys and interviews with homeless individuals, service providers and key informants were also interviewed in four Canadian cities: Toronto, Regina, Calgary and Victoria. The specific details are outlined in case study chapters in this book.

⁴⁷ I draw here from the survey and interview data of the Toronto portion of the empirical research described at the outset of this article.

support. The ability to practice recommended germ elimination methods — regular hand washing and disinfecting surfaces — is similarly constrained.

The concept of relational autonomy helps us to see that social structures and processes create limited, and in some circumstances virtually non-existent, options. Rather than blaming individuals for their ‘failure’ to self-protect, or to comply with public health orders, we need to consider what forms of state action are required to enable compliance. The Campbell Commission provides insight into possibilities of this sort. After a lengthy review of quarantine measures, including compliance data, the Commission recommended legislative reforms that would provide a range of employment protections and a “basic blueprint for the most predictable types of compensation” that would be provided (Government of Ontario, 2005a, p. 8). The importance of enabling compliance was borne out during the H1N1 pandemic in the United States, where a major determinant of compliance with social distancing measures was the presence of employer-paid sick-leave (Purtle, 2012).⁴⁸

The Campbell Commission’s analysis also underscores the reciprocity that is essential to an effective pandemic response: governments cannot expect compliance with measures such as quarantine without a reciprocal obligation to ensure the provision of safe shelter and access to adequate food, water, and other necessities, and to provide job security and adequate compensation (Gostin & Berkman, 2007).⁴⁹ The Commission concludes that “[a]ny fight against infectious disease depends above all on public cooperation. ... [which] must be nurtured and promoted,” (Government of Ontario, 2005a, p. 8) adding that “legal powers by themselves are false hopes” (Government of Ontario, 2005a, p. 11). It continues: “Voluntary compliance is the bedrock of any emergency response. It is essential to compensate those who suffer an unfair burden of personal cost for cooperating in public health measures like quarantine” (Government of

⁴⁸ Where Purtle also references one study estimating that “disparities in paid sick leave policies contributed to an additional 1.2 million cases of probably H1N1 among Hispanics.”

⁴⁹ Gostin & Berkman also emphasize the ethical obligation of society to provide those affected with the necessities of life, including safe and humane housing, high quality medical care, and psychological support.

Ontario, 2005a, p. 11). Further, “without public cooperation, laws are little help Legal procedures are useless without overwhelming public cooperation ...” (Government of Ontario, 2005a, p. 298; 300).⁵⁰

But here again the advice of the Commission has been largely ignored. Ontario’s *Employment Standards Act* provides for a leave of absence, but the leave is unpaid (Government of Ontario, 2016).⁵¹ Moreover, eligibility arises only after an emergency has been declared and the employee has been made the subject of an order under the *Emergency Management and Civil Protection Act* (Government of Ontario, 2009) or the HPPA, or is required to care for a close relative (as listed in the statute) who is the subject of such an order. This is woefully inadequate because it ignores the impact of lost income on low-wage earners and telescopes our obligation of care to a narrow circle of close relatives, omitting the friends, neighbours, and colleagues who may well require assistance in the time of a pandemic. Complete silence surrounds future compensation plans.

Accessing trusted information

Access to timely and relevant communication from a trusted source has been identified as absolutely critical by the Campbell Commission and by many others who think about pandemic planning. Gostin and Berkman have noted that while misinformation has been rampant during past pandemics, the most marginalized members of society have experienced the least access to credible and reliable sources of information (2007). Differences in culture, language, reasoning processes, and literacy all point to the importance of tailored and targeted communications (Vaughan & Tinker, 2009).⁵² But unless those with varied needs participate in the planning and development of the content of communications and communication

⁵⁰ While here the Campbell Commission emphasized that compliance derives from a sense of civic duty rather than a fear of legal consequences, later in its report the Commission expresses a view that “[e]ducation and moral suasion ... will not bring results unless the people realize that behind them is the long arm of the Law” (p. 298).

⁵¹ In some instances, other forms of unpaid leave, such as the family medical leave (Government of Ontario, 2016, 49.1), the family caregiver leave (49.3) and the personal emergency leave (50[1]), may be available.

⁵² Here again, the experience of the Ebola virus in West Africa is instructive; not only has the absence of trust in state actors presented a major barrier to containing its spread, but so too has the failure to consider cultural practices in burying the dead (in which the deceased’s body is touched). See Banerjee, Mor, Kok, Sorrell, & Hill-Cawthorne, 2014; Gounder, 2014).

strategies, a nuanced appreciation of those differences will not emerge, and communications during a pandemic will be massively uneven, with potentially devastating implications.

Additionally, the importance of a trusted source of information cannot be under-estimated. Indeed the Campbell Commission identified public confidence that medical decisions are being made by a trusted independent medical leader as “*the most important thing in a public health emergency*” (Government of Ontario, 2005a, p. 13). But do we know whom different populations rely upon and trust for information? The Toronto study of homeless individuals specifically asked about who they trusted to provide public health information during the outbreak of H1N1. Health care providers were ranked as the source of the best information about H1N1, followed by the television, shelter and drop-in centre staff, posters and pamphlets, and family members. Community health clinics were the most common point of access to health care for those interviewed (36.9% report using community health centres, while 30.9% reported having a regular doctor, 24.8% used walk-in clinics, and 22.8% used the health services offered through shelters and drop-in centres). Gathering this type of more finely grained information is critical to developing responses that are attentive to the needs of particular groups, and ultimately to our ability to minimize the impact of a pandemic.

Accessing vaccines

There is widespread agreement that in a pandemic there will be not be an adequate supply of vaccines or anti-viral medications, raising important questions about allocative criteria. Much of the literature here — medical and ethical — focuses on medical vulnerability and the importance of preserving the health of first responders and health care workers.⁵³ Again, a shift in focus to a social justice model challenges these widely agreed-upon priorities (O’Sullivan & Bourgoïn, 2010; Ahle, 2007). Viewed through the lens of social vulnerability, the issues of crowded living quarters, inadequate food, and poor ventilation become relevant to the determination of priority access. As the Toronto surveys and interviews reveal, homeless individuals

⁵³ The Government of Canada identifies several priority groups (although they are not rank ordered); none of the groups are derived from a social vulnerability analysis (Government of Canada, 2015).

experience significant social vulnerability: they report high levels of poor health (33.6% described their overall health as fair, 7.4% as poor/bad, and 3.4% as very poor/bad). More particularly, 21.5% reported chronic lung disease, 58.75% fatigue, 43.6% depression, and 47.5% a disability. This combination of poor health, inadequate nutrition, overcrowding, and, in many shelters, poor ventilation, renders the homeless particularly vulnerable to the acquisition of communicable disease. While a medical lens of vulnerability may identify some of the homeless for priority access, a consideration of social vulnerability would shift significantly more resources towards the homeless population.⁵⁴

A consideration of social vulnerability not only expands the range of ethical considerations necessary to deliberations about prioritization but also requires that we consider the more pragmatic logistical challenges of ensuring access to vaccines for marginalized groups. During the H1N1 pandemic, for example, a concerted effort to create accessible, community-based vaccination clinics for the homeless was undertaken through a partnership between Toronto Public Health and shelters, drop-in centres, and community-based health centres. This effort resulted in a sizeable increase in homeless people's vaccination rates for H1N1 compared to seasonal flu, from an average of 25% for the seasonal flu vaccine to 38% for the H1N1 vaccine as reported by participants in the Toronto study (a rate similar to that of the general population) (Buccieri & Gaetz, 2013).

Preventing discrimination

Stereotypes of the poor, the homeless, Aboriginal people, racialized peoples, and people with disabilities are pervasive and contribute to the discrimination that limits access to meaningful employment, to education, and to political participation. As noted above, there is considerable evidence from past

⁵⁴Gostin & Berkman note that the criteria frequently employed to determine access prioritization protect relatively high-income earners — those who produce vaccines, first responders, medical personnel — and utterly fail to attend to those who are socially disadvantaged (2007). There are profoundly important issues related to the global access to vaccines and anti-virals; for example, during the 2009 H1N1 pandemic, developed countries bought virtually all the vaccines that companies could manufacture. See Fidler, 2010; Rothstein, 2010; Coleman, 2009.

pandemics and other disasters that these events exacerbate discrimination.⁵⁵ Particular groups have been identified as sources of contagion, scapegoated, demeaned, and disrespected. Pandemic planning informed by social justice requires, as Keil and Ali have argued, planning how to avoid the “identification of infection with race, ethnicity or other socio-physical appearance,” and to develop “safeguards against racist victimization of infected people and those who are targeted as potential risk groups” (Keil & Ali, 2006, p. 25).⁵⁶ As the Campbell Commission cautioned regarding orders against a class of persons, it is “all too easy for officials with lesser sensitivity to act immediately, without consultation, and to think only later of the ensuing stigmatization, disruption, and confrontation” (Government of Ontario, 2005a, p. 320-21).⁵⁷

Conclusion

The evidence to date suggests that the voices of those who are socially marginalized, including the homeless, have been largely silenced in the pandemic planning process. They have not been identified as requiring priority access to treatment or vaccinations, notwithstanding their vulnerability to communicable diseases, their need to travel to access basic necessities, and their lack of access to resources required to take measures to protect themselves. The recommendations of the Campbell Commission regarding the obligations of the state to guarantee safe shelter, food, and water, and to be absolutely clear about available compensation, have been ignored. Social vulnerability finds no place in the national security narrative that reduces individuals to risks, dehumanizing them in the process.

⁵⁵ Selgelid reminds us that “infectious diseases are prone to promote fear, panic, stigma, discrimination, and emotional and irrational decision and policy making” (2009, p. 255).

⁵⁶ Similarly the American Civil Liberties Union suggests that a governing principle must be the protection of minorities and the socially disadvantaged from discrimination (Annas, Mariner & Parmet, 2008). Gostin & Berkman similarly address concerns regarding the discriminatory use of social distancing, quarantine, and isolation (2007).

⁵⁷ To guard against this, the Commission recommended that “the power to order and enforce isolation of a group must, wherever practicable, be preceded by such degree of consultation with the group as is feasible in the circumstances” (321).

Against the dominant narrative of national security, the social justice approach to planning struggles for a place. There are, however, signs of change. There is a growth in scholarship that engages social justice in public health generally, and in pandemic planning more specifically. O’Sullivan and Bourgoïn, in a recent review of the pandemic literature, discern a shift from a focus on medical vulnerability to social vulnerability (2010). Ontario’s Pandemic Influenza Plan for the Health Sector has recently been updated to incorporate “health equity” as a defining principle, promising a strategy that “strives to reduce or eliminate socially structured differentials in health outcomes, building on broader ideas about fairness, social justice and civil society,” and noting that:

For example, the implementation of system-wide school closures has different impacts on groups in society such as single parents/ caregivers, children who participate in school-based nutrition programs, families with low or fixed incomes who cannot afford increased child care costs, and parents who do not have flexible work arrangements, paid vacation or short term leave policies (Government of Ontario, 2013, p. 8).

Equity principles have not, however, moved into action and there are worrying trends in the opposite direction. Income inequality continues to grow in Canada. The Organisation for Economic Co-operation and Development (OECD) ranks Canada as one of the developed countries with the worst income gap (OECD, 2011). After close to three decades of neo-liberal reforms, Banting and Myles describe Canada as a “fading redistributive state” wherein the tax transfer system no longer offsets the growth in inequality generated by the market, and where ideational shifts have replaced equality with efficiency (2013). In this context of growing inequality, how ought we to think about legal preparedness?

As former Chief Justice Roy McMurtry urged in the context of anti-terrorism measures, no doubt there is a role for law and for lawyers to “uphold the rights of the individual in the face of increased security concerns” (Toope, 2002, p. 295). As outlined above, a number of obstacles impede access to an adjudicative forum to review orders made under the HPPA, and procedural

reforms would go at least some distance in protecting the rights of individuals to liberty, privacy, and security of the person in the context of a pandemic. But that distance, in light of the power of the national security narrative, will be very short indeed.

Beyond these measures there is a role for law and lawyers in advancing the social justice approach to pandemic planning. Here the emphasis is upon creating positive state obligations, rather than keeping the state out of the lives of its subjects. Such obligations range from those tied to an actual pandemic — the creation of enforceable employment protections, guaranteed compensation packages, the right to safe quarantine or isolation facilities and to food and water — to more expansive and longer-term measures designed to diminish social inequality. Securing a right to health — not to health care but to health with all that entails in relation to its social determinants — will be our best protection against a pandemic. As legal professionals, our efforts cannot be confined to the contestation of particular and specific deployments of state power to detain, contain, and treat. In isolating justice concerns to this narrow band of activity, the social and participatory domains of justice are ignored.

Baylis, Kenny and Sherwin suggest that the threat of a pandemic has created a “window of opportunity” to think creatively about “an ethics framework that is firmly grounded in our common interest in preventing illness, building physically and socially healthy communities and eliminating health inequities” (Baylis, Kenny, & Sherwin, 2008, p. 196). Perhaps equally so, it presents an opportunity for us to rethink the necessary legal framework, one constructed with the full participation of those traditionally excluded and marginalized.

References

- Ahle, H. R. (2006). Anticipating Pandemic Avian Influenza: Why the Federal and State Preparedness Plans Are for the Birds. *DePaul J. Health Care L.*, 10, 213.
- Annas, G. J. (2003). Puppy love: bioterrorism, civil rights, and public health. *Florida Law Review*, 55(5), 1171-1190.

- Annas, G. J., Mariner, W. K., Parmet, W. E. (2008). *Pandemic Preparedness: The Need for a Public Health – Not a Law Enforcement/National Security Approach*. Retrieved from https://www.aclu.org/sites/default/files/pdfs/privacy/pemic_report.pdf
- Appleyard, T. (2009). *Bridging the preparedness divide: A framework for health equity in Ontario's Emergency Management Programs*. Retrieved from <http://www.homelesshub.ca/sites/default/files/ori5qc0m.pdf>
- Attaran, A. & Wilson K. (2007). A Legal and Epidemiological Justification for Federal Authority in Public Health Emergencies. *McGill Law Journal*, 52(2), 381-414.
- Banerjee, A., Mor, S. M., Kok, J., Sorrell, T. C., & Hill-Cawthorne, G. A. (2014). Vulnerability, hysteria and fear—conquering Ebola virus. *The Medical Journal of Australia*, 201(6), 320-321.
- Banting, K. G., & Myles, J. (2013). *Inequality and the fading of redistributive politics*. Vancouver: UBC Press.
- Batlan, F. (2007). Law in the Time of Cholera: Disease, State Power, and Quarantines Past and Future. *Temple Law Review*, 80(1), 53.
- Baylis, F., Kenny, N. P., & Sherwin, S. (2008). A Relational Account of Public Health Ethics. *Public health Ethics*, 1(3), 196-209.
- Bellagio Group. (2006). *Bellagio Statement of Principles*. Retrieved from http://www.unicef.org/avianflu/files/Bellagio_Statement.pdf
- Benjamin, G. C., & Moulton, A. D. (2008). Public health legal preparedness: a framework for action. *The Journal of Law, Medicine & Ethics*, 36(s1), 13-17.
- Bensimon, C. M., & Upshur, R. E. (2007). Evidence and Effectiveness in Decisionmaking for Quarantine. *Am J Public Health American Journal of Public Health*, 97(1).
- Bucciari, K., & Gaetz, S. (2013). Ethical vaccine distribution planning for pandemic influenza: Prioritizing homeless and hard-to-reach populations. *Public Health Ethics*, 6(2), 185-196.
- Canadian Red Cross. (2007). *Integrating Emergency Management and High-Risk Populations: Survey Report and Action Recommendations*. Retrieved from http://www.redcross.ca/cmslib/general/dm_high_risk_populations.pdf
- Cheyette, C. M. (2011). Communitarianism and the Ethics of Communicable Disease: Some Preliminary Thoughts. *Journal of Law, Medicine, & Ethics*, 39(4), 678-689.

- Coleman, C. H. (2009). Allocating vaccines and antiviral medications during an influenza pandemic. *Seton Hall L. Rev.*, 39, 1111.
- Dhamoon, R. & Abu-Laban, Y. (2009). Dangerous (Internal) Foreigners and Nation-Building: The Case of Canada. *International Political Science Review*, 30(2), 163-183.
- Fidler, D. P. (2010). Negotiating equitable access to influenza vaccines: global health diplomacy and the controversies surrounding avian influenza H5N1 and pandemic influenza H1N1. *PLoS Med*, 7(5), e1000247.
- Florida Court Education Council's Publications Committee. (2007). *Pandemic Influenza Benchguide: Legal Issues Concerning Quarantine and Isolation*. Retrieved from <http://biotech.law.lsu.edu/blaw/flu/fl-Benchguide-07.pdf>
- Gagnon, M., Jacob, J. D., & Holmes, D. (2010). Governing through (in) security: A critical analysis of a fear-based public health campaign. *Critical Public Health*, 20(2), 245-249.
- Garoon, J. P., & Duggan, P. S. (2008). Discourses of disease, discourses of disadvantage: A critical analysis of National Pandemic Influenza Preparedness Plans. *Social Science & Medicine*, 67(7), 1133-1142.
- Gostin, L. O., & Berkman, B. E. (2007). Pandemic Influenza: Ethics, Law, and the Public's Health. *Administrative Law Review*, 59(1), 121-175.
- Gostin, L. O., & Powers, M. (2006). What Does Social Justice Require For The Public's Health? Public Health Ethics And Policy Imperatives. *Health Affairs*, 25(4), 1053-1060.
- Gostin, L. O., Lucey, D., & Phelan, A. (2014). The Ebola Epidemic: A Global Health Emergency. *Jama*, 312(11), 1095-1096.
- Gounder, C. (2014). To combat Ebola, first build back trust in healthcare workers. *Reuters*.
- Government of Canada. (1982). *Canadian Charter of Rights and Freedoms*. Retrieved from <http://laws-lois.justice.gc.ca/eng/const/page-15.html>
- Government of Canada. (2004). *Securing an Open Society : Canada's National Security Policy*. Retrieved from <http://publications.gc.ca/collections/Collection/CP22-77-2004E.pdf>
- Government of Canada. (2015). *Canadian Pandemic Influenza Preparedness: Planning Guidance for the Health Sector*. Retrieved from <http://www.phac-aspc.gc.ca/cpip-pclcpi/>

- Government of Ontario. (2005a). *The SARS Commission, Second Interim Report: SARS and Public Health Legislation, Volume 5*. Retrieved from http://www.archives.gov.on.ca/en/e_records/sars/report/v5-pdf/Volume5.pdf
- Government of Ontario. (2005b). *Safe Streets Act, 1999, S.O. 1999, c. 8*. Retrieved from <https://www.ontario.ca/laws/statute/99s08>
- Government of Ontario. (2009). *Emergency Management and Civil Protection Act, R.S.O. 1990, c. E.9*. Retrieved from <https://www.ontario.ca/laws/statute/90e09>
- Government of Ontario. (2010). *Ministry of Health and Long-Term Care Appeal and Review Boards Act, 1998, S.O. 1998, c. 18, Sched. H*. Retrieved from <https://www.ontario.ca/laws/statute/98m18>
- Government of Ontario. (2015a). *Health Protection and Promotion Act, R.S.O. 1990, c. H.7*. Retrieved from <https://www.ontario.ca/laws/statute/90h07>
- Government of Ontario. (2015b). *Health Care Consent Act, 1996, S.O. 1996, c. 2, Sched. A*. Retrieved from <https://www.ontario.ca/laws/statute/96h02>
- Government of Ontario. (2016). *Employment Standards Act, 2000, S.O. 2000, c. 41*. Retrieved from <https://www.ontario.ca/laws/statute/00e41>
- Hawryluck, L., Gold, W. L., Robinson, S., Pogorski, S., Galea, S., & Styra, R. (2004). SARS Control and Psychological Effects of Quarantine, Toronto, Canada. *Emerging Infectious Diseases*, 10(7), 1206-1212.
- International Centre for Infectious Disease. (2010). *Issues in Pandemic Influenza Responses for Marginalized Urban Populations: Key Findings for Marginalized Urban Populations*. Retrieved from http://www.icid.com/files/Marg_Pop_Influenza/Issues_in_Pandemic_Influenza_Responses_for_Marginalized_Ubran_Populations_English_FINAL.pdf
- Kamoie, B., Pestronk, R. M., Baldrige, P., Fidler, D., Devlin, L., Mensah, G. A., & Doney, M. (2008). Assessing laws and legal authorities for public health emergency legal preparedness. *The Journal of Law, Medicine & Ethics*, 36(s1), 23-27
- Kayman, H. & Abloh-Odjidja, A. (2006). Revisiting public health preparedness: Incorporating social justice principles into pandemic preparedness planning for influenza. *Journal of Public Health Management and Practice*, 12(4), 373-380.

- Keil, R. & Ali, H. (2006). Multiculturalism, Racism and Infectious Disease in the Global City: The Experience of the 2003 SARS Outbreak in Toronto. *Topia*, 16, 23-49.
- Kerridge, I., & Gilbert, L. (2014). *Epidemic ethics: four lessons from the current Ebola outbreak*. Retrieved from <http://theconversation.com/epidemic-ethics-four-lessons-from-the-current-ebola-outbreak-30534/>
- Kouzoukas, D. L. (2008). Public health emergency legal preparedness: Legal practitioner perspectives. *The Journal of Law, Medicine & Ethics*, 36(s1), 18-22.
- Lancet, The. (2009). Swine influenza: how much of a global threat? The Lancet, 373(9674), 1495.
- Leung, C. S., Ho, M. M., Kiss, A., Gundlapalli, A. V., & Hwang, S. W. (2008). Homelessness and the Response to Emerging Infectious Disease Outbreaks: Lessons from SARS. *Journal of Urban Health J Urban Health*, 85(3), 402-410.
- Mariner, W. K., Annas, G. J., & Parmet, W. E. (2009). Pandemic preparedness: a return to the rule of law. *Drexel Law Review*, 1, 341.
- Massey, P. D., Miller, A., Durrheim, D. N., Speare, R., Saggars, S., & Eastwood, K. (2009). Pandemic influenza containment and the cultural and social context of Indigenous communities. *Rural and Remote Health*, 9(1179).
- Mikkonen, J. & Raphael, D. (2010). *Social Determinants of Health: The Canadian Facts*. Retrieved from http://www.thecanadianfacts.org/the_canadian_facts.pdf
- Morley, J. C., Hermer, J., & Mosher, J. (2003). Disorderly People: Law and the Politics of Exclusion in Ontario. *Labour / Le Travail*, 51, 293.
- Moulton, A. D., Gottfried, R. N., Goodman, R. A., & Murphy, A. M. (2003). What is public health legal preparedness. *JL Med. & Ethics*, 31, 672.
- O'Sullivan, T. & Bourgoïn, M. (2010). *Vulnerability in an Influenza Pandemic: Looking Beyond Medical Risk*. Retrieved from http://homelesshub.ca/sites/default/files/Lit%20Review%20-%20Vulnerability%20in%20Pandemic_FINAL.pdf
- OECD. (2011). *Divided we stand: Why inequality keeps rising*. Paris: OECD Publishing.
- Paciocco, D. M. (2002). Constitutional Casualties of September 11: Limiting the Legacy of The Anti-Terrorism Act. *Supreme Court Law Review*, 16, 184-232.

- Parmet, W. E. (2009). *Public Health & Social Control: Implications for Human Rights*. Retrieved from http://www.ichrp.org/files/papers/173/public_health_and_social_control_wendy_parmet.pdf
- Parnaby, P. (2003). Disaster through Dirty Windshields Law, Order and Toronto's Squeegee Kids. *Canadian Journal of Sociology*, 28(3), 281.
- Patterson, K. (2009). *Influenza has a cure: affluence*. Retrieved from <http://www.theglobeandmail.com/technology/science/influenza-has-a-cure-affluence/article4195391/?page=all>
- Purtle, J. (2012). Racial and Ethnic Disparities in Post-Disaster Mental Health: Examining the Evidence through a Lens of Social Justice. *Washington and Lee Journal of Civil Rights*, 19(1), 30-55.
- Reynolds, D., Garay, J., Deamond, S., Moran, M., Gold, W., & Styra, R. (2008). Understanding, compliance and psychological impact of the SARS quarantine experience. *Epidemiology and Infection*, 136(7).
- Ries, N. M. (2005). Quarantine and the Law: The 2003 SARS Experience in Canada (A New Disease Calls on Old Public Health Tools). *The Alberta Law Review*, 43(2), 529.
- Roach, K. (2002). Did September 11 Change Everything? Struggling to Preserve Canadian Values in the Face of Terrorism. *McGill Law Journal*, 47(4), 893-947.
- Rothstein, M. A. (2010). Should health care providers get treatment priority in an influenza pandemic?. *The Journal of law, medicine & ethics: a journal of the American Society of Law, Medicine & Ethics*, 38(2), 412.
- Rothstein, M. A. (2015). From SARS to Ebola: legal and ethical considerations for modern quarantine. *Ind. Health L. Rev.*, 12, 227.
- Saunders 3rd, G. L., & Monet, T. (2007). Eliminating injustice toward disadvantaged populations during an influenza pandemic. *North Carolina Medical Journal*, 68.1, 46-48.
- Schabas, R. & Rau, N. (2014). *Ebola: Can we learn from SARS?* Retrieved from <http://www.theglobeandmail.com/globe-debate/ebola-can-we-learn-from-sars/article20211486/>
- Selgelid, M. J. (2009). Pandethics. *Public health*, 123(3), 255-259.
- Smith, P. J. (2003). Anti-terrorism and rights in Canada: Policy discourse on the 'delicate balance.' *Arab Studies Quarterly*, 25(1/2), 137-158.
- Sunstein, C. R. (2004). Fear and Liberty. *Laws of Fear Beyond the Precautionary Principle*, 204-223.

- Tierney, K. (2006). Social Inequality, Hazards, and Disasters. *On Risk and Disaster Lessons from Hurricane Katrina*.
- Toope, S. (2002). Fallout from '9-11': Will a Security Culture Undermine Human Rights? *Saskatchewan Law Review*, 65(2), 281-297.
- United Nations. (1966). *International Covenant on Civil and Political Rights*. Retrieved from <http://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx>
- United Nations. (1984). *UN Sub-Commission on Prevention of Discrimination and Protection of Minorities: Siracusa Principles on the Limitation and Derogation of Provisions in the International Covenant on Civil and Political Rights*, UN Doc E/CN4/1984/4, Annex. United Nations: New York, NY.
- University of Toronto Joint Centre for Bioethics. (2000). *Population and Public Health Ethics: Cases from Research, Policy, and Practice*. University of Toronto Joint Centre for Bioethics.
- Uscher-Pines, L., Duggan, P. S., Garoon, J. P., Karron, R. A., Faden, R. R. (2007). Planning for an Influenza Pandemic: Social Justice and Disadvantaged Groups. *Hastings Center Report*, 37(4), 32-39.
- Van Wagner, E. (2008). The practice of biosecurity in Canada: public health legal preparedness and Toronto's SARS crisis. *Environment and Planning A*, 40(7), 1647-1663
- Vaughan, E. & Tinker, T. (2009). Effective Health Risk Communication About Pandemic Influenza for Vulnerable Populations. *American Journal of Public Health*, October(99), 324-332.
- Viens, A. M. (2013). Disadvantage, Social Justice and Paternalism. *Public Health Ethics*, 6(1), 28-34.
- Wald, P. (2008). *Contagious: Cultures, carriers, and the outbreak narrative*. Durham: Duke University Press.
- World Health Organization. (2007). Ethical considerations in developing a public health response to pandemic influenza.
- Young, I. M. (2011). *Justice and the Politics of Difference*. Princeton University Press.

3 PANDEMIC PLANNING AND PREPAREDNESS IN THE CONTEXT OF HOMELESSNESS: THE CASE OF VICTORIA, BRITISH COLUMBIA

Bernie Pauly, Kathleen Perkin & Geoff Cross

Introduction

As a result of inadequate housing and income, people experiencing homelessness face multiple health challenges, including poor health outcomes and lack of access to health care services (Frankish, Hwang, & Quantz, 2005; Hwang et al., 2011; Hwang et al., 2010). As a consequence of their living situations, people experiencing homelessness are more vulnerable to transmission of disease, especially during public health crises such as pandemics (O’Sullivan & Bourgoin, 2010). For example, they may not have access to clean water for hand washing, or may be forced to sleep in overcrowded spaces. Since 2000, there have been several public health emergencies that have compromised the health and well-being of many communities, raising legal, political and ethical concerns (Gostin & Berkman, 2007; Wilson, 2006). In this case study, we look at the response in Victoria, British Columbia (BC) to the 2009 H1N1 crisis, with a focus on lessons learned for cross-sector collaboration in addressing public health emergencies in the context of homelessness. We begin by describing homelessness in Victoria, and the policy context for addressing public health emergencies in the city and province. Then, drawing on data collected from policy-makers, service providers and those experiencing homelessness, we describe that city’s response to the H1N1 threat, including pandemic planning, communication of H1N1 information, prevention efforts (including the delivery and uptake of vaccinations), and potential and actual impacts on health and social services provision.

Background

Victoria, BC is located at the southern end of Vancouver Island on the west coast of Canada. Today the city itself has a population of approximately 83,200, and the surrounding capital region is home to 372,463 people (BC Stats, 2015a, 2015b). The population of Victoria and the surrounding area were similar in 2009, when the city's population was 83,000, and the surrounding capital region was home to around 360,000 people (BC Stats, 2009). In 2013, an estimated 1,000 people were homeless or unstably housed on one night with 1,769 individuals experiencing homelessness in a year (Pauly, Cross, Vallance, & Stiles, 2013). In February 2016, 1,387 people were enumerated during a one-night point-in-time count (Albert, Penna, Pagan, & Pauly, 2016).

In 2009, emergency shelters for people experiencing homelessness in Victoria were operating over capacity, at a 103% occupancy rate, and the total number of overnight stays at these shelters increased by 2.4%, from 66,027 stays in 2008–2009 to 67,595 stays in 2009–2010 (Austen & Pauly, 2010; Pauly et al., 2013). In 2013, shelters were similarly over capacity, operating at 111% with the placement of additional mats on the floors of emergency shelters.

Victoria suffers from a serious housing affordability problem. In 2009–2010, access to affordable rental housing was extremely limited. The overall vacancy rate for the region was 1.4%, though the vacancy rate for bachelor units renting for less than \$700 per month was 1.3%, and the rate for one-bedroom units in the same rent range was 0.8%. For many, BC income assistance in 2009 was not sufficient to cover the cost of housing in Victoria with the rental portion being \$375 per month (Austen & Pauly, 2010). This situation was unchanged as this chapter was being written, with the cost of rent typically consuming more than 30% of the income of people receiving social assistance benefits or working for minimum wage (Pauly et al., 2013). In 2012–2013, bachelor and one-bedroom units costing less than \$700 remained scarce, with vacancy rates of 1% or less (Pauly et al., 2013). Due to the scarcity of housing, many people are driven into emergency shelters and onto the streets.

Past research has documented that homelessness increases vulnerability to poor health outcomes, such as exacerbating prior health conditions, increasing the chances of contracting diseases and lowering life expectancy overall (Badiaga et al., 2009; Frankish et al., 2005). A public health emergency, such as a pandemic, serves to exacerbate the vulnerabilities faced by people experiencing homelessness. Overcrowded emergency shelter spaces can act as vehicles for rapid transmission of infection, and the possible closure during a pandemic of important services like soup kitchens and harm reduction sites can leave people without access to basic resources (O’Sullivan & Bourgoin, 2010). As such, H1N1 had the potential to increase risks for people experiencing homelessness in Victoria and throughout Canada. By examining the response to the H1N1 threat in one Canadian city, our intention is to provide insights for cross-sector collaborations that aim to reduce the vulnerability of homeless populations in the event of a public health emergency.

Provincial and Municipal Roles in Pandemic Planning

In British Columbia, responsibility for public health rests mainly with the health authorities and the Ministry of Health. In 2009, BC had five regional health authorities and another health authority responsible for specialized health care services (the Provincial Health Services Authority).¹ In 2005, the British Columbia Pandemic Influenza Advisory Committee (including representatives from the provincial government and provincial and national health organizations) produced the *BC Pandemic Influenza Preparedness Plan* (British Columbia Pandemic Influenza Advisory Committee, 2005). This document sets out the roles and responsibilities of different organizations in the event of an influenza pandemic, as well as the expected impact of a pandemic, and provides templates for further planning and reporting. The plan identifies people who are homeless as a hard-to-reach population that may need to be targeted for priority vaccination. The health authorities also had general plans in case of an influenza pandemic (for example, Vancouver Coastal Health, 2006; Vancouver Island Health Authority, 2009b). In 2009,

¹ BC’s First Nations Health Authority did not become fully active until 2013.

several Ministries and provincial organizations were involved in planning for the H1N1 pandemic. These included:

- The BC Centre for Disease Control (BCCDC);
- BC Housing;
- The Ministry of Health;
- The Ministry of Healthy Living and Sport;
- The Ministry of Housing and Social Development;
- The Regional BC Health Authorities;
- Provincial Health Services Authority.

Concurrent with the planning done by the above-mentioned ministries and organizations for the general response to influenza pandemic, specific work was also undertaken by provincial and municipal organizations. BC Housing, a provincial Crown agency with responsibility for subsidized housing, produced plans and reports relevant to pandemic planning, including the *BC Housing Pandemic Continuity Plan* (BC Housing, 2009). This document focused on staffing levels and business continuation plans for homeless-serving agencies. As it became clear in the first half of 2009 that H1N1 could pose a serious risk to British Columbians, health organizations updated their pandemic plans (BC Ministry of Health, 2009; Vancouver Island Health Authority, 2009b) and created plans specific to those who are homeless (Vancouver Coastal Health, 2007; Vancouver Island Health Authority, 2009a).² These later documents focus on infection control, identification of H1N1 and service continuity planning. They identify social contact as a particular challenge for managing H1N1 in shelters, recommending that a distance between people of 1 to 2 meters be maintained. The Vancouver Island Health Authority (VIHA) document focuses mostly on how to identify H1N1 and limit its spread, but also identifies a possible increased risk of complications in people who are homeless, due to the higher prevalence of chronic illness in that group.

² Some health authorities had created plans specific to people experiencing homelessness prior to H1N1 in 2009, as Vancouver Coastal Health did in 2007.

While the City of Victoria does emergency planning, it was not heavily involved in the public health response to H1N1. In fact, municipalities, which often bear the burden of homelessness, were relatively uninvolved in this process in BC.

Data Overview

We used a mixed-methods case study design to investigate the development of pandemic responses in the context of homelessness in one Canadian city, Victoria, BC (Yin, 2013)³ Consistent with a case study design, we incorporated multiple sources of data: 1) interviews with policy makers and service providers in the homelessness sector; 2) surveys and interviews with clients of these services; and 3) a review of relevant documents from ministries, government organizations and local health authorities.

Qualitative semi-structured interviews were conducted with policy-makers and service providers and 32 client surveys were also completed. In June and July 2010, we interviewed six policy-makers from different levels of government and seven service providers from Victoria-based homelessness serving agencies. The policy-maker interviews covered participants' experiences planning for and managing H1N1, with a specific focus on 'at-risk' and/or 'vulnerable' groups. The service providers worked in Victoria-based organizations delivering services for people experiencing homelessness, and were involved in preparing for and responding to H1N1. This group included managers/coordinators, front-line emergency shelter workers and health care staff from five agencies service both youth and adults. The agencies ranged from shelters serving nearly 100 people per night, to temporary seasonal accommodations serving a small number of people per night, to large drop-in centres, to a health clinic. Combined, these agencies provide a wide range of services: food and shelter; health care, dental care and mental health services; employment, income and tenancy advocacy; and outreach to people who are homeless or marginally housed.

³ An overview of the project methodology can be found in the introductory chapter of this book. Findings from other cities, and comparisons, can be found in other chapters within this book.

All interviews were recorded, transcribed and analyzed in NVivo software using content analysis (Graneheim & Lundman, 2004).

Structured surveys were undertaken with 44 clients of these homelessness services, 32 of whom completed the whole survey. The attrition rate was mainly due to the length of the survey. All surveys were completed with the support of a research assistant. Client participants were eligible to be surveyed if they had used emergency homeless shelters or drop-in programs during 2009. Clients who completed the survey ranged in age from 24 to 65 years. Youth under the age of 24 were neither the focus of the study nor specifically recruited, however, qualitative interviews with youth service providers were conducted.

The surveys explored the study participants' perceptions of experiences during the H1N1 pandemic of 2009. Survey data was inputted, organized and analyzed using SPSS. Partially completed surveys were excluded from the data sample, yielding a total sample of 32 completed surveys that were used in writing this chapter. We provide below an overview of the findings in relation to planning for vulnerable populations, communicating and coordinating information, preventing the spread of disease, and the impact on the provision of health and social services. We then highlight learnings to strengthen cross-sector collaborations in addressing future infectious disease pandemics and the crisis of homelessness.

The findings presented in this chapter are organized into three main sections. First, we explore how planning for H1N1 commenced in the health and homelessness sectors. Second, we discuss how information regarding H1N1 was disseminated from public health officials, to community-based homeless-serving agencies, among homeless serving agencies, and finally to clients of homeless-serving agencies. Third, we discuss efforts to address the spread of H1N1 and attend to affected individuals. As part of this discussion, we also illustrate how H1N1 affected the delivery of health and support services in Victoria, BC. Drawing on these findings, we close this chapter by highlighting lessons learned from the Victoria experience for cross-collaboration in future public health emergencies and in the public health crisis of homelessness.

Planning for ‘Vulnerable Populations’

Within the health sector

Interviews with policy-makers indicated that emergency planning for ‘vulnerable populations’ was a priority. Provincially, certain groups were identified as being at high risk for harms related to H1N1. These included pregnant women, people with underlying health conditions, young children and Aboriginal peoples (Office of the Provincial Health Officer, 2010). The province did not explicitly include people experiencing homelessness as a high-risk group. However, VIHA identified that marginalized people were particularly vulnerable, thereby including people who were homeless (Vancouver Island Health Authority, 2009a). This prioritization was largely because public health officials understood people experiencing homelessness, “as being more at risk in certain instances to emergencies and disasters” (policy-maker), in that there is, as another interviewee noted, a “lack of support networks, so if they did end up becoming sick but weren’t sick enough to be hospitalized, [they] just can’t go and convalesce on the street” (policy-maker). That is to say, people who are homeless do not have access to adequate shelter and often have less access to primary care, in turn making them more susceptible to pandemic-related harms as compared to the housed population (Badiaga et al., 2009; Hwang, 2001). Officials were concerned that if people experiencing homelessness became infected, they would not be able to access either respite shelter or the primary care needed to take care of their own health and prevent further spread of the virus. This understanding of structural vulnerability of people experiencing homelessness was a central feature that contributed to planning specifically for homeless populations.

Given the identified structural vulnerability to harms faced by homeless populations (and other vulnerable populations), policy-makers worked to develop plans and education materials relevant to vulnerable populations as quickly as possible. This meant working at a faster pace than usual. Interviewees highlighted factors that either enabled or impeded working quickly in preparing and responding to H1N1. An enabling factor was the work to improve inter-ministry collaboration that had been undertaken prior to H1N1. Many of the people involved in developing the plans and

educational materials for H1N1 had been working together on a provincial working group well before the virus emerged. The existence of a cross-sector committee fostered learning and relations across departments and ministries, with one interviewee noting, “Just for the fact that we knew how to work together before was leaps and bounds easier to engage in something” (policy-maker). This prior groundwork enabled the committee to respond to H1N1 more quickly, as some of the required committees and working processes were already in place.

As for impeding factors, some policy makers noted the contemporaneous general challenge of working across ministries and between governmental organizations. For example, each ministry has its own process for approving documents intended for public release. This meant the plans for vulnerable populations were developed by an inter-ministerial working group, but finalizing a document required review and approval by multiple people from multiple ministries, thus slowing down the process. This challenge was referred to as “dual approval” by one of the policy-makers, who stated, “Just all those basic things where you have to get approval through your hierarchy and when you’re going through two hierarchies on something, it makes it slow” (policy-maker). Despite general ministry structures impeding a quicker response, the existence of the working group shows how ongoing intergovernmental collaboration enables more responsive planning in such crisis situations. Moreover, interviewees felt that some of the processes and connections built through this experience could be restored with relative ease if they were needed in the future.

Within the homelessness sector

Prior to early fall of 2009, most community-based organizations serving people experiencing homelessness did not have a specific plan for a serious influenza outbreak. However, larger organizations had detailed emergency plans. As one interviewee stated, “We were prepared for having low staffing levels; we were prepared for needing to be nimble in terms of how we organized things to meet whatever emergency need came up” (service provider). Only one organizational plan specifically addressed a pandemic infectious disease outbreak. Nevertheless, organizations’ leaders believed they could adapt existing emergency plans to include specific pandemic

considerations. One interviewee described this as “formalizing previous protocols we had in place, just putting them all together in one and making them really clear” (service provider).

Before the H1N1 outbreak, most of the service providers were not aware of or familiar with pandemic plans developed by public health officials. Organizations began their planning efforts when it became clear, in late summer of 2009, that H1N1 might become a serious health emergency. Organizations accessed a variety of planning resources through the Internet, including protocols, sample plans and templates from BC Housing, BCCDC, the World Health Organization, VIHA and other health authorities in BC. Larger organizations in the homelessness sector that were part of the health authority-led Pandemic Planning and Homeless Population Committee could access support directly from this committee. One interviewee mentioned that individuals in the community with emergency planning expertise offered to help, but the organization already had more than enough information through VIHA and BC Housing. In general, service providers felt well supported in developing their plans.

Some service providers reported providing pandemic planning to help organizations in other areas, or providing H1N1 information to other organizations in Victoria, “We were getting calls from various other parts of BC to talk with them about, you know, just what we’ve come up with and where we’re at and sharing little things” (service provider). Larger organizations with more human resource and infrastructure capacity were more readily able to participate in planning efforts than smaller agencies with limited resources, though all were serving people viewed as ‘vulnerable’ by public health officials. The support needed to develop high-quality pandemic and business continuity plans varied with organizational size and capacity. Thus, highlighting a need for ‘customized’ assistance according to agency’s size and capacity, rather than taking a one-size-fits-all approach.

Agency-specific plans addressed protocols for screening clients for H1N1, plans for infected clients, and instructions about hygiene around hand washing/sanitizing and coughing. Also included were protocols for reducing services in the case of significant staff shortages. Larger organizations planned to call

in off-duty staff as well as managers, and had plans for service reduction if staff levels dropped below certain thresholds. Smaller organizations had less elaborate plans that relied on calling in off-duty staff and drawing on a pool of volunteers if needed. Overall, interviewees were very concerned about potential staff shortages, especially if it meant they would have to decrease services. One interviewee said they would ask for volunteers from among their client group if that was necessary to keep the service open, noting there were no additional monies to cover the extra staff needed in the event of staff shortages. Although interviewees thought it was unlikely they would have to close their services completely, they expected, if this happened, that clients would go to other similar organizations if those were still operating. However, it was noted by some interviewees that certain groups, especially youth, have limited options for health and emergency shelter services already, so service closures would have a greater impact on those groups.

Planning specific to women, youth, families and children was limited. In part, this was based on the perspective that service agencies' usual client populations are already at high risk for health problems, as articulated by one service provider: "Anybody who's homeless is high risk, right... they can't access regular nutrition or they don't have a home to go to" (service provider). So from that perspective, there was less need to differentiate between groups of people when planning, because any H1N1 plan would be addressing 'high risk' groups, be it single men or pregnant women. That said, one organization circulated information about pregnancy and vaccination, as well as risks to children, yet this was mainly for staff who might be caring for young family members. This highlights important questions about the need for both universal and targeted approaches to reducing structural risk for everyone, and the need to address specific considerations across the lifespan.

Coordinating and Communicating Information and Messages

One of the most important aspects of responding to H1N1 was working to ensure that accurate, up-to-date information about H1N1 was being communicated continuously, particularly among service providers and

their clients. In late summer and fall of 2009, H1N1 was frequently in the news, and many rumours were circulating about the illness. At the same time, public health officials were changing their advice based on new information as they acquired it, as well as changing who was eligible for vaccination as more vaccine became available. Given the potential for misinformation to be spread through the community, public health officials felt it was important that “there’s one place everyone can go to, to get information” (policy-maker).

Although not part of the formal health care system, community-based homeless-serving agencies were viewed as a key part of public health’s response to H1N1, as these agencies generally had established connections with people experiencing homelessness. To involve these agencies in planning and response efforts, public health officials from the health authority (VIHA) initiated a Pandemic Planning and Homeless Population Committee (PPHPC) for Victoria, and invited prominent local service providers to participate, in order to foster an exchange of information between public health and homeless-serving agencies. The meetings were eventually replaced by weekly emails among participating members. Hence, through the PPHPC, public health officials were able to directly pass on consistent, up-to-date and accurate information to the participating service providers, which helped the providers to more effectively respond to the potential pandemic, and to provide consistent messages to their staff and clients. Participation in the PPHPC allowed providers to be up to date and consistent with advice given by VIHA in the media, reinforcing the feeling among staff and many clients that the organizations had a handle on H1N1 and could be trusted to respond to it appropriately. Service providers also turned independently to other health authority and government webpages, and to the media.

Outside the PPHPC, communication between homeless-serving agencies was facilitated by pre-existing partnerships. Smaller organizations not involved with the PPHPC were left out somewhat, meaning they could not easily access the information disseminated to other organizations. Smaller agencies subsequently relied on partnerships with larger service providers to access information, as detailed by one interviewee: “Each of the smaller

agencies is generally attached to someone who's larger, who's sort of in their specific area dealing with homelessness, so I don't think there was anyone who was missed, and certainly Victoria had a wealth of information around about it" (service provider). These usual working relationships between services were useful for sharing information during the H1N1 outbreak (for example, in one case where agencies share one building).

Agencies in the homelessness sector prepared their staff to respond to H1N1 through ongoing communication, but provided minimal additional training. Information about H1N1 was communicated to staff through staff meetings (both regular staff meetings and meetings specifically about H1N1), email, individual discussions, an information binder and a message board. A key message communicated to staff members was to look after their own health, for example, by staying home if they were ill, so as not to affect the health of their clients. In regard to staff training, most organizations did not provide additional training to staff for dealing with H1N1, believing that it was not needed. In larger organizations, staff already had training around infectious disease, with interviewees noting that it was part of their standard operations: "We're very experienced in dealing with people that.... present and they have different diseases, different flus. That's business as usual. The only thing that was unusual with this H1N1 was the strain that had a potential to be, you know, fairly severe" (service provider). Preparations for H1N1 mainly involved reviewing existing procedures along with any new protocols specific to H1N1 at staff meetings and in one-to-one discussions. For example, in some organizations, staff members were asked to watch for certain symptoms or ask everyone if they had used hand sanitizer when they entered the shelter.

The ongoing work of managing anxieties among staff was an important part of responding to H1N1. Although service providers did their best to give up-to-date and consistent information, rumours still circulated, and not everyone was reassured by the available information. Staff concerns included the fear of contracting H1N1, especially as their clients had been identified as a high-risk group — which to some meant the clients were more likely to pass the illness to others. However, as concerning as H1N1 was for most people, not all staff were concerned about the illness. One service provider observed:

“There was kind of a split. I mean, I think there was a group of staff that felt like it was an overreaction and, you know, that there was probably much ado about nothing. And then there was a group of staff that felt that there was potentially something quite serious and that there was a significant threat” (service provider). Shelter staff often encounter infectious diseases, among other challenges, in their work daily, so not everyone saw H1N1 as a qualitatively different threat from everyday dangers. Nevertheless, service providers took staff concerns seriously, and felt that passing on the information they were getting from the health authority to their staff helped reduce anxiety by countering some of the unfounded rumours about H1N1.

Homeless-serving organizations translated information they received from VIHA and other sources into the context of services for people who are homeless. According to regular practice in these agencies, information was communicated to clients through a variety of methods, including posters and pamphlets for people with low literacy, and conversations directly with agency staff and street nurses. As part of their protocols, agencies set up hand sanitizer stations in their facilities, and some interviewees mentioned management directing front-line staff to discourage certain kinds of social interaction among clients, including hugging and shaking hands: “We did explain to them that we wanted them to sanitize their hands just to decrease the spread of germs. We also didn’t want to create undue panic in our population because it can certainly get out of hand” (service provider).

Service providers noted that clients were concerned about H1N1, but not more so than they usually were about contracting other illnesses. Reflecting on this, one service provider stated: “There was surprisingly very little [concern], you know. It was more the health care professionals and my staff who were a little more, you know, had a heightened awareness” (service provider). Staff also relied on peer-to-peer communication, acknowledging that if they explained information to respected clients, that information would then be shared via word of mouth. Complementing staff efforts, VIHA street nurses regularly visited many of the agencies, in some cases weekly, and were available to help disseminate information about H1N1 to clients. Generally, information provided by both emergency shelter/drop-in centre

staff and street nurses dealt with how to recognize the symptoms of H1N1 and how to stop the spread of the disease. Clients who had specific concerns were able to speak one-to-one with agency staff or a street nurse.

Approximately half the 32 clients surveyed reported they received information about H1N1 from staff at drop-in centres, and just over three-quarters from staff at emergency shelters, often in the form of printed materials, but also through one-to-one conversations. Information received focused on general preventive practices (hand washing, covering mouth when sneezing, etc.) but also on vaccines and vaccination clinics. Importantly, staff referred clients to street nurses for further information when they could not adequately answer questions or concerns. In the survey findings, most clients who received information from agency staff found it to be useful. Most clients identified that health care providers were a “very important” and “reliable” source of information about H1N1, while slightly less than half reported that agency staff was a very important source of information. Overall, clients were more receptive to information that came from sources they trusted, such as a staff member they knew particularly well or a street nurse who had helped them in the past.

When surveyed, clients expressed differing preferences about the best way to get information to them in the event of a pandemic (health care professionals, posters, media and agency staff were all equally identified as preferred sources, though health care providers were said to be the most reliable source). This suggests that a diversity of communication methods is needed to effectively disseminate information. Tellingly, when asked how agencies could have better handled H1N1, a key recommendation by clients was to have more health care workers available for clients to talk to, along with more face-to-face communication of information in general. Other recommendations to improve communication in future situations were to organize information workshops (with stipends and food for participants), train clients to be ‘peer communicators’ of H1N1 information, and better prepare agency staff to answer clients’ questions and concerns.

Prevention Measures: Stopping the Spread

Most service providers said they found it difficult to find or afford supplies such as masks, gloves and hand sanitizer to prevent and contain the spread of infection. One provider stated: “Supplies were a huge concern....I mean, we were getting really close to the shelter opening and where and how were we going to find masks and gloves and hand sanitizer was brutal to have to find. I mean you could call around everywhere and there’s just none available; and, you know, to get it in the quantities that you’re going to need it” (service provider). The difficulty in finding and affording supplies was due to the demand for these items and the additional cost involved in buying supplies over and above usual operational requirements. The interviewees did eventually find the supplies and the money to buy them, and had a lot of unused supplies after H1N1 was over.

In partnership with VIHA, organizations prepared for the delivery of vaccines. At first, a limited number of vaccine doses were available, but as a high-risk group, homeless clients were prioritized to be immunized. Collectively, organizations planned how to best deliver vaccinations. Street nurses visited shelters and a daytime drop-in program to provide vaccination to anyone who wanted it. This strategy proved successful, as street nurses already had well-developed relationships with many people experiencing homelessness. Service providers reported that among adult clients, vaccination was very popular, and a few interviewees mentioned there was more client interest than expected in being vaccinated. In fact, the uptake of H1N1 vaccination was reportedly higher than in regular influenza vaccine drives, with one provider stating they “usually give out 100...probably about 180 to 200 flu vaccines normally, and we gave out, with the H1N1 and then the regular flu vaccine, we gave out probably 700 to 800 doses” (service provider).

According to service providers, early access to vaccination seems to have been interpreted one of two ways by clients: either they were pleased by what they saw as special priority access to care, or suspicious that an unproven vaccine was being given to them first as a test. Slightly fewer than half the 32 clients surveyed received the H1N1 vaccine. That is comparable to vaccination rates for the general population in Canada and in BC. Statistics

Canada estimates that 41% of Canadians aged 12 and older received the vaccine by April 2010. Among ‘high-risk’ groups in Canada, 54.8% of individuals were vaccinated. In BC, 35.6% of the general population was vaccinated (Statistics Canada, 2015). For those who did not have the vaccination, the main reasons were to avoid the risk of side effects, concern about catching H1N1 through the vaccine, or because they did not trust vaccinations in general or avoided vaccinations altogether. Clients who were vaccinated reported they were able to access vaccination easily in the fall of 2009 (October to December). Suspicion about the vaccine was particularly high among youth. While data collected in this study on the topic is limited (i.e., no youth were interviewed), an interviewee from a youth-serving agency reported that, despite the efforts of staff and street nurses, nearly all the youth accessing the shelter were suspicious of the vaccine and refused it.

When immunizations became available for staff, they were able to access vaccination at public clinics and, in some cases, through their organization. Organizations encouraged their staff to be vaccinated, though it was not required. However, as one interviewee stated, “Had the pandemic actually progressed to the point where it was truly a bigger pandemic, it would be possible that we would actually say, ‘In order to be working you would have to have the immunization’ and those who really didn’t want to for various reasons would just sort of be on leave until such time as it was past” (service provider). Other organizations would also have considered mandatory vaccination if the H1N1 outbreak had been more severe. Mandatory vaccination for staff raises a range of ethical issues, as some staff may object to such requirements. Recognizing the importance of vaccinations, organizations are often advised by the health authority that they can resolve these challenges by stating immunizations are voluntary, but people not choosing to be immunized must, for example, wear a mask (or another protective device).

In the end, few clients were infected with H1N1. Weekly, all the organizations that were part of VIHA’s PPHPC reported the number of clients and staff with H1N1 to the rest of the group, as a way of tracking the progress of the disease and the need for respite care. Standard protocol at most locations

was to first assess whether the client had symptoms of H1N1, isolate them if they had influenza-like symptoms and, in some cases, provide masks to people showing symptoms. Clients were sent to a clinic for assessment or testing if necessary.

H1N1 resembles many other illnesses, so it was difficult for staff to identify it accurately. Clients are often exposed to other types of illnesses, experience a compromised immune system and show symptoms similar to those of H1N1. Many of the clients surveyed reported having influenza or other illnesses during the course of H1N1 in 2009: slightly fewer than half the 32 clients reported they had had influenza or a chest infection. A similar number of people did not know if they had become infected with H1N1, despite having had some form of sickness.

Although they ended up not being needed, an ongoing challenge in stopping the spread was the availability of ‘sick rooms,’ where clients could stay throughout the day to reduce potential disease spread to others. Managers at adult emergency shelters and other services agreed to send people who might have H1N1 to one of the shelters where there was a ‘sick room’ separate from the rest of the shelter. That shelter also provided Tamiflu, an anti-viral medication, and staff would remind people to take it, something they never do with other medicines. In severe cases, clients would be taken to hospital. There was some discussion of using other large facilities, such as gyms, to house people with H1N1 if many people became ill, but interviewees did not know if these plans were ever finalized and, in any case, were not needed. Youth did not have access to a daytime indoor sick room if needed.

Impact on health and social service provision

Clients’ well-being was a major issue for staff. In interviews with service providers, the main challenges they identified concerned their ability to provide adequate services for clients. Concerns were two-fold. First, staff recognized there was a pre-existing lack of services for clients to adequately meet their needs if they became infected by H1N1, such as limited sick rooms and daytime indoor facilities. One service provider stated: “We don’t have the ability to house them during the day. So, you know, the thought of actually having to throw a really sick kid out on the street and say, ‘Well,

here's a blanket,' you know, and 'Here's how to get to the clinic' was really quite disturbing to the staff and myself" (service provider). Interviewees from youth-serving agencies were especially concerned about their clients, and generally acknowledged the lack of services for homeless youth in the Victoria region. The other area of concern was the potential that services, which were already limited, would have to be scaled back even further in the event of reduced staff coverage.

Interviewees realized that if H1N1 had been worse, they could begin "losing some of our front-line staff" (service provider). If they became ill, staff were encouraged to stay home, as part of the precautions around H1N1. Consequently, there would not have been enough staff to adequately support clients at a time when they needed services more than usual. Staff members, who had a limited number of paid sick days in the year, were also concerned for themselves. Staff concern, as one interviewee put it, "started to settle in when people thought, 'Well you're asking me to stay at home, but I don't have any vacation or sick leave left, so am I going to get paid?'" (service provider). Staff members worried they would use all their sick leave and have to take unpaid days off, which some could not afford. This issue remained latent, since H1N1 never became serious enough to affect staffing. However, given that organizations did not receive additional funding to weather H1N1, staff concerns may have been realized with a more serious outbreak.

Service providers, due to the nature of shelters, had trouble adhering to guidelines recommended by public health officials to keep people 1 to 2 meters apart (Vancouver Island Health Authority, 2009a). Clearly, the guidelines were not entirely suitable to the context of space shortages faced by many community-based homeless-serving agencies: the agencies simply did not have the space to implement the recommended distances. One shelter used bunk beds, some temporary shelters provided mats on the floor and services providing food generally did so in large common eating areas. Having large numbers of people using shared washrooms was also a concern. Some organizations had plans to spread people out more by opening up other spaces, though this would be challenging, because more staff would be needed to monitor the extra areas. Another consideration was to reduce the number of people served, in order to adhere to the guidelines. Interviewees working

in clinics expressed concern about lack of space in waiting rooms, the need to isolate people showing symptoms while they were waiting to be seen by a doctor, and inadequate ventilation in waiting and examination areas. Staff working in temporary shelters with rotating locations had challenges setting up hand sanitizer stations and isolation areas in each new location.

Overall, these problems highlight the lack of adequate space that is a chronic rather than acute problem in the homelessness sector. For example, one shelter for some time prior to H1N1 had been sheltering approximately twice as many people as the facility was designed to accommodate. Nevertheless, service providers felt they had done the best with what they had, as summarized in one provider's reflection: "I can't imagine we could have done anything more than....we only had the resources that were available, we had, you know, we were well connected to the whole issue and we had lots of support from each other, from the health authority" (service provider). This statement suggests the persistent issue of inadequate space and resources to properly serve this sector's clients, whether in the context of an H1N1-like event or not.

If H1N1 had resulted in reduced services for people experiencing homelessness, the ability of people to meet their basic needs would most likely have been severely compromised. Clients reported a high degree of reliance on services to meet many of their basic needs, including hygiene, nutrition and health care. More than half the 32 clients surveyed ate meals at least several times a week at an emergency shelter and/or a drop-in centre, with a smaller number eating meals at these services once a day. They also relied heavily on these facilities for basic hygiene needs. Virtually all clients interviewed reported being able to wash their hands several times a day, most were able to eat from clean surfaces every day, more than three-quarters were able to shower at least once a day and half were able to wash their clothes at least several times a week. Most of these basic hygiene and nutrition needs were met through services offered at emergency shelters or drop-in programs. As for health care, more than half the clients surveyed received health care services from a community health clinic. This high degree of reliance on services shows that a reduction in service would have had an immediate negative effect on clients.

Clients surveyed expressed some concern about contracting H1N1, although perhaps not more than their usual concerns about contracting infectious diseases. Fewer than half reported specific concerns about becoming infected with H1N1. Clients who accessed these services were generally concerned instead about getting sick with the range of illnesses and infectious diseases to which they believe they are regularly exposed at such services. H1N1 was only one illness among many potential illnesses to which they are regularly exposed. Nevertheless, clients spoke of a dilemma: they were concerned about contracting sickness at service sites, but also concerned about where they could go during the day if they were too sick to be outdoors.

If the H1N1 outbreak had become more widespread, clients would have been in even more vulnerable circumstances. Approximately three-quarters of clients surveyed indicated that an H1N1 increase would have affected their views about drop-in centres and emergency shelters. Slightly more than half reported they would have avoided emergency shelters and drop-in centres. One reason clients commonly reported they would still visit the services, even under more severe circumstances, was because they needed a place to stay and had no other choice, which ties into the dilemma about where to go if they were too sick to be outdoors. The few clients surveyed who had some form of housing reported they could avoid the services by simply remaining at home, an option not available to unhoused people.

Overall, most service providers believed they were now relatively well prepared to respond to a pandemic, and they were reassured by the health authority's reaction to H1N1. However, interviewees acknowledged that it is the ongoing systemic issue of homelessness — in large part due to a lack of affordable housing — that increases the vulnerability of people experiencing homelessness during a pandemic. They reported that H1N1 was “an emergency that’s in your face,” and addressing this can be easier “than to deal with an emergency that’s slowly growing and growing and getting harder and harder over time,” a reference to the long-term work of “getting people housed and supported and a part of their communities” (service provider). If another public health emergency arises, “you’ve got all the same vulnerable people” and, “you’ve got no infrastructure” to actually deal with the underlying causes of their vulnerability (service provider).

While H1N1 was identified as a public health crisis that required responsive action, it is equally important for public health and other sectors to recognize the underlying causes of vulnerability are, in fact, produced by the public health crisis of homelessness.

Discussion and Key Learnings

Most interviewees thought the planning and response to H1N1 went well, and suggested few changes to plans and protocols, given the limited available resources. Foundational to the response was the high degree of cross-sector collaboration between health and other sectors provincially, regional collaboration between public health and the homelessness sector, and collaboration between agencies within the homelessness sector. At both the provincial and regional levels, public health played a key role in coordinating the response and providing current and up-to-date information. Smaller homeless-serving agencies, which were not part of the regional collaboration, had concerns about getting access to information and resources to prepare for and respond to the pandemic. They were more likely to rely on larger homeless-serving agencies.

Understanding the context of homelessness and service provision to people who are homeless is important for successful implementation of public health guidelines. As noted above, public health played a key role in the Victoria response, and collaboration between public health and the homelessness sector was an important facilitator. In addition to raising awareness among service providers about the need for emergency plans to address pandemic diseases, certain new protocols put in place for H1N1 were retained afterward, such as having more hand sanitizer available for clients and staff, increased awareness of coughing protocols (i.e., coughing into one's arm instead of one's hands), and a greater focus on hand washing. At the same time, the burden of implementing appropriate public health responses placed additional stress on service providers. Implementing public health interventions in potentially overcrowded and communal living spaces such as emergency shelters makes implementing such guidelines as keeping people 1 to 2 meters apart or providing private

spaces to prevent disease transmission structurally difficult. Service providers were very concerned about their ability to control the spread of H1N1 under such conditions, and also about the potential need for extra space and resources to prevent the spread. However, it is not clear who would bear the cost of these interventions.

Communication of information to clients was a critical component of response efforts. Clear information was quickly disseminated by public health officials to service providers, who then translated it into materials suitable for people with low literacy. No single method was relied on to disseminate all information but a key trusted source were health care providers. Given the importance of communicating meaningful information through relevant channels, an area for future consideration and expansion is to include people who have experienced homelessness as part of best practices in disseminating information (Norman & Pauly, 2013). This is particularly important for people who may not regularly access homeless-serving agencies or may even avoid these locations for a variety of reasons, including the advent of a pandemic.

Several key factors facilitated the vaccination drive. First, clients of homelessness services were prioritized for early vaccination. Second, information about H1N1 and the vaccine was widely distributed to clients at popular services in a variety of ways, and clients were able to ask questions and raise concerns to both agency staff and street nurses if necessary. Third, vaccination clinics were held at services already frequented by people experiencing homelessness. Finally, vaccinations were administered by street nurses who had already built relationships and trust with clients. However, clients did recommend that services have more health care workers available to discuss vaccination issues with clients. Additionally, given the concerns expressed by service provider interviewees about low uptake among youth, a youth-specific vaccination strategy created with participation by youth with experience of homelessness may be required for future scenarios. As recommended by clients interviewed, peer resources should also be considered. Having youth peers available to talk with other clients can be an effective way to disseminate health information and support vaccination efforts.

Future planning efforts should consider how to best deliver vaccinations in more severe influenza pandemics. Many clients indicated they would avoid service facilities if the outbreak of H1N1 had been more severe. This suggests the strategy of facility-based vaccination delivery may be unsuccessful in the event of a more severe pandemic because of lower attendance at service facilities. As an alternative, mobile vaccination programs may need to be considered, for example, by delivering vaccinations in public places frequented by people affected by homelessness, such as parks.

Service providers and clients recognized that H1N1 is not a unique threat to health, as clients experiencing homelessness face daily health threats due to the structural conditions in which they live (i.e., poverty and lack of affordable housing). Inadequate and overcrowded conditions in shelters and drop-in programs are ongoing problems that increase the vulnerability of homeless people to poor health far beyond the H1N1 threat. Ongoing communication and partnerships during H1N1 to plan and deliver services highlighted the possible ways cross-sector collaboration can be used to best respond to a public health crisis, specifically demonstrating the role of public health to lead the response. While public health has considerable responsibility around preventing the spread of communicable diseases, its mandate also extends to addressing the broader social conditions, including homelessness, that shape citizens' vulnerability to poor health (Butler-Jones, 2008). A few interviewees identified the importance of preventing homelessness as an underlying source of vulnerability, but very little emphasis was placed on this after the threat of the pandemic passed. This may have been a missed opportunity for further action on the root causes of homelessness.

Conclusion

Clearly, in addressing threats such as a pandemic or homelessness itself, a cross-sector response is needed. This case study illustrates the value of potential partnerships between health and other sectors. Communication between all organizations regarding key messages is crucial, to ensure a consistent understanding of key prevention strategies and actions, thereby

unifying the response. The homelessness sector is generally focused on responding to crises as they occur, and is often too under-resourced to participate in planning and action that extend beyond responding to immediate concerns.

The threat of H1N1 highlighted some of the challenges people who are homeless face daily. This includes lack of space and resources or access to services needed for health and well-being, as well as vulnerability resulting from social conditions. A key factor in the response to H1N1 was the importance of public health taking a lead role in planning and coordinating services and communicating information. Public health's mandate to prevent the spread of communicable diseases facilitated its leadership role in a pandemic, but public health must also ask what its role is in response to the ongoing crisis of homelessness. As part of preventing a wide range of diseases and poor health in people experiencing homelessness, public health has an important role in addressing the root causes underlying the structural vulnerabilities impacting people who are experiencing and at risk for homelessness.

References

- Albert, M., Penna, T., Pagan, F., & Pauly, B. (2016). *More than a Number: 2016 Greater Victoria Point in Time Count Summary Report*. Retrieved from <https://www.crd.bc.ca/docs/default-source/housing-pdf/pitcount-report26apr2016.pdf?sfvrsn=2>
- Austen, T., & Pauly, B. (2010). *Greater Victoria Report on Housing and Supports*. Retrieved from <http://victoriahomelessness.ca/wp-content/uploads/2012/07/Report-on-Housing-and-Supports-2010-x.pdf>
- Badiaga, S., Richet, H., Azas, P., Zandotti, C., Rey, F., Charrel, R., . . . Brouqui, P. (2009). Contribution of a shelter-based survey for screening respiratory diseases in the homeless. *Eur J Public Health*, 19(2), 157-160. doi:10.1093/eurpub/ckn142
- BC Housing. (2009). *Pandemic Continuity Plan*. Retrieved from https://www.bchousing.org/resources/HPK/Emergency_Preparedness/Appendix_Sample_Pandemic_Continuity_Plan_Template.pdf

- BC Ministry of Health. (2009). *H1N1 Pandemic Preparedness: Be Prepared Be Well*. Retrieved from <https://www.vch.ca/media/H1N1PandemicPreparedness.pdf>
- BC Stats. (2009). Population Estimates. Retrieved from <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx>
- BC Stats. (2015a). Population Estimates: Census Metropolitan Areas 2011-2014. Retrieved from <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx>
- BC Stats. (2015b). Population Estimates: Census Metropolitan Areas 2001-2011. Retrieved from <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx>
- British Columbia Pandemic Influenza Advisory Committee. (2005). *British Columbia Pandemic Influenza Preparedness Plan*. Retrieved from http://www.bccdc.ca/resource-gallery/Documents/Epid_Guidelines_PandemicPlan_20090609.pdf
- Butler-Jones, D. (2008). *Chief Public Health Officer's Report on the State of Public Health in Canada: Addressing Health Inequalities*. Retrieved from Ottawa:
- Frankish, J., Hwang, S., & Quantz, D. (2005). Homelessness and health in Canada. *Canadian Journal of Public Health*, 96, S23-S29.
- Gostin, L. O., & Berkman, B. E. (2007). Pandemic Influenza: Ethics, Law, and the Public's Health. *Administrative Law Review*, 59(1), 121-175.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112. doi:<http://dx.doi.org/10.1016/j.nedt.2003.10.001>
- Hwang, S. W. (2001). Homelessness and health. *Canadian Medical Association Journal*, 164(2), 229-233.
- Hwang, S. W., Aubry, T., Palepu, A., Farrell, S., Nisenbaum, R., Hubley, A. M., . . . Pidlubny, S. (2011). The health and housing in transition study: a longitudinal study of the health of homeless and vulnerably housed adults in three Canadian cities. *International journal of public health*, 56(6), 609-623. doi:10.1007/s00038-011-0283-3
- Hwang, S. W., Chiu, S., Kiss, A., Tolomiczenko, G., Cowan, L., Levinson, W., & Redelmeier, D. (2010). Universal health insurance and health care access for homeless persons. *American Journal of Public Health*, 100(1454-1461). doi:10.2105/AJPH.2009.182022

- Norman, T., & Pauly, B. (2013). Including people who experience homelessness: A scoping review of the literature. *International Journal of Sociology and Social Policy*, 33(3/4), 136-151.
- O'Sullivan, T., & Bourgoin, M. (2010). *Vulnerability in influenza pandemic: Looking beyond medical risk*. Retrieved from Ottawa: <http://homelesshub.ca/resource/vulnerability-influenza-pandemic-looking-beyond-medical-risk>
- Office of the Provincial Health Officer. (2010). *B.C.'s Response to the H1N1 Pandemic: A Summary Report*. Retrieved from http://www.health.gov.bc.ca/library/publications/year/2010/PHO_Report_BC_Response_to_the_H1N1_Pandemic_June2010.pdf
- Pauly, B., Cross, G., Vallance, K. W.-W., A., & Stiles, K. (2013). *Facing Homelessness: Greater Victoria Report on Housing and Supports 2012/2013*. Retrieved from Victoria, BC: http://victoriahomelessness.ca/wp-content/uploads/2013/09/GVCEH_ReportHousingSupports_FINAL.pdf
- Statistics Canada. (2015). *H1N1 Vaccination. Canadian Community Health Survey 2010*. Retrieved from <http://www.statcan.gc.ca/pub/82-003-x/2010004/article/11348-eng.htm>
- Vancouver Coastal Health. (2006). *Regional Pandemic Influenza Response Plan*. Retrieved from http://www.jumpjet.info/Emergency-Preparedness/Disaster-Mitigation/NBC/Bio/Regional_Pandemic_Influenza_Response_Plan.pdf
- Vancouver Coastal Health. (2007). *Pandemic Response Planning Checklist for Homeless & Housing Services Providers*. Retrieved from <http://homelesshub.ca/sites/default/files/pbuq0dab.pdf>
- Vancouver Island Health Authority. (2009a). *Influenza A H1N1 and the Homeless: Information for Shelter Facilities*. Retrieved from <http://homelesshub.ca/sites/default/files/5ks5sh0o.pdf>
- Vancouver Island Health Authority. (2009b). *Pandemic Influenza Plan*. Victoria, BC: Vancouver Island Health Authority.
- Wilson, K. (2006). Pandemic threats and the need for new emergency public health legislation in Canada. *Healthcare Policy*, 2(2), 35.
- Yin, R. K. (2013). *Case study research: Design and methods*: Sage publications.

4 UNDERSTANDING PANDEMIC PREPAREDNESS BY HOMELESSNESS SERVICES IN THE CONTEXT OF AN INFLUENZA OUTBREAK: THE CALGARY RESPONSE

Jeannette Waegemakers Schiff & Annette Lane¹

Care of the homeless population during a pandemic is a serious concern. Why is this marginalized population so vulnerable during a pandemic? The more than 200,000 Canadians who access shelters or sleep outside per year (Gaetz, Donaldson, Richter, & Gulliver, 2013) are extremely susceptible to illnesses due to poor health, compromised immune systems, inadequate nutrition and barriers to accessing health services (Frankish, Hwang, & Quantz, 2005). Sleeping in shelters, which are often dangerously overcrowded and have poor air quality and limited infection control procedures, can result in increased exposure to illness. Sleeping outside of shelters poses a different kind of risk; in addition to the increased risk posed by exposure to the elements, rough sleeping lessens the educational information that individuals receive regarding protecting themselves and vaccinations. What can be done, therefore, to ensure that homeless individuals receive health-related information about dangers and appropriate care during a pandemic?

The proposal to examine pandemic preparedness in Calgary, Alberta was given new meaning and immediacy with the onset of an outbreak of a newly identified virus, H1N1, at the start of this project. Thus the overall objective to understand the local responses by health and municipal authorities as well as the service providers in the homelessness sector was subsumed under actual responses to the outbreak of a virulent strain of influenza as the study began. In this chapter, we report the lessons learned from key informants² and offer an organizing framework for pandemic preparedness developed from our findings.

¹ Authors' note: We acknowledge and appreciate the work of Juliana Ramirez and Chantel Watson in the preparation of the preliminary reports and Dr. John Graham in support of this project.

² In this report we present findings from key respondents and do not identify individual organizations, at their request.

The Calgary Context

Calgary, a rapidly growing city with a population of over 1,000,000 at the time of the study, currently has over 1,250,000 residents. Most of this growth stems from those who were drawn to the city's economic prosperity, fueled by the oil and gas industry, through migration from economically struggling regions in Canada and international immigration. Population growth increased demand for housing, and the city experienced a concomitant surge in its homeless population, caused by high rents and an inadequate stock of affordable housing for low income (often service sector) workers. Interestingly, Calgary also has the largest single homeless shelter in North America, housing 1,200 individuals in one building on the edge of the downtown core. Additional shelters, accommodating from 50 to over 300 persons per night, along with other health and social services supports, are located within 10 city blocks of this core area. Rapid transit runs through the middle of this area and leads directly to a major hospital located on the east side of the city. The city core, a stretch of 1.5 km, is a "free transit" zone, which both encourages use of rapid transit by all sectors of society, and allows people who ordinarily could not afford public transit mobility across the downtown core. This confluence of services and accessibility in a small area results in a high density of homeless and marginalized people occupying the same public spaces used by employees of the business and energy sectors. The ready access to services also allows for ease of disease transmission, a reality that underscores the need for adequate planning in the event of the outbreak of any virulent disease.

A second aspect of the unique nature of Calgary stems from the provincial move to unify health service across all regions of Alberta under a "super-board" Alberta Health Services (AHS). At the time, the "super-board" was struggling to develop levels of accountability and to smooth interfaces across all levels of health care, from hospitals to outpatient clinics, laboratory services, home health care and ancillary care. Levels of administrative authority were frequently not clearly defined, resulting in slow responses to varying issues. The amalgamation also had several ripple effects on service planning and delivery. Public health officers appointed by local municipalities had a diminished presence (and were subsequently phased

out) as AHS staff assumed most of their roles and responsibilities, such as infection control, development of immunization protocols and procedures, isolation procedures and other duties, all of which impacted all health and health care-related organizations. Information dissemination on health matters, including responses to influenza outbreaks, came from central offices in Edmonton. Additionally, immunization protocols, including availability of vaccines, designation of priority populations, establishment of clinics, including numbers, locations and days and times of operation, were in the hands of senior health services administrative staff in Edmonton. At the time of the initial outbreak, this administrative hierarchy and distancing led to a disconnection between what the local community needed and what was offered. This had a direct impact on how local homelessness service providers could plan and negotiate for the needs of their clients.

The purpose of this study was to examine how the public sector, including municipal, health and service provider organizations responsible for homelessness services in Calgary, would respond to an emergency that is precipitated by a widespread outbreak of a dangerous and highly communicable disease. While not intended to reflect on the health system amalgamation, some of the repercussions of system unification were drawn into the study results. The study was guided by the following key research questions: 1) What has been the systems level impact of H1N1 on pandemic preparedness, planning and response in Calgary? and 2) How have agencies serving the homeless population responded to the H1N1 pandemic? To this end, the following research objectives were identified:

- Explore the state of pandemic planning;
- Understand pandemic planning in the context of H1N1;
- Examine the challenges of working with the homeless population in the event of a widespread medical emergency;
- Analyze the effectiveness of collaboration with other agencies, government and health care infrastructure; and
- Understand system vulnerabilities and articulate lessons learned.

Content analysis, a qualitative methodology often used in health research (Hsieh & Shannon, 2005), was used, as this approach is particularly useful to classify and analyze large amounts of information, such as is found in semi-

structured interviews, into manageable data components (Weber, 1990). When little is known about how individuals (e.g., homelessness service providers) process and work through a situation, but there are key issues involved, content analysis can help to uncover the common and underlying themes across multiple interviews. As a result, researchers are able to move beyond pure description of a situation or phenomena, such as Calgary's emergency response system's preparedness for a pandemic, to formulate an organizing framework for how homelessness service providers anticipated, experienced and prepared for a pandemic.

As a background, and as one of the documents that informed this analysis, we examined the Calgary Health Region (as it was then known) Pandemic Emergency Response Plan, which had been developed in 2005. This document presented the health region's proposed activities for a "worst-case scenario," a pandemic that would affect 35% of the population, thereby inundating health care providers and facilities. While this plan recognized major potential disruptions in availability of services, it based proposed activities on the assumption that most of those affected would be cared for outside of hospital, presumably by family members. Most significantly, it omitted mention of and consideration for its homeless population, which at the time numbered over 4,000 (*Calgary Homeless Foundation Report to Community*, 2010). One concern of our research was whether the health authority had subsequently revised its plan to include the needs of those experiencing homelessness.

As this was a qualitative study, face-to-face semi-structured interviews allowed the greatest opportunity to explore common themes and challenges, as well as individual and idiosyncratic issues. Thus the interviews had a multi-focused intent that was both inter- and intra-organizational, and ranged from individual interactions to structural themes. Interviewees were asked questions about their organization's structure, population served, pandemic planning for H1N1, external supports for pandemic planning, communication with other agencies, working with staff and clients, communicating with clients, vaccination of clients, how to manage infected clients, and key challenges and lessons learned from the 2009 H1N1 outbreak. (See Appendix D for Agency and Service Provider Interview.)

Study Protocols³

Interviews were conducted with 14 senior administrators in major homeless-serving organizations (primarily emergency shelters) and municipal and provincial health authorities. The interviews focused on the current status of pandemic planning at the individual (with the clients), organization and community levels. To capture interviewees' dominant concerns we used a purposive sampling approach. The investigators collated a list of key agencies and their potential key informants. These key informants were considered to be both knowledgeable about pandemic planning within their agency and to have considerable administrative authority in implementing targeted action plans in their agency and coordinating responses with other organizations. We used a broad set of criteria to guide interviewee selection to include:

- Representatives of each planning authority (provincial and city);
- Senior administrative status in one of the larger shelters and/or service providers;
- Knowledge of their agencies' homelessness programs; and
- Representation from organizations characterized by range of services, size of organization (number of clients/day), and demographic characteristics (age and gender) of clients served.

Of 17 invitations sent out, 14 individuals agreed to participate. Participants were assured that all interviews were confidential and no identifying information would be presented in reports. These reports were not subject to editorial veto by any participant. Ethical approval for this study was received from the University of Calgary Conjoint Faculties Ethics Research Board.

Face-to-face interviews averaging 90 minutes each were conducted at the interviewees' work locations and an interview guide of 25 questions was provided to interviewees prior to meeting. Relevant topics included: their organization's structure, population served, pandemic planning in the

³ An overview of the project methodology can be found in the introductory chapter of this book. Findings from other cities, and comparisons, can be found in other chapters within this book.

context of H1N1, external supports for pandemic planning, inter- and intra-organizational communication, work with staff, work and communication with clients, vaccination of clients, how they managed infected clients, key challenges and lessons learned with H1N1, and planning in the event of a more serious future pandemic. A semi-structured interview approach provided opportunities for further exploration of relevant issues that arose during the interview. Interviews were either audio-recorded or detailed in extensive notes. These were then analyzed by examining transcripts to identify dominant themes. The major themes were labeled and grouped, with illustrative quotes, along with preliminary interpretations, and subsequently arranged into an organizing framework. Preliminary findings were reviewed and validated with the research team.

Lessons Learned About Preparedness In the Homelessness Services Sector

Two factors in particular formed a background to these interviews. First, while this project was intended to explore future preparedness for pandemics, the service providers' experiences with an H1N1 outbreak were still recent enough that interviewees used those as a reference point during the interviews. This had providential aspects as providers were more attuned to challenges that an outbreak of a virulent disease creates. However, the diminished lethality of the H1N1 virus (actual number of deaths) was less than that of the SARS (severe acute respiratory syndrome) outbreak in other regions in 2002–04. Thus these interviews and the conversations that they generated about a possible pandemic outbreak lost the intensity of concern that had been generated by the outbreak that SARS in other cities.

A second factor, the lack of other means to voice concerns, facilitated our interviews, as participants appreciated the opportunity to be involved in this project and were candid in their responses. Several noted that negative feedback about the issue of pandemic preparedness in the homelessness sector was a sensitive political issue. One respondent said, "I am pleased we have a forum to voice our concerns about this situation." This comment was repeatedly echoed by other interviewees, and was indicative of the

lack of debriefing and exploration of the experiences of the providers in the aftermath of the H1N1 outbreak in 2009. This sentiment also underscored the overall minimization of the issues resulting from an emergency situation affecting the entire population. However, underlying their concern for institutional preparedness was another concern: that responses could result in damage to themselves or to their agencies, as noted in this comment: “Politically, this is dangerous ground for us – *I do not want my name or the name of this agency on any documentation* (tone and volume change, as indicated by italics).

This reluctance to discuss problems in the public sector, for fear of employment repercussions, is not unique to the homelessness sector, but underscores that lack of candid discussion will hamper any efforts to improve protocols for future action. Further, some respondents discussed their perceptions of not being heard, and that concerns were not adequately raised within their own organizations or with other organizations. One respondent illustrated this frustration: “I am sick and tired of my concerns being constantly swept under the carpet.”

Emerging Themes

A number of strong and noteworthy themes were voiced across organizations with respect to pandemic planning at the community level. The frequency and consistency with which these were raised allowed us to categorize themes, explore relationships among themes and develop an organizing framework. The quotes from respondents are representative of issues mentioned frequently during the interviews. Our results are presented in order of frequency, from most to least commonly discussed.

Theme #1:

The homeless population needs to be included in definitions of high-risk populations when planning for a pandemic disease.

People experiencing homelessness need to be considered a high-risk population due to their high rates of chronic illness, such as diabetes,

respiratory problems and heart and circulatory conditions, all of which require specialized treatments, medications and ameliorative living conditions, a fact that has subsequently received research attention (Frankish, Hwang, & Quantz, 2009; Hwang, Wilkins, Tjepkema, O'Campo, & Dunn, 2009). Interviewees emphasized that this vulnerability has not been well recognized. However, when planning for the needs of this sizable group of people, provincial and city plans need to include strategies that recognize these realities and their implications. In addition, interviewees were concerned about those individuals who do not use shelter services and are most vulnerable to the influences of disease and weather-related illnesses. While those who sleep rough are a small proportion of the total homeless population in Calgary, and comprise only about 5% of the total homeless population in Calgary, they use many costly health resources.

Interviewees suggested that pandemic planning for the homeless population differs from planning for the general public because of pre-existing health conditions in those experiencing homelessness:

Many of them are not in their best physical or mental health. Compound that with substance abuse issues and you can have a major pandemic outbreak. It is a very vulnerable population (...) They generally have other health issues, mental health issues. For them, it is hard to make a decision on whether or not to get the shot (...).

When planning for an influenza pandemic, this vulnerable population will need to receive targeted preventive and palliative treatment and the response structure must be designed not only to attend to their needs, but also to justify to the general public the need for special treatment. As one of the interviewees commented, "It is challenging and it is very political. General population will wonder why special treatment to homeless population, as it was the case when a clinic was set up at the Drop In⁴...a lot of politics around."

⁴The Calgary Drop In Centre is the largest shelter in Canada. During the H1N1 outbreak a special clinic was set up there, but was not available to other shelters and their occupants who were in the immediate vicinity. This decision was not well received by other providers, who perceived it as politically influenced.

Since planning for vulnerable people can be viewed as a political process, stakeholders empowered to make decisions during the planning phase need to be aware of the idiosyncratic characteristics and needs of these vulnerable groups, and communicate decisions effectively. The following example illustrates a salient issue in the homelessness sector. Some clients who have chronic alcoholism drink alcohol-based hand sanitizers, also referred to as non-beverage alcohol, and its consumption can be physically very dangerous. As access to these sanitizers would cause further harm, the issue was avoided by ordering alcohol-free sanitizers, a response that would not readily be made in mainstream health services.

Theme #2:

A) Planning for the homeless population is very different from planning for the general population. B) This planning should be done with rather than for people experiencing homelessness, as this engagement will help ensure relevant and acceptable approaches.

Challenges in planning include the mobility of the homeless population, their inherent scepticism of “mainstream” individuals and services, and their perceptions of discrimination (Waegemakers Schiff, 2015), which make it difficult to engage with this population around health-related prevention and treatment as their lifestyles are often disconnected from mainstream society. For example, a common recommendation from health authorities in the event of an influenza outbreak is for infected individuals to isolate themselves from others. However, homeless people lack the physical and financial resources to secure food and shelter apart from others, unless they sleep rough.

Coordination of planning and including homeless people in planning services

In addition to tailored procedures that involve dissemination of information about health-related diseases, disease prevention activities and immunization availability, better coordination between pandemic planning for the general public and specific planning for the homeless population is also necessary. This needs to be differentiated from disaster planning which may affect the entire population suddenly and simultaneously with little advance warning.⁵ When asked about the challenges of working with other stakeholders, one interviewee described the difficulty in getting health region, municipal government and disaster relief services authorities to understand the critical nuances between planning for the general population and planning for the homeless population. Interviewees remarked there is often a disconnect between the perceptions of the mainstream (general, housed population) and those who are homeless. This points to a need for different approaches and better coordination between responses to the mainstream and homeless populations:

Health official documents are more generic, but you have to think about a concentration of population. They see that more in schools and hospitals, for us is hundreds of people living in a common dining room, all coughing.

Another interviewee also expanded on this lack of understanding by the general public about conditions homeless people live with on a daily basis with the following reflection on crowding in shelters:

I don't think these people understand how a shelter is like, they see the building, waterfront, they see the people wandering around, but they haven't been in there. They do not realize how close the people are to each other, at the lunch rooms for example.

⁵The flood in June 2013 that inundated most of the downtown area of Calgary and forced evacuation of all residents and closure of all buildings is an example of a universal disaster affecting the entire population. In this type of instance, safety, shelter, safe drinking water and food are primary considerations and there is no fear of contagion.

While the latter comment alludes to the cramped and frequently overcrowded shelter conditions, it also serves as a reminder that shelter populations change on a daily basis and contact with infected people thus rotates and can include many individuals in a short period of time. Those in one shelter may move to another, or temporarily sleep rough or couch surf. These people are continually replaced by those in similar circumstances, thus increasing contacts and the potential spread of disease.

A specifically mentioned component of pandemic planning reflected the need for more engagement of the homeless population in these discussions, which could better inform the planning process. Some interviewees were concerned that planning authorities have a lack of knowledge about the special health needs of the homeless population and do not include service recipients in health interventions planning. At the provincial level, there was no direct consultation with representatives of the homeless population. At the local level, this was left to agencies and service providers.

Continuing post-hospital care

The lack of strategies to effectively coordinate and implement response plans provides another example of the failure to consider the homeless population in planning. When referring to continuity of care (for those who require convalescence beyond acute hospitalization) one interviewee suggested:

It was clear to operators that access to continued care was going to be hard to get in the event of a pandemic. (...) every shelter operator, to some extent, was going to be self-sufficient. This was part of the planning.

Essentially, this comment reflects the common practice that those who are discharged from hospital, and need continued medical attention or a recuperative environment, return to the shelter from which they came, regardless of that facility's ability to provide continued care. The dilemma of where infirm people recuperate can be doubly problematic as those weakened by and recovering from influenza could be placed in an environment that lacks adequate follow-up care facilities or a sick bay for those in need of further rest and this further exposes them to other contagious illnesses.

Theme #3:

Pandemic preparedness planning before H1N1 was insufficient for the entire population, and this had a ripple effect in the homelessness services sector.

Lack of communication and imprecise planning were intertwined, and delayed information being disseminated. Many such instances involved details defining the scope of primary prevention and implementation initiatives such as vaccinations including: where and when influenza vaccination clinics were held; what specific groups would be priority populations; what times clinics were open; and anticipated wait times to receive a shot. Interventions in the case of an outbreak overlooked the important implications of conveying timely and precise information to agency staff, as well as the potential ripple effects of systemic services disruptions in the case of widespread infections among staff and clients.

Interagency coordination in the event of systems disruptions

Although the SARS outbreak in Vancouver and Toronto several years before had sounded an alarm bell for health care providers to attend to multiple aspects of emergency preparedness beyond immunizations, this message was largely minimized or ignored in the homelessness sector in Calgary. Belatedly, in November 2008, several homeless-serving organizations in Calgary initiated active pandemic planning discussions and asked important questions, such as, “What was the plan?” and “What if...” prior to the H1N1 outbreak in 2009. One respondent commented, “But people *stopped short* of the more difficult question: ‘Where are we going to move people *out*? [italics ours]’” This comment is especially salient given the high proportion and density of homeless services and shelters in the downtown area, and the low vacancy rates in any buildings, either residential or commercial, that could be used for temporary accommodations. Some agencies participated in initial meetings, but their involvement was not maintained on a regular basis, despite that fact that Calgary homelessness agencies have a strong history of collaboration and sharing. This political will may have been impacted by the simultaneous and rapid evolution of the health services from local collaborations to a regional group and then to the AHS provincial entity that was quickly assuming many public health roles, leaving local agencies unsure as to levels of accountability and responsibility in the planning process.

Limited agency resources for advance planning

Another dynamic that influenced the failure of homeless-serving organizations to maintain active involvement in pandemic planning may reflect the scarce resources available. The constant challenge of meeting the basic daily needs of food, shelter and clothing for large numbers of people leaves most organizations with few staff or finances for long-range planning for an event that may never occur. Flagging attendance at meetings may have had less to do with a reluctance to collaborate and instead reflect work pressures that result in pandemic planning as a low priority. It was clear that sharing of information and resources and working together were perceived benefits from these meetings. However, there were also identified but unresolved gaps: procedures for staff safety during a pandemic; limited emergency action plans; and planning for staff absences because of illness.

Agency first response plans

At the onset of the H1N1 outbreak, all homelessness service providers had basic first aid plans and staff trained in first aid. Infection-control procedures in place included cleanliness (kitchen, bathroom, laundry), and isolation for clients exhibiting influenza/cold symptoms. However, isolation practices were a major challenge due to overcrowding and limited designated quarantine space. Staff were educated about how to identify individuals with possible symptoms of H1N1 (fever, cough, severe muscle aches, intense headaches), but identification of infected individuals was hindered, because many homeless individuals had one or more of these symptoms, especially cough, due to pre-existing conditions. Since coughing is a normal behaviour in shelters, both staff and clients may minimize its importance.

A compounding factor is that standard instructions for sick individuals such as staying home to rest, both for their own health and that of others around them, could not apply to homeless individuals who were often sheltered in close quarters with many others. Despite concerns about overcrowding and the risk of contagion, many interviewees stated that their agencies refused to turn their clients out on the street. Every agency representative agreed that the pandemic was less severe than feared and that they were “lucky” not to have been put in the situation where this choice (turning people away) would have had to be made.

Contingency planning in the event of a major system disruption

Planning in the event of a large-scale disruption of services because of contagious illness had not been carried out by most agencies. A few of the larger homelessness service providers (primarily shelters) had either business continuity/risk management plans in the event of an emergency, or a contract with another company to take over operations in case of emergency. Smaller agencies had more informal planning practices, such as a decision-tree process for closing or moving programs, staff rotation or sharing among programs, borrowing staff from other agencies, or hiring relief staff from temporary staffing firms. Only a few agencies were able to stockpile non-perishable food and supplies, as most did not have the necessary space or funding to do so. The shortcomings of some of these procedures, especially with respect to how to operationalize these plans, were recognized by many interviewees: “There is a process in place (for an emergency), not a good one...staff found it too formalizing, *it’s hard to get our head around*, so it’s been on the back shelf [*italics ours*].”

Overall, the primary concern of the homelessness service providers was not the primary prevention agenda of information and vaccinations that drives the health system, but the reality that service providers did not have a system of procedures in place in the event of a crisis-level pandemic. They were concerned about how to manage large numbers of ill clients, how to provide quarantine and palliative care, and if there would be agency closures due to staff or client illness. Staff shortages due to employee absences were problematic because of concerns around the expense, safety and suitability of replacement staff.

The use of temporary or relief staff had also not been well thought out. While people are often drawn to working with homeless people for altruistic reasons, and some come from lived experiences, many lack education and training in skills essential to working with homeless people (Waegemakers Schiff, 2015). Those not familiar with the organizational culture and climate of these organizations, or the demands that clients place on staff, may not be able to step readily into a temporary job. Working with homeless people

necessitates a predisposition to work with underserved people, knowledge of their potential psychosocial and health issues, and the interpersonal skills to work effectively with them. Often individuals do not have the requisite skills, even when the position is primarily administrative:

We had a young girl come in from a temp agency downtown to cover staff absenteeism, she lasted that one day and didn't return...we need to ensure relief staff are educated beforehand about the special needs of our clientele.

Theme #4:

Communication from government and health care authorities during H1N1 was inadequate.

Almost all homelessness service providers identified a breakdown in channels of external communication. In terms of receiving information about the H1N1 virus and strategies to manage a potential outbreak, there were too few formal directives on basic policies or responses from public health officials during the first wave. Communication issues included: the lack of timeliness; the inappropriateness of information specific to front-line workers in the homelessness sector; difficulty accessing help via telephone; lack of clear guidelines for immunizations (what persons had priority and where clinics were established); and miscommunication regarding where to send infected clients. In response to the challenges in obtaining information for their agencies, workers relied on their own coping measures, which often included using internet sources to obtain information about H1N1. This was problematic in instances where workers did not have adequate background to determine reliable and accurate sources of information.

Communication timeliness

Receiving infection control and health-related information from AHS when it was needed was a significant issue. Interviewees stated that took several months after recognition of the emerging pandemic to receive the necessary information to manage H1N1 in their organization. Comments such as, “It was very reactive — there was not a lot of clarity with the information,” and,

“The material was great, but too late,” corroborate the issues of timeliness. Other comments reflected that the communication problems were part of the lack of organization within AHS, which was attempting to centralize its organization while dealing with a potential emerging health crisis: “Couldn’t believe they stood up and stated they didn’t have their own plans in place,” and, “We felt people were caught off guard...scrambling.”

By the time the second wave of influenza hit a year later, timeliness was no longer problematic, as AHS had shored up its own response and information protocols. The resulting improvements included timeliness and comprehensiveness in communications about primary prevention and vaccinations. However, improved communication did not necessarily translate in to information most salient for front-line workers and did not include the other care-related issues.

Inappropriateness of information for front-line workers

Respondents reported that the information received during the first seasonal outbreak was inappropriate, either because it did not address specific sub-populations within the homelessness sector, or because the information was written for health professionals and not front-line workers. This reflects a more substantive issue as lack of training has been noted in the homelessness literature (Waegemakers Schiff & Lane, 2016). Many workers have little or no training for their jobs and educational levels vary from a secondary school diploma to post baccalaureate education (Olivet, McGraw, Grandin, & Bassuk, 2010). Staff training in homelessness sector agencies is often minimal, and does not routinely extend to emergent issues such as highly contagious illnesses (Waegemakers Schiff, 2015). Agencies therefore needed resources that were easy to access, with clear messages written or imaged to allow rapid implementation in day-to-day operations. In terms of content, front-line staff needed information on how to manage an outbreak, rather than to understand the clinical pathology of the virus:

Pictures/images would have been more appropriate, rather than the reams of information we received — for example, try explaining how to read a thermometer and that a temperature of 40 degrees Celsius is emergency level. We need images saying red (on the thermometer reader), bad — get to the hospital; green, OK.

To mitigate this knowledge gap, service providers accessed plans from other cities, such as Seattle, Toronto and Ottawa. Interviewees accessed the Internet, used their own initiative and listened to the media. Unfortunately, some of the self-education strategies were not effective because of staff's inability to distinguish between accurate and helpful information and that which had lots of publicity but little practical utility. Additionally, those staff doing the research often lacked the voice of authority that would catch the attention and respect of other staff.

Staff difficulty accessing helplines

Health Link Alberta is a 24-hour per day, 7 days per week telephone advice and health information service provided by AHS. Trained registered nurses provide information and advice to callers about health symptoms and concerns, and advise when an individual needs to seek additional care. Unfortunately, this helpline was not seen as accessible because AHS had failed to allocate sufficient staff to handle the volume of inquiries received or deal with requests for specific information from front-line staff. Since many front-line workers have minimal training in this area, their need to access accurate technical information is critical in a health crisis. When they have access only to general health information, their ability to deal with specific and multiple health concerns is seriously compromised.

Miscommunication regarding where to send infected clients for care

Knowing where to send infected clients is an important part of managing a pandemic, but there was considerable miscommunication about which agencies and services could accommodate infected clients. In this confusion, some smaller organizations mistakenly assumed that larger shelters had sufficient capacity to provide isolation beds for infected individuals who did not require a hospital level of care as some agencies had designated rooms for ill clients. This misassumption about which agencies had the capacity to deal with infected clients is noted in the following comment: "They [smaller agencies] kept referring the sick to us; we are *not* a contamination centre [*italics ours*]." However, while limited space could be allocated to provide segregated sleeping areas for those potentially infected, no single shelter had the capacity to deal with referrals from other shelters: "Had the pandemic been worse, we don't know what we would have done with our clients —

we are already at capacity.” The problem of where to best care for infected individuals was an ongoing concern for smaller organizations that lacked the infrastructure to handle quarantine and medical issues. These concerns also point to a systemic lack of isolation and recuperative resources even when there is no contagious disease outbreak.

Internal communications

While external communication proved challenging, internal communication was generally described as more effective. The majority of homelessness service providers were pleased with their own internal communication strategies among staff and clients: “Staff were educated first and then messaged to clients; presentations, cards made up with things like what H1N1 was...preventative care.” However, these self-reports of the effectiveness of organizational level communication may have been self-serving and should be interpreted in light of the absence of corroborating interviews with staff. Some comments by interviewees suggested that their administrators and managers did not always convey clear, precise, accurate and timely information to front-line staff, due to external factors (either lack of information or misinformation), or internal factors (deficient internal communication strategies), or both.

In summary, pandemic emergency response communication was poor on many levels. The urgent need to provide coordinated and consistent sector-relevant information was not well recognized at the provincial, regional or local levels. Interviewees indicated that health officials did not respond fast enough to the initial panic and there was a lack of a formal unified government crisis plan. The resultant confusion within and among agencies, in concert with sensationalist media coverage,⁶ brought about a loss of trust in health system professionals and organizations regarding their capacity to respond to H1N1 among those in homelessness serving agencies.

Theme #5:

Access to infection mitigation and control resources during H1N1 was adequate.

While all agencies received printed material for clients, such as hygiene signage posters, these arrived after the infection had already erupted.

With the early warnings of a possible pandemic, all homelessness service providers topped up their supplies of infection-control items such as masks, gloves, hand sanitizers, cleaning fluids and other medical supplies. One interviewee suggested the need for a temporary central distribution point for resources during a pandemic. Other recommendations included increasing the supply of specific equipment, such as temperature strips/indicators. Although agencies had access to adequate medical resources, the H1N1 outbreak was mild, and it was unclear if there would have been adequate resources to cope with a higher infection rate.

Theme #6:

Primary prevention: immunization/vaccination procedures were highly unsatisfactory.

By far the most consistently cited specific concern focused on the availability and distribution of H1N1 vaccine. In Alberta, influenza vaccines are provided free of charge to the public, most often at public health vaccination clinics and doctors' offices. Vulnerable persons, including those with chronic health conditions, the elderly, pregnant women and young children have traditionally received vaccination priority. A large-scale immunization effort against H1N1 influenza was launched on October 25, 2009. All Albertans were offered vaccinations as the second wave of H1N1 hit the province. However, only four public health clinics in Calgary (as well as other clinics around the province), had the H1N1 vaccine available, and no clinic was located specifically in the city core, where people experiencing homelessness typically congregate: "Four centres for the million people in Calgary...it caused undue panic to everyone...for the homeless population, we could have been a centre (for vaccinations), we had all the facilities."

Health officials advised that high-risk clients, specifically those with chronic health conditions and pregnant women, should receive the H1N1 vaccine as quickly as possible. While officials also stated that healthy people who went to the clinics could also be vaccinated, in reality, only those who fell

⁶ Globe and Mail. Mass health-worker absenteeism feared. Published on Monday, July 20, 2009.

into high-risk categories were encouraged to “line up for the shot.” Although mass vaccination is considered an effective strategy to combat a pandemic, the Calgary response was inadequate: clinics were limited; doses of vaccine were in short supply; and line-ups, even for vulnerable populations, were extensive, and individuals could wait in line for several hours, often in harsh weather conditions. As a further complication, a week after beginning vaccinations, H1N1 immunization clinics were suspended immediately and indefinitely because of limited local and national availability of the vaccine.

All providers expressed alarm regarding how the provincial government and AHS handled the H1N1 influenza vaccination planning and delivery. One respondent noted:

When the vaccinations were first announced, we were told high-risk people should be the first to get vaccinated, but the province would not turn anyone away who wanted one. Then we were told that there was not enough of the H1N1 vaccine to meet the demands for everyone.

This lack of foresight impacted the homelessness sector, as clinics were often at inconvenient locations, wait times were long and immunization schedules did not align with the demands of shelters that have strict sign-in, meal availability and “be in for the night” times: “Those line ups...it was inexcusable to me...our people have to be back at certain times or they’ll miss dinner...they couldn’t wait for forever, they don’t have transportation to come and go as they please...”

Homelessness service providers were frustrated with the policy of not turning anyone away at clinics, as they felt this unfairly impacted their vulnerable population. Ironically, by making vaccination available to everyone, individuals who most needed the vaccination were excluded because of wait times and clinic hours (held into the evening, when shelters required people to be signed in). The vaccination policy exacerbated the inherent marginalization that many homeless people feel: “These people are used to being swept under the carpet, so this was no surprise to them.”

Perhaps most upsetting was the Calgary Flames vaccination controversy. The Flames are a National Hockey League (NHL) franchise team whose players and their families received the H1N1 vaccine in late October 2009 at a special clinic, reserved for the team, an event that became the target of public ire. This clinic was held at the same time as other vaccination clinics at which lines were long, the supply of vaccine ran out, immunizations were suspended and many high-risk people went unvaccinated: “When we heard of the queue-jumping, I mean, with people waiting for hours, and then the Flames get it, we were in shock — again, we get shafted.” Within 48 hours of learning about the Flames clinic, AHS conducted an investigation that resulted in the dismissal of two employees, but the investigative process took many weeks, and the immediate result was severe damage to public confidence in the impartiality of the system.

When clinics specifically intended for the homelessness sector were available, interviewees perceived inconsistencies with the vaccination rollout, with some agencies prioritized without a rationale being provided. Others saw a missed opportunity to increase efficiency in the distribution, as exemplified by the fact that despite the existence of clinical facilities in some agencies, they were not used as vaccination facilities: “We could have been a centre for distribution at the start, but we didn’t get it till December, and by then we were past the point of being effective.”

Of all the topics discussed in our interviews, the most contentious was the media report of the distribution of vaccinations, highlighted by long lines of people waiting to be vaccinated, lack of adequate vaccination opportunities for chronically ill and elderly people, health workers not turning up to provide vaccination, body-bags (but not vaccine) being sent to nearby First Nations Reserves and the “queue-jumping” of the Calgary Flames and their families. All these contributed to a loss of confidence and mistrust felt by homelessness organization providers in the health system’s response to the H1N1 outbreak. All interviewees emphasized that people experiencing homelessness face many barriers to accessing preventive health care, which contributes to the spread of infections.

Theme #7:

Experiences from the current outbreak could provide the impetus to implement coordinated pandemic preparedness planning.

Some lessons were learned through the 2009 pandemic and changes were made; however, some respondents believed that pandemic preparedness had not gone far enough, and expressed apprehension, or foreboding, about future outbreaks. In response to warnings of a pandemic, all homelessness service providers had enhanced their basic public health and infection control procedures during the H1N1 outbreak, encouraged frequent hand-washing and use of hand sanitizer, use of masks and gloves by staff, and increased surface cleaning and disinfection. While pandemic preparedness was better than the prior year, and providers acknowledged that this was a reaction to the H1N1 outbreak, they expressed concern that crisis talks had yet to happen, and that they feared that not enough had been done to prepare for a large-scale pandemic: “We are more in control and we have a plan...we dodged a bullet; it was great to begin with, and we need more conversations about a crisis-level pandemic.” And: “We only took our preparedness to a certain level and we were lucky we didn’t have to go there. We are not ready as a community to go there yet.”

Agencies need a plan aimed at maintaining their individual operations, at least at a minimal level, in the event of an emergency, pandemic or otherwise. While agency-level policies and practices resulting from the H1N1 outbreak were put in place, these remained independent of a coordinated pandemic planning strategy in Calgary. Although it is important for homelessness sector providers to have agency-specific policies and procedures, these should be synchronized with other sector providers, AHS, and the provincial homeless and housing ministry.

Organizing Principles for Pandemic Planning

Key themes from these interviews provide a conceptual framework for pandemic planning in the homelessness sector. This plan is focused on the recognition by provincial and local levels of government of the

vulnerabilities and special needs of the homeless population, and including them as a high-risk group when planning and implementing policies and procedures for any emergency situation, including a pandemic. The main principle of recognizing homeless people as a vulnerable population is to provide a guiding framework that circumscribes planning from multiple viewpoints: health care, activities of daily living and usual lifestyle. This prioritization has a number of implications for health care and homelessness service providers.

In health care, primary prevention efforts should include the homeless-serving sector among the first to be notified of potential communicable disease hazards in ways that are similar to those used to inform primary and continuing care facilities, staff and residents. This includes tailoring preventive strategies, such as immunizations, by offering clinics at locations and times most accessible and acceptable to homeless people. These principles are congruent with the contemporary emphasis on client-centred community-based health care (Stanhope & Lancaster, 2015). Organizationally, this entails prioritizing homelessness sector agencies to receive relevant information, protective equipment and medical supplies. Staff outbreak-specific training would also occur more expeditiously if the health vulnerabilities of homeless people and the needs of homelessness sector agencies were targeted as priorities. Because agencies lack the resources (physical and staffing) to respond to crises, they need additional financial, material and human resources for adequate pandemic planning and to deal with the myriad of complicating factors of hygiene and isolation in the event of an outbreak in their facilities. Some of these resources, such as planning and staff training, entail prior preparation, but additional issues arise when an outbreak forces a reduction of services, depletion of staff and difficulties addressing health care in a sick client population.

One area of civic planning for a pandemic involves procedures to be implemented that encourages or demands forced isolation of contagious or infected people from the general public. The city of Calgary has contingency plans for this scenario that include delivery of food and essential supplies to those confined to their homes in the event of a highly contagious illness. However, requiring self-isolation and provisioning supplies for people who

lack a home is not feasible for those who seek refuge in shelters. Another issue involves discharge planning for homeless people who are leaving hospitals during an outbreak. AHS policies do not force a patient who has been admitted to hospital from a continuing care facility (for example, nursing home, high-needs special-care home) to be discharged to that facility if there is a current outbreak of influenza in the facility. This practice ensures that people with vulnerable health status are not returned to a contagious environment. By considering homeless people who have been hospitalized as equally vulnerable, the same guidelines should inform discharge to shelters. These issues point to the need for a coordinated and collaborated plan with multiple services agencies.

Pandemic planning was at a tipping point when the H1N1 influenza outbreak occurred. The momentum generated from concern about H1N1 transmission provided a timely opportunity to collaborate and implement a coordinated pandemic response for Calgary. However, because the outbreak was relatively mild, the sense of urgency was lost. The danger in the sigh of relief when the agencies realized that “we had dodged the bullet” was that active practical preparations for a future outbreak may be lessened as the need for action is no longer perceived as urgent.

At the time of the original H1N1 outbreak, the health vulnerabilities of the homeless population, while documented, were not yet widely acknowledged in the public sector (Frankish et al., 2009). This lack of awareness was foundational to the minimal attention given to the homelessness sector for specialized approaches and interventions in the event of a pandemic. Lack of specialized preparation was fostered by a lack of understanding of the potential impact that such an ongoing event would have on service providers and their clientele. During the initial outbreak, agencies quickly began to develop a working knowledge of disease prevention and early intervention strategies, and started to grapple with the implications of a serious and/or prolonged outbreak. However, communication between and within organizations hampered the timely conveyance of accurate information, and staff were not always equipped to filter information obtained from the internet for accuracy and relevance. In the aftermath of the first wave, health authorities breathed a sigh of relief that the outbreak had been mild,

and made some adjustments to communication protocols for prevention and rapid immunization, but also reduced the intensity of efforts to address other ancillary issues that a more severe pandemic would present. An important positive impact of this experience was that homelessness sector organizations had an increased awareness and appreciation of the interdependence and connectedness of their services, and better understood the ways in which collaboration would promote an enhanced response in future outbreaks.

Limitations

There were some limitations in this study. The most obvious is that we were able to interview only one representative per organization, and so did not capture any diversity of experiences within organizations. The opinions of respondents may not be representative of all homelessness service providers and public officials in Calgary. Second, observations about the experiences of the interviewees' organizations may be biased, and thus these self-reports may have minimized some difficulties encountered. Additionally, while detailed interviews were conducted by experienced interviewers, there may be unreported variations in the depth and details of the content of these conversations. However, the recurrent themes apparent across respondents supports the existence of a consistent viewpoint on many issues that were raised.

Discussion and Recommendations

An immediate result of this investigation was the recognition that integration of pandemic preparedness planning across all homelessness service providers in Calgary is essential, and this integration must involve system-wide, multi-level discussions to engender a sense of mutual collaboration between homelessness service providers, community organizations and health officials and ensure that action points are met. Five recommendations that come from this study follow.

- A) *Ensure that all agencies have a formalized pandemic plan in place* (tailored to specific groups in the sector: youth, families, singles, women, men, wet or dry, etc.) and do so in a way that achieves better connections with provincial and local health agencies. Additional pandemic planning should occur now and be conducted in ways that stimulate mutual aid, agency cooperation and access to shared resources. In addition, front-line workers and representatives of the homeless population should be involved in the development of guidelines and strategies for the dissemination of pandemic planning procedures, so that content is linked directly to the needs of a specific sub-group of the homeless population.
- B) *AHS authorities should provide timely, accurate information about and delivery of services* such as immunizations, and access to these should occur in an equitable fashion, with homeless people included in the recognized “vulnerable populations.” The most challenging consequence with the H1N1 outbreaks was the erosion of confidence in the health authorities. Thus, the generation of confidence in the provincial government system to lead a coordinated pandemic plan is therefore essential.
- C) *Infrastructure funding for pandemic preparedness planning* is required to assist local authorities and homelessness service providers to coordinate a crisis-level contingency plan. Isolation and quarantine scenarios suggested include: a dedicated facility to isolate or quarantine people individually; grouping infected clients in a section of one or more shelters or designating entire shelters for infected persons; and designating supported accommodations for individuals discharged from hospital during an outbreak in the shelters.
- D) *Interagency collaboration* is a significant positive step toward city-wide collaboration, transparency and sharing of resources. Continuation of interagency planning meetings would improve the city-wide information sharing network and service provision for many issues beyond pandemic preparedness. This would allow service providers to monitor and strengthen service provision, meet client needs in a more efficient and streamlined manner, and share information to allocate resources for any eventuality.

- E) *Staff training* needs to include health- and pandemic-related precautions and interventions. Additionally, contingency plans for temporary staff that would be able to supplement regular staffing in the event of shortages due to illness need to be developed.

Conclusion

In this chapter, we described the results of the ways in which Calgary's homelessness services sector prepared for a potential H1N1 pandemic. While our exploration focused upon planning for future pandemics, agency respondents placed their observations in the context of a concurrent influenza outbreak. At the time, the health vulnerabilities of homeless people were unacknowledged outside the homelessness sector. Service providers believed they should have received more timely and consistent communication from the federal, provincial and local levels on how to prepare and implement procedures for a pandemic emergency situation. Some lessons learned, such as the availability of information on potential outbreaks, prevention efforts, immunization availability and important prevention strategies, such as hand sanitizers in public locations and throughout shelters, have resulted in changing practices. However, many details about the impact of a large-scale outbreak and its consequences for shelters, soup kitchens and emergency food providers — and for homeless people themselves — have not received comprehensive planning. Importantly, people experiencing homelessness were not involved in the planning process, which reduces the saliency of any plan. A final lesson learned from this study is that the relief of having avoided a crisis in the homelessness sector should spur inter-organizational collaborations to proactively prepare for future, more severe outbreaks of influenza and other highly contagious illnesses.

References

- Alberta Health Services. (2014). Alberta's Pandemic Influenza Plan. Retrieved from <http://www.health.alberta.ca/documents/APIP-Pandemic-Plan-2014.pdf>

- Calgary Homeless Foundation. (2010). *Report to community*. Retrieved from http://calgaryhomeless.com/wp-content/uploads/CHF-2010-AR_Report.pdf
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2005). Homelessness and health in Canada: Research lessons and priorities. *Canadian Journal of Public Health, 96*, S23-S29.
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2009). The relationship between homelessness and health: An overview of research in Canada. In D. Hulchanski, P. Campsie, S. Chhahau, S. Hwang, & E. Paradis (Eds.), *Finding Home: Public Options for Addressing Homelessness in Canada* (p. 2-21). Toronto, ON: Canadian Observatory on Homelessness Press. Retrieved from www.homelesshub.ca/findinghome
- Gaetz, S., Donaldson, J., Richter, T., & Gulliver, T. (2013). *The State of Homelessness in Canada 2013*. Toronto, ON: Canadian Observatory on Homelessness Press. Retrieved from www.homelesshub.ca/SOHC2013
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.
- Hwang, S. W., Wilkins, R., Tjepkema, M., O'Campo, P. J., & Dunn, J. R. (2009). Mortality among residents of shelters, rooming houses, and hotels in Canada: 11 year follow-up study. *BMJ: British Medical Journal, 339*.
- Stanhope, M., & Lancaster, J. (2015). *Public health nursing: Population-centered health care in the community*: Elsevier Health Sciences.
- Waegemakers Schiff, J., & Lane, A. (2016). Burnout and PTSD in Workers in the Homeless Sector in Calgary.
- Waegemakers Schiff, J. (2015). *Working With Homeless and Vulnerable People*. Chicago: Lyceum Books, Inc.
- Waegemakers Schiff, J., & Lane, A. (2016). Burnout and PTSD in Workers in the Homeless Sector in Edmonton. 32.
- Weber, R. P. (1990). *Basic content analysis*: Newbury Park, CA: Sage.

5 PANDEMIC PREPAREDNESS IN THE CONTEXT OF HOMELESSNESS IN REGINA, SASKATCHEWAN: THE CASE OF SMALL, ISOLATED URBAN CENTRES

Rebecca Schiff

Introduction

As homelessness in Canada worsens, it is essential to ask what kind of impact an influenza pandemic might have on the homeless population and urban communities across the country. Estimates suggest that at least 200,000 individuals use homeless shelters annually across Canada (Gaetz, Donaldson, Richter, & Gulliver, 2013; Gaetz, Gulliver, & Richter, 2014). Canada's homelessness response system has historically been focused on emergency response, much of which is characterized by dangerously overcrowded sleeping conditions, poor air quality and residents being forced onto the streets during daylight hours. Homeless people typically suffer from poor health, nutritional vulnerability, compromised immune systems and barriers to accessing health services (Frankish et al., 2005). In the event of a pandemic, it is not clear whether the infrastructures to address homelessness, Public Health departments, or the health care system in general, will be prepared to adequately respond to the risks faced by the homeless population.

The purpose of the research described in this chapter was to better understand the ways in which the current emergency response to homelessness in cities across Canada would affect the vulnerability of this population in the event of an influenza pandemic. A majority of research has focused on experiences in larger urban centres and communities in dense networks of urban centres (e.g., the dense network of urban regions in southern Ontario). The case study presented in this chapter focuses on homelessness and pandemic preparedness in a small and relatively isolated city, specifically, Regina, Saskatchewan. The goal of this research was to identify the experiences and challenges of pandemic planning in the context of homelessness in smaller and more isolated urban areas, as well as suggestions for improved responses in the case of future pandemics.

We used Grounded Theory techniques and methods for data analysis (Corbin & Strauss, 1998) to explore the experiences of Regina's homelessness service sector in addressing the unique needs of homeless people during the H1N1 outbreak and the challenges of planning for a future pandemic. Themes that emerged from the data analysis formed a framework for understanding the status of pandemic preparedness in the context of homelessness in the city of Regina. Findings provided a preliminary assessment of institutional vulnerabilities in the homelessness sector and suggestions for improved effectiveness of pandemic preparedness planning.

Community Context and the Homelessness Sector in Regina

Regina is the capital of Saskatchewan and the second largest city in the province. The closest urban centres are Saskatoon (259 km) and Winnipeg, Manitoba (828 km), making the city relatively isolated in comparison to the dense urban networks surrounding larger Canadian cities. Several other small Canadian cities (e.g., Thunder Bay, Ontario, Brandon, Manitoba, Sault Ste. Marie, Ontario and Saskatoon, Saskatchewan) share similar experiences in terms of isolation from urban networks and larger urban centres. According to the 2011 national census, 193,100 people resided in the Regina Census Metropolitan Area (Statistics Canada, 2012a). This represented an 8% increase in population from the 2006 census. Most residents (69.2%) fell within the age range of 15 to 64; 17.6% of residents were under 15 years of age and 13.1% were over the age of 64. The 2011 census indicated that 9.5% of Regina's population self-identified as Indigenous (Aboriginal), compared to a national rate of 4.3% (Statistics Canada, 2012b; 2012c). On the other hand, only 10.5% of Regina residents self-identified as immigrants, while the rate was 20.6% nationally (Statistics Canada, 2012b; 2012c).

In 2006, there were 79,615 private households in Regina (Statistics Canada, 2012a). The home ownership rate (71.2%) was higher than the national average of 69% (Statistics Canada, 2012c). While housing was ranked as more affordable than the national average, the city had the second-highest rate of housing in need of major repair.

There is little published peer-reviewed literature on homelessness in Regina, although a few reports and articles provide some preliminary information on the nature of homelessness and related service provision in the city (Schiff 2010; Goulden, 2009; Greenberg, Schiff, & Howett, 2010a; 2010b; Greenberg, Salm, Spooner, & Schiff, 2009). The central area of Regina — primarily the neighbourhoods referred to as ‘North Central,’ ‘Core’ (or ‘Heritage’) and ‘Transition’ — house the majority of non-profit- and government-delivered social and health services. Health services are delivered through the Regina Qu’Appelle Health Region (RQHR), which serves a total of approximately 260,000 residents of southern Saskatchewan. The City of Regina delivers police and fire services, while the province provides a variety of income, employment and housing assistance programs, primarily through the Ministry of Social Services.

In 2011, five organizations provided most of the social (rent supplemented) housing in the city. Seven organizations provide supportive housing units, including one organization that provides long-term supportive housing and psycho-social rehabilitation services for over 100 individuals with mental health and developmental disabilities. There were five general emergency shelters for adults and three emergency shelters specifically for women escaping violence (victims of domestic violence, or VDV). Five shelters provided longer-term transitional accommodation for adults and two provide transitional VDV housing. Three organizations provided the majority of emergency and transitional shelter for homeless people although numerous other smaller organizations also provide shelter and supports. Of the three larger organizations, one serves only men, one serves only women, and the other serves both men and women. These shelter-providers also provided other services such as soup kitchens and emergency goods and services. There were also five shelters for homeless youth (0-17 years of age).

In 2010, there were approximately 323 shelter beds in Regina, of which 169 were emergency and 112 were transitional beds for adults (Greenberg, Schiff, & Howett, 2010). A number of non-shelter service providers also provided goods and services assistance to homeless people. A few of these organizations also housed health and social services delivered by, or on behalf of, the province and RQHR.

Methods¹

Semi-structured interviews were conducted between January and July 2011 with four Executive Directors or Program Managers who worked for homelessness service providers in Regina, including two emergency shelters and two non-shelter emergency service providers. Organizations were selected to represent the diversity of shelter and service types and populations served. The agencies that participated in this research study varied in size, number of clients and services offered to the homeless population in Regina, thus providing a diverse sample of agencies to participate in this research. Table 1 summarizes key characteristics of participant agencies.

Category/ participant	Shelter 1	Non- Shelter 1	Shelter 2	Non-Shelter 2
Position	Executive Director	Executive Director	Executive Director	Executive Director
Time in organization	1.5 years	2 years	14 years	1.5 years
Services provided	Emergency and supportive residential living	Advocacy, basic help with poverty issues	Emergency housing, supportive living, social programs	Crisis intervention
Number of clients/day	130	200-300	700	50
Health services?	Yes	Yes	No	No
Partnership with other agencies	Yes	Yes	No	No
Target populations	Males over 16 with chronic housing problems (homeless) only	Males over 16 with chronic housing problems (homeless) only	Women, children youth, families (other issues, not just homelessness)	Regina and surrounding areas

Table 1: Characteristics of Participants

¹ An overview of the project methodology can be found in the introductory chapter of this book. Findings from other cities, and comparisons, can be found in other chapters within this book.

The profile of participating agencies included two with the mission of providing residential housing, one that advocated and helped with poverty issues, and one that focused on crisis intervention. Two of the agencies offered health services to clients. Only two had developed any type of formal partnership with other agencies. In terms of size, one agency provided services for more than 300 clients per day, two agencies served between 100 and 300 clients, and one served about 50 clients per day. This variety of participating agencies allowed for exploration of pandemic experiences from diverse planning perspectives.

Interviews were conducted in person using a semi-structured open-ended interview guide, and each interview lasted about an hour. Participants were asked about their organization's experiences with pandemic planning and preparedness, challenges faced during the H1N1 crisis, and lessons learned for future events. This study was approved by the University of Regina Research Ethics Board.

Findings: Identification of Common Themes

Analysis identified five themes in experiences with pandemic planning and preparedness: experiences with pandemic planning; implementation of planning during the H1N1 outbreak; vaccination planning; working with other agencies and service providers; and communication with clients and health authorities. Participants also discussed lessons learned that could be applied to future pandemic events.

Experiences with pandemic planning

Based on responses, pandemic planning by homelessness service providers in Regina depended on the size of the agency and the availability of resources to dedicate to planning for general emergency responses. After the SARS experience, some plans and/or internal controls were put into place at one of the agencies that participated in our interviews, and these were adapted to the H1N1 experience. However, only two of the agencies reported having a pandemic plan in place before H1N1, and described their agency's response as reactive. None of the participants made reference to

having pandemic plans that specifically fit the H1N1 crisis. Two of the larger agencies that offered housing services to the homeless population had a type of pandemic plan before the H1N1 crisis. One of these agencies reported having a communicable disease mitigation plan, and the other reported having emergency internal protocols and plans related to the SARS crisis.

Due to a lack of plans specific to pandemic events, agencies relied on internal protocols for maintaining critical operations as their immediate response to the H1N1 outbreak. According to study participants, responding to H1N1 was often reactive, as there were inadequate or no plans in place before the pandemic. In the case of bigger agencies, existing plans dealt with general emergency responses. Agencies with existing plans used them as a starting point to develop specific responses to H1N1. For instance, agencies referred to the existence of internal protocols, such as scaling back to critical services, calling in on-call staff, or moving non-critical staff into a main building to support residence operations when human resources were limited due to staff sickness. One participant mentioned the importance of ensuring that someone was available to answer the phone to assist with clients' concerns related to H1N1.

The H1N1 outbreak was also seen as an opportunity for agencies to review plans and internal protocols already in place, and complement or modify them based on the recent experience with H1N1. Although the H1N1 crisis was not considered a severe outbreak in Regina, it gave agencies an opportunity to revise emergency strategies and to determine their agency's capacity to respond to a pandemic. In some cases, new plans were created; in others, a continuity plan was added as part of an existing communicable disease or mitigation plan. One agency adapted its general influenza and communicable disease protocol for the H1N1 situation. Another of the larger agencies created a pandemic planning committee to develop new policies and procedures. They expanded their existing plan into the agency's business continuity plan, and it included not only an immediate response to a pandemic, but also strategies to respond to the crisis and deal with media. This agency updated its overall sanitation and universal precautions, targeting priority areas, such as daycare spaces that could be easily contaminated. Only one agency did not implement any changes after the H1N1 experience.

A final concern regarding preparedness involved participants' lack of knowledge of the City of Regina's pandemic plan: none of the participants had knowledge of that plan. This demonstrated a concerning disconnection between the homelessness sector and other agencies involved in emergency response in the city. There was little to no consultation with homelessness service providers in the development of the City of Regina's Pandemic Plan. This also leads to concerns regarding the city's lack of recognition of people experiencing homelessness as a vulnerable population.

Implementation of planning during the H1N1 outbreak

The H1N1 event was not seen to have affected normal operations. Although there were certain concerns among staff about normal operations during the influenza pandemic, none of the participants mentioned any direct impact of H1N1 on their organizations' functions. Despite this, there was concern regarding staff preparedness, availability and training in the event of a severe pandemic event. Participants also indicated concerns about procedures for working with clients during pandemic events.

Staff preparedness, availability and training

According to participants, special measures were not taken to train staff members during the H1N1 outbreak. Two agencies did not provide staff with any resources or information on H1N1. One agency provided staff with written materials on universal precautions and reminders. The other provided general reminders on influenza and communicable disease control protocols. Training specific to H1N1 was nonexistent.

During H1N1, participants were concerned about limitations on their capacity to provide adequate services during an outbreak. For instance, one of the participants mentioned their agency's main concern was the capacity to sustain critical operations, such as maintaining shelter operations. Other participants were concerned about the lack of support from health authorities around preventive measures and responses to the pandemic. An agency with an on-site vaccination clinic was provided with hand sanitizers from RQHR, but the other three agencies were not provided with supplies, and did not feel they would have had adequate resources if the severity of the pandemic had increased. Staff at an agency that provided housing had prevention and

sanitation concerns and worried about contamination of program areas used by children. There were also ongoing concerns about lack of support from RQHR. A final concern related to clients who did not heed the universal precautionary advice, and the potential for those clients to increase the risk to other clients of contracting H1N1.

Working with clients

Staff at agencies with residences encouraged clients to take universal precautions to try to inhibit the spread of the H1N1 virus. Clients were advised to avoid being around people with symptoms of H1N1, remain attentive to personal hygiene and cleanliness, and maintain good nutrition. Some clients were concerned about whether other clients were infected with H1N1. Vaccination for clients was not mandatory at any of the agencies. Only two of four agencies identified high-risk clients who were especially vulnerable during the H1N1 outbreak. These agencies offered more encouragement for vaccination to high-risk clients by telling these clients about the risks associated with their vulnerabilities and providing transportation to vaccine sites in the city or offering on-site vaccination.

One of the larger agencies with a residence communicated through word of mouth with clients. Another of the larger agencies with a residence displayed information posters on self-care during the H1N1 crisis. One of the smaller agencies used word of mouth to communicate with clients and advertised when they would be holding an on-site vaccination clinic. Agencies without residences were not as engaged with clients around H1N1 prevention, self-care and precautionary measures to avoid contracting H1N1. This may have been because they did not have residential programs. The only on-site vaccination clinic was held at one of the smaller centres.

The agencies did not have a protocol to identify clients who exhibited symptoms of H1N1. At two of the larger centres, clients proven to have H1N1 were asked to withdraw from the agency's services and seek medical help. If residents were diagnosed with H1N1, they were quarantined to inhibit spread of the virus. There was no specific plan that outlined a protocol to follow; instead, these agencies made reactive decisions. At one of the smaller agencies, it was reported that staff followed "normal procedures

of caring for ill clients.” The other small agency did not have any procedures for identifying infected clients; however, this was also the only agency to offer on-site vaccination.

Vaccination planning

Several strategies were introduced in centres across Regina to enable clients to be vaccinated. These included bringing the service to the clients by offering an H1N1 vaccination clinic on-site and providing transportation to a vaccination clinic.

On-site clinics were offered by RQHR. Transportation was offered by agency staff or by RQHR. Participants believed this process was effective in reaching high-risk clients, helped control the epidemic and was an effective way of communicating information about H1N1 to clients.

All agencies disseminated information on locations and duration of vaccination clinics. Only one agency reported having an on-site clinic for two half-day sessions. This agency was a drop-in centre that dealt with people affected by poverty, not specifically homeless people, although the majority of their clients experienced absolute or hidden homelessness. The agency reported that if another pandemic were to occur, they would offer the clinic for a longer time period, as they estimated that less than 10% of their clients were vaccinated.

Agencies did not keep track of clients who were vaccinated. Participants estimated that between 40% and 50% of their clients had been vaccinated. One of the larger centres, which had a residence, reported having a history of collaborating with RQHR to offer on-site influenza vaccination. However, during the year of the H1N1 outbreak, RQHR removed the on-site vaccination program from this agency. This agency reported the percentage of vaccinated clients would have been higher if the service had still been offered on-site.

Working with other agencies and service providers

Three of the four participants identified provincial government ministry support as integral to the development of pandemic planning for their

agencies. In most cases, agencies reported that provincial ministries had provided the tools necessary to design and develop effective pandemic plans. One participant said that the provincial government made guidelines available on site. Ministries provided templates to develop a continuity plan and were identified as a source of knowledge for agencies. One participant felt these guidelines allowed their agency to consider issues, not addressed prior to H1N1, that were useful in developing a pandemic plan.

Participants indicated that during the H1N1 outbreak, their agencies networked with other agencies and vaccination clinics in the city. Two agencies reported challenges in dealing with other agencies. One agency faced challenges with: 1) hospitals, which asked the agency not to send clients to the hospital if they had influenza, 2) walk-in clinics, which were reported to have specific antisocial and restrictive requirements for who was welcome, and 3) regional health authorities, which overreacted about the severity of the pandemic. The second agency that identified challenges with other agencies reported difficulty maintaining working relationships with the public health sector and the regional health authority.

Although participants did identify the existence of networks among agencies in the city, they also identified challenges in maintaining these networks and reported that there were no formal networks in place for addressing H1N1 cases. At the time of the H1N1 outbreak, participants were not aware of any city-wide pandemic planning committees. One of the agencies put an internal planning committee in place during H1N1, but because there were no other committees, they could not collaborate outside of their agency.

Communication with Clients and Health Authorities

Communication with provincial and health authorities

Participants said that their main sources of information and news came from RQHR, the internet and other media sources, and nursing staff if they were employed as regular staff or for vaccination clinics at the agencies. Most participants said that agencies rarely received H1N1 updates from local health authorities. One agency said they received updates monthly.

Agencies did hear about vaccination clinics from RQHR while they were being offered in the city. Participants said that agency staff were informed of updates when available through newsletters, word of mouth, or through RQHR's pandemic committee.

Participants felt they did not receive adequate information from provincial government ministries regarding H1N1, and therefore felt personally responsible for accessing information through clinics, general communication pathways with on-site nurses and community members, and media. Although most participants said they were able to access information through other sources related to H1N1, some participants thought this information was not sufficient to inform the design and development of a pandemic plan, indicating a need for more support from provincial government ministries' authorities and RQHR.

Protocol for communicating with clients

Participants said that agencies did not have a strict protocol about communicating with clients during H1N1, so information flowed through normal communication channels, such as word of mouth, over the telephone and in person. Program staff offered the most support to clients, as they had direct access to agency Executive Directors and Chairs. Agency staff offered advice on universal precautions associated with disease, such as staying away from infected individuals and maintaining hygiene. Staff also provided support and instruction on personal care, and made referrals to appropriate services.

Participants identified several communication challenges. In particular, they noted that some clients did not pay attention to universal precautions, while other clients felt 'paranoid' and lacked trust in health care professionals and agency staff. Participants indicated that this attitude was not out of the ordinary.

Lessons Learned

The data reveal important considerations for future pandemic planning to improve the capacity of Regina's homelessness service providers to respond to such events. Participants discussed a number of lessons learned during the H1N1 outbreak, as well as suggestions for future planning and pandemic preparedness. In particular, interviews revealed five thematic suggestions for improvement of pandemic planning in the city of Regina: improving the level of preparedness for a more serious pandemic; improving coordination in the homelessness sector; improving access to supplies; improving education and awareness; and addressing challenges in treatment and isolation of affected individuals.

Improving preparedness for a serious pandemic needs improvement

In general, participants felt insufficiently prepared for the H1N1 pandemic. In the event of a more severe pandemic, participants thought their agencies would be unable to predict the challenges they might face, which might cause them to resort to crisis-mode operations. Some of the larger centres felt they had enough resources to deal with a pandemic, but still had concerns about communications with the city and health authorities, and about their own inability to predict issues regarding health and the spread of disease among clients.

Improving coordination in the homelessness sector is necessary

Most participants felt there was a need for an improved pandemic-specific coordination and communication plan between the ministries and homelessness agencies and also among the city's homelessness agencies. It was suggested that larger homelessness agencies with more human resources could be the main coordinators for future pandemic planning. It was also suggested that the larger centers become quarantine and vaccination sites in the event of a future pandemic.

Agencies need better access to supplies

Participants felt that on-site vaccination clinics should have been offered for longer periods of time. They also suggested that on-site and off-site clinics could be made more accessible to clients. Participants identified a need for improved access to sanitation and other supplies from the health authority.

Improved education and awareness of pandemics

Participants raised the important point that clients at their agencies tended to interact frequently throughout the day, which could increase the spread of disease in the population. Participants thought clients were at especially high risk if they were using housing services with shared communal spaces, where cross-contamination was likely; this is an issue that has been noted in the literature regarding the dangers of congregate living in homeless shelters (Ali, 2010; Hwang, Kiss, Gundlapalli, Ho, & Leung, 2008; Sasaki, Kobayashi, & Agui, 2002). Participants suggested there should be improved communication and education for service providers, city staff and the provincial government ministries around the high risks of infection and cross-contamination among homeless individuals and at homelessness service provider locations. They also spoke about the need for improving client education and awareness initiatives around specific viruses and the spread of disease. It was suggested that education and awareness for clients should be incorporated into pandemic planning within the homelessness sector in Regina.

Challenges for treatment and isolation

A final concern focused on the challenges associated with the shelter model when dealing with pandemics. The nature of communal living areas and programs creates challenges in sanitation and increases the risk of disease transmission (Sasaki, Kobayashi, & Agui, 2002). Quarantine was another significant concern for shelter providers: participants indicated that there were inadequate facilities for quarantine of infected clients, creating a need to identify suitable options in the event of future pandemics. Previous research has also suggested that new shelter designs should take into account the challenges of communal living and the potential need for quarantine spaces (Davis, 2004; Graham, Walsh, & Sandalack, 2008).

Conclusion

Overall, our findings suggest that coordinated pandemic planning was limited to nonexistent in the homelessness sector in Regina at the time of this study. Interviews revealed a significant lack of communication between

RQHR and homelessness agencies. There was also a lack of communication about strategies to address pandemic crises among homelessness service providers in Regina.

The ability of agencies to respond to the H1N1 pandemic depended greatly on the size of the agency and the services it offered. Larger agencies had general protocols in place around communicable diseases. Smaller agencies did not have plans in place to deal with communicable diseases, and implemented their resources in the most effective manner possible as situations arose. All agencies felt their response to the H1N1 outbreak had been reactive, and there was a need for preventive measures for future outbreaks.

Homelessness agencies in Regina identified several major challenges in implementing consistent pandemic controls, including a lack of appropriate training for agency staff, limited human resources, a lack of communication and guidance from local health authorities, a lack of education and awareness of pandemic diseases in the homeless population, and uncoordinated and haphazard efforts between homelessness agencies. Participants expressed the concern that their agencies were unprepared for a more serious outbreak.

These findings suggest the need to develop a consistent planning strategy in the homelessness sector in Regina. In addition, the challenges participants identified speak to the need for greater coordination between health and social service authorities and service providers in developing a collaborative city plan. This plan must address the vulnerability of homeless people to communicable diseases, and should address high-risk groups, such as residents of children's, women's and drug-users' residences, as well as other shared living spaces.

References

- Ali, S. H. (2010). Tuberculosis, homelessness, and the politics of mobility. *Canadian Journal of Urban Research*, 19(2), 80–107.
- Corbin, J., & Strauss, A. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage Publications, Inc.

- Davis, S. (2004). *Designing for the homeless: Architecture that works*. Berkeley, CA: University of California Press.
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2005). Homelessness and health in Canada: Research lessons and priorities. *Canadian Journal of Public Health*, 96, S23–S29.
- Gaetz, S., Donaldson, J., Richter, T., & Gulliver, T. (2013). *The State of Homelessness in Canada 2013*. Toronto, ON: Canadian Observatory on Homelessness Press.
- Gaetz, S., Gulliver, T., and Richter, T. (2014). *The State of Homelessness in Canada 2014*. Toronto, ON: Canadian Observatory on Homelessness Press.
- Goulden, D. (2009). *Housing support coordinator position paper*. Regina, SK: Report prepared for the North Central Community Association.
- Graham, J. R., Walsh, C. A., Sandalack, B. A. (2008). *Homeless shelter design: Considerations for shaping shelters and the public realm*. Edmonton, AB: Brush Education Inc.
- Greenberg, H., Salm, T., Spooner, M., & Schiff, R. (2009). *Housing and homelessness in Regina, SK*. Regina, SK: Report prepared for the Regina Homelessness Committee.
- Greenberg, H., Schiff, R., & Howett, C. (2010a). *Getting housed, Staying housed*. Regina, SK: Report prepared for the Regina Homelessness Committee.
- Greenberg, H. Schiff, R., & Howett, C. (2010b). *An evaluation of the Youth Express Program at the Regina Rainbow Youth Centre*. Regina, SK: Report prepared for the Rainbow Youth Centre and Regina Homelessness Committee.
- Hwang, S. W., Kiss, A., Gundlapalli, A. V., Ho, M. M., & Leung, C. S. (2008). Infectious disease exposures and contact tracing in homeless shelters. *Journal of Health Care for the Poor and Underserved*, 19, 1163–1167.
- Sasaki, T., Kobayashi, M., & Agui, N. (2002). Detection of *Bartonella quintana* from body lice (Anoplura: Pediculidae) infesting homeless people in Tokyo by molecular technique. *Journal of Medical Entomology*, 39(3), 427–429.
- Schiff, R. (2010). Housing needs of urban Aboriginal women with multiple issues in the Canadian Prairies. *Social Development Issues*, 32(3): 65–76.

- Statistics Canada. (2012a). Focus on Geography Series, 2011 Census. Statistics Canada Catalogue no. 98-310-XWE2011004. Ottawa, Ontario. Analytical products, 2011 Census.
- Statistics Canada. (2012b). NHS Focus on Geography Series, Regina CMA, 2011 Census. Retrieved from <https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/fogs-spg/Pages/FOG.cfm?lang=E&level=3&GeoCode=705>
- Statistics Canada. (2012c). NHS Focus on Geography Series, Canada, 2011 Census. <https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/fogs-spg/Pages/FOG.cfm?lang=E&level=3&GeoCode=705>

6 H1N1 AND HOMELESSNESS IN TORONTO: IDENTIFYING STRUCTURAL ISSUES IN THE HOMELESSNESS SECTOR

Kristy Buccieri

The H1N1 pandemic outbreak of 2009–2010 provided a unique set of circumstances from which to evaluate the readiness of homelessness sectors across Canada to deal with infectious outbreaks. In Toronto, the previous occurrence of SARS meant that policy-makers, social service managers and front-line workers had already faced the challenge of working through a major public health crisis. Even before SARS, managing public health issues was not a new concern for the homelessness sector of Toronto, as outbreaks of tuberculosis, lice and bedbugs have occurred within that context (Basrur, 2004; Tuberculosis Action Group, 2003). This chapter examines the homelessness sector's experience of the H1N1 pandemic outbreak in Toronto.¹ Mixed methods research was conducted with key stakeholders, social service providers and homeless individuals in the city to gain a better understanding of how the sector prepared for, experienced and recovered from the outbreak.

Through this research, many of the structural issues facing Toronto's homelessness sector were apparent. Although this study examined the H1N1 outbreak in particular, these issues are arguably not limited to a pandemic. For instance, the study showed chronically high rates of service reliance among Toronto's homeless population, limited capacity for public health and pandemic planning within the sector, congregate service designs that create close proximity between clients, and the many challenges service providers had in accessing and retaining necessary supplies. These structural issues are discussed throughout this chapter, with research findings and recommendations being provided. While this research was conducted in Toronto — and thus represents findings particular to that city — the themes and recommendations should be of interest and value to municipalities across Canada.

¹ For a complete analysis of the Toronto site, please see Buccieri & Gaetz, 2015.

Homelessness and Pandemic Vulnerability

In the spring of 2009, Dr. Margaret Chan, Director-General of the World Health Organization, announced the world was experiencing an H1N1 influenza pandemic. She declared, “Above all, this is an opportunity for global solidarity as we look for responses and solutions that benefit all countries, all of humanity. After all, it really is all of humanity that is under threat during a pandemic” (Chan, 2009, n.p.). However, while the threat might be universal, research shows the risk of negative outcomes is greater for vulnerable populations (Ng, 2009). As Appleyard (2009) notes, the ways in which emergencies unfold are directly rooted in the pre-existing social patterns that are established in non-emergency times.

Marginalized populations are often at greater risk during a pandemic outbreak, making it particularly important to consider their needs in the planning process. A sound response to a pandemic rests on the ability of planners to identify sources of risk, populations likely to experience the greatest hardships during a crisis and concrete strategies to overcome inequities. There is a growing body of literature that documents efforts to include at-risk individuals in pandemic planning (Appleyard, 2009; Blickstead & Shapcott, 2009; Blumenshine et al., 2008; Chen, Wilkinson, Richardson, & Waruszynski, 2009; Hutchins, Truman, Merlin, & Redd, 2009; John Hopkins Berman Institute of Bioethics, n.d.; Ng, 2009; Upshur et al., 2005; Uscher-Pines, Duggan, Garron, Karron, & Faden, 2007).

Homeless individuals have multiple vulnerabilities that may put them at greater risk during a pandemic outbreak. For instance, homelessness has been described as a health inequity cliff in which homelessness causes health to drop off significantly (Story, 2013). Research documents many of the physical and mental ailments associated with homelessness, such as premature aging, respiratory illness, fatigue, traumatic brain and other injuries, sexually transmitted infections, hepatitis and HIV/AIDS (Daiski, 2007; Frankish, Hwang, & Quantz, 2005; Haldenby, Berman, & Forchuk, 2007; Hwang, 2001; Hwang et al., 2008a; Topolovec-Vranic et al., 2012).

Homelessness may also leave individuals disconnected from positive social support networks (Gaetz, O'Grady, & Buccieri, 2010). While some homeless persons may find sources of support in street communities (Kelly & Caputo, 2007) or social service workers (Thompson, McManus, Lantry, Windsor, & Flynn, 2006), homelessness is often described as an experience of loneliness and isolation (Rokach, 2005). Consequently, researchers have found that homeless persons are at higher risk of mental health conditions such as depression, anxiety and post-traumatic stress disorder (Bender, Ferguson, Thompson, Komlo, & Pollio, 2010; Forchuk, Csiernik, & Jensen, 2011; Kirst, Frederick, & Erickson, 2011). Many homeless individuals also use substances and/or have addiction-related issues, and these findings are particularly well documented in Toronto (Barnaby, Penn, & Erickson, 2010; Grinman et al., 2010; Hwang, 2006).

Pandemic outbreaks are becoming an increasingly common occurrence in modern global cities like Toronto (Ali & Keil, 2008). While each outbreak may be different in scope and nature, the potential for harm is a risk that is common to all pandemics. The experience of homelessness — and the associated declines in physical health, mental health and social supports — puts individuals at a greater disadvantage before, during and after an outbreak. Planners are increasingly considering the needs of populations at greater risk during a pandemic. This chapter draws on research conducted in Toronto that examines how the homelessness sector managed the H1N1 pandemic, and lessons that can be learned for future outbreaks.

Methodology²

This chapter discusses the findings from the Toronto site, drawing on data collected from 2010 to 2011.³ Interviews and surveys were conducted with three key participant groups: homeless people, social service providers and stakeholders working in policy and health care roles. The statistical software program SPSS was used for analysis. The project was funded by the

² An overview of the project methodology can be found in the introductory chapter of this book.

³ Findings from other cities, and comparisons, can be found in other chapters within this book.

Canadian Institutes of Health Research and approved by the York University Research Ethics Board. Participants were recruited based on their affiliation with the homelessness sector in Toronto as employees, consultants or clients.

A total of 149 homeless individuals participated in the study, completing both an interview and a survey. The majority were self-identified males (64.4%), with a minority of female (30.2%) or transgender (2.7%) individuals. The average age of participants was 34, and participants experiencing homelessness ranged in age from 16 to 75 (45% were street youth, aged 16 to 24). The participants primarily self-identified as straight (72.5%), while a large minority reported being LGBTQ (18.9%). Ethnically, the homeless participants were a diverse sample, with 36.9% considering themselves to be members of a visible minority. While the majority were Canadian citizens (83.9%), only one-third were born in Toronto (33.6%). One-quarter of the respondents identified themselves as Aboriginal (24.8%). These demographics are similar to those reported in a 2013 Toronto street needs assessment, in which the average age of homeless individuals was 42 years, 65% were male, 1% reported being transgender, 9% reported being LGBTQ, and 16% self-identified as Aboriginal (City of Toronto, 2013).⁴ The present study had higher response rates from those who self-identified as Aboriginal and LGBTQ than the street needs assessment, but diverse populations were intentionally sought for this study by conducting research in partnership with agencies that have mandates to support those populations.

In addition to individuals experiencing homelessness, 15 social service providers were interviewed as part of this study. Each of these participants interviewed worked in an agency that provided services for homeless, vulnerable, marginally housed, and/or street-involved persons in Toronto. These participants included seven individuals who worked as Managers of Health Care/Nursing, three Nurses and Nurse Practitioners, two Directors, one Executive Director, one Residential Supervisor, and one Chaplain. These individuals had served in their current positions between 8 months and 19 years, with the majority having been in their position between 2 and 10 years at the time of the interview. Another seven social service provider

⁴ Ethnicity of respondents was not reported in the street needs assessment.

participants had worked in other inter-agency positions prior to undertaking their current roles. Most began in non-managerial positions before being promoted. Those participants had been working in their respective agencies between 1 and 20 years, with most being there 2 to 10 years.

Finally, five key stakeholders were interviewed for this study. These individuals served in roles related to homelessness sector policy, public health and homelessness sector service coordination in Toronto. Each of the five individuals was actively involved in key stakeholder roles during the H1N1 pandemic. During the interviews, they described their roles as advocacy, liaising, health care, influencing planning and policy, and serving on the front line during the outbreak.

A Brief Overview of Toronto's Homelessness Sector

Toronto's homelessness sector comprises a range of services and supports that are intended to reduce homelessness, support those in crisis and aid in transitioning the homeless from the streets into stable and suitable housing. The kinds of supports that operate within the sector include, but are not limited to, emergency shelters, drop-in centres, day programs, community health centres and food banks. These services are important to Toronto's homeless population. For instance, in this study, high rates of service usage were noted by participants, with 57.7% indicating shelter use and 84.6% reporting drop-in centre use. Many homeless individuals are reliant on social service agencies for a range of support needs. Among the most commonly accessed services at shelters and drop-in centres, as reported by participants in this study, were food services, case workers, computers, showers, health care and laundry facilities, among others.

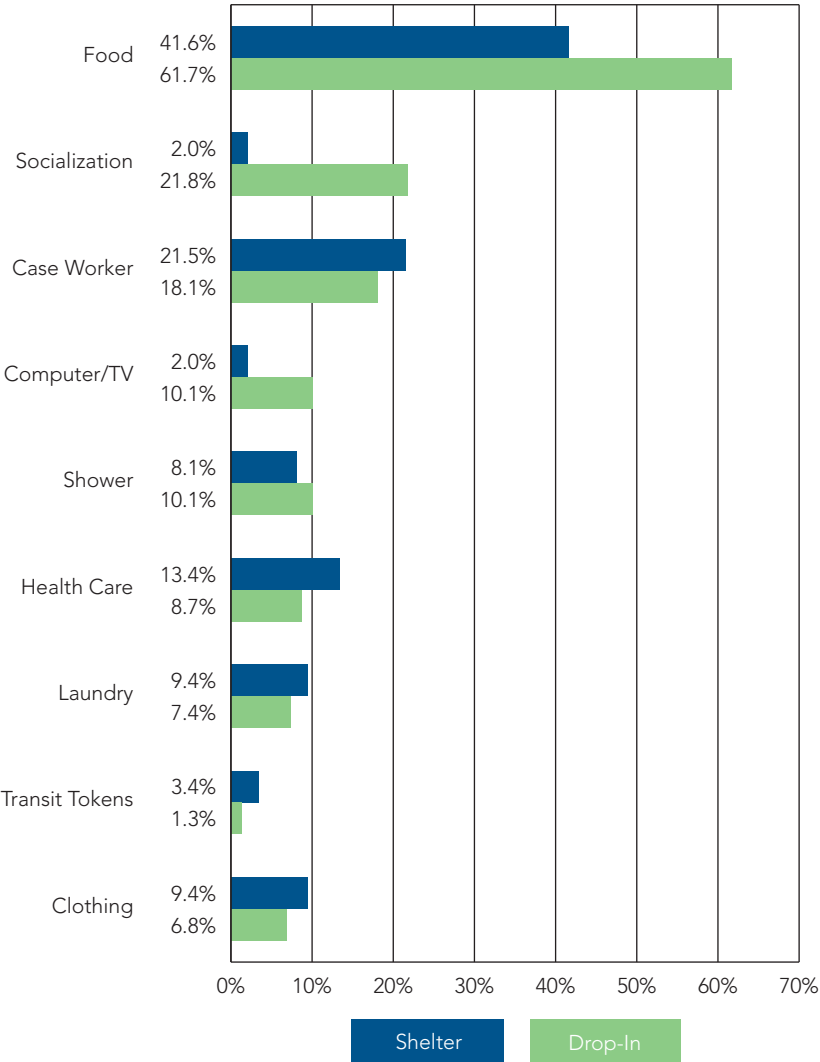


Figure 1: Most Commonly Accessed Services

High rates of service usage may put a strain on the sector's ability to meet the needs of every client. According to one high-level administrator interviewed for this study, Toronto has a "hybrid-model shelter system," in which there is a mix of shelters operated by the city and by other providers. The City of Toronto's Shelter, Support and Housing division operates 30 to 40 shelters, while the remaining shelters in the city are operated through non-profit and community organizations. There is a disproportionate number of beds in each shelter. Figures presented by one key stakeholder suggested that at the time of the interview (in 2011), there were 1,500 beds in city-operated shelters and approximately 2,650 beds in purchase-of-service shelters, for a total of approximately 3,800 emergency shelter beds (not including violence against women shelters and domestic hostels). Statistics collected and reported on by the City of Toronto (n.d.) indicate that in the same year as this study, the average nightly occupancy of emergency shelter beds was approximately 3,716 individuals. Taken together, these figures indicate an average occupancy rate of 97.8% in emergency shelters in Toronto during 2011.

Several of the key stakeholders and service providers interviewed for this study identified many existing structural issues in the homelessness sector, but among the most pressing concerns are the recurrently high usage rates of essential services such as emergency shelters and drop-in centres. Meeting this high demand for service requires adequate funding and resources. During the H1N1 outbreak, the rates of service usage fluctuated, but remained relatively high. For instance, drop-in centre usage dropped from 84.6% when there was not a pandemic, to 71.8% during the H1N1 outbreak, but shelter usage rose from 57.7% to 62.4% during the outbreak.⁵ Given these high rates of use, the sector is already burdened by having to operate services at or near full capacity, even before an emergency outbreak occurs.

⁵The figures were reported by participants, based on their recollection following the end of the H1N1 outbreak. It is possible that factors such as memory and time of year may have impacted their reporting.

Identifying Structural Challenges

While very few individuals within the homelessness sector of Toronto became infected with H1N1, the experience of managing the outbreak highlighted key structural issues within that sector. These included congregate service designs that create close proximity between clients, the limited capacity for public health and pandemic planning within the sector and the challenges service providers had in accessing and retaining necessary supplies.

Congregate service design

The high occupancy rates of homelessness services, such as shelters and drop-in centres, are made more problematic by inadequate physical design. Many service agencies are housed in adapted buildings that were not purposely designed to meet the needs of large numbers of homeless clients. Often this means that individuals are placed together in close proximity while in a service agency. When shelter users in the H1N1 study were asked how many other people generally shared their room at night, the most common response was one to five other people (33.6%). Several participants reported sleeping in bunk beds (12.8%), and the distance between sleeping spaces was commonly described as being one to five feet (21.5%). Participants also reported that at their preferred drop-in centre there were often more than 20 (20.1%) or more than 50 (30.9%) other individuals in the room with them at any given time. It was also quite common to have at least five other people within touching distance when at a drop-in centre, as reported by 41.6% of participants.

Congregate settings are a challenge for enacting public health measures that reduce the spread of infectious disease. Because very few social service agencies are purpose-built, they experience a range of infection control challenges related to the physical spaces they occupy. As one stakeholder with advanced medical knowledge noted, “Any time you have a congregate setting it’s easier to spread anything. This is the case with drop-ins and shelters. Ideally you should have smaller groups, more rooms, more bathrooms — that would be better and reduce transmissions between groups.” The physical design of service agencies is a concern,

not only because of small rooms and the limited number of bathrooms, but because such locations are not equipped to manage large-scale pandemic outbreaks. During the H1N1 pandemic, service providers experienced several challenges related to the spatial layouts of their agencies. Among the most common concerns were small or inconveniently located quarantine rooms (for example, on higher floors, which ill clients had to climb stairs to access), being in public buildings where entry/access is not controlled, shared ventilation throughout the building, shared sleeping accommodations (and the use of bunk beds), not having access to a negative pressure chamber and not having rooms for screening potentially infected clients.

Many homeless people rely on social services such as drop-in centres and shelters to meet basic needs (Sager, 2011), but the congregate nature of these settings results in exposure to a range of potential bacteria and viruses (Ali, 2010; Hwang, Kiss, Gundlapalli, Ho, & Leung, 2008b), while the large number of clients creates barriers to accessing limited resources, including shower stalls and washing machines. Sasaki, Kobayashi, and Agui (2002) have written that it is likely that factors such as overcrowding affect the transmission and spread of diseases among the homeless.

Limited capacity for public health and pandemic planning

In Toronto, a number of key organizations were involved in helping prepare the homelessness sector for H1N1. Toronto Public Health was at the forefront of the planning and preparedness initiative. Given its role as the municipal body overseeing the city's response to H1N1, Toronto Public Health took the lead in working with agencies and organizations to prepare for the outbreak. According to one key stakeholder, "It was good that Toronto Public Health stepped up with a specific identifiable group of people to deal with the homelessness sector. It worked very well in Toronto." Toronto Public Health and another city department, Shelter, Support and Housing, have a long history of working together on infection control and public health promotion with the homelessness sector of Toronto, including during previous outbreaks of tuberculosis in shelters (Basrur, 2004; Tuberculosis Action Group, 2003) and SARS (Svaboda et al., 2004; The SARS Commission, 2004, 2006a, 2006b, 2006c).

Although Toronto Public Health had published a pandemic plan for the city (Toronto Public Health, 2011), most service providers interviewed in this study were not very familiar with its details. Officials from Toronto Public Health offered support to service agencies in creating their pandemic plans, but were unable to offer one-to-one consultations. As one stakeholder stated, “Living through H1N1, one of the biggest issues was that so many agencies had not even a generic emergency plan. So in dealing with H1N1, many were starting from scratch.” According to service providers, the plans that existed largely emerged as a result of the previous SARS outbreak in Toronto.

The reported lack of preparedness occurred primarily because most agencies within the homelessness sector do not have a health mandate, and therefore do not have the personnel, expertise, funding or resources needed to focus on public health and pandemic plan creation. In the words of one stakeholder, “One of the things that struck me was the difficulty so many organizations had with organizational depth. They just didn’t have the staff time to free up to think things through. They are funded in a very strict way that limits their mandate — this is really true in social services. The fact that health issues occur in the realm of social services becomes really difficult, and they are not always able to pick it up.”

The general lack of funding available to social service agencies for pandemic preparedness inhibited planning initiatives. Many agencies had small operating budgets, with little to no funds for discretionary spending. As a stakeholder noted, “Because the budgets of agencies were so small, they had almost no leeway to deal with these kinds of things [such as a health emergency] when they popped up.” Many social service providers identified the lack of funding as a primary challenge in planning and getting their agencies prepared for the outbreak. Although the limited funds proved to be challenging, one stakeholder mentioned witnessing a strong will by many agencies to find alternative ways to get what they needed. To this end, one service provider stated, “You can’t always wait for others. Sometimes we have to go ahead and get things done ourselves.”

Within the sector, most service providers reached out to other agencies for guidance and advice on pandemic planning. Many took advantage of existing relationships, partnerships and committee meetings to gain insight into how others were approaching the planning and preparation process. Notably, many service providers took advantage of the opportunity to connect with other agency staff by participating in sector-wide meetings. Those who did reach out to other service providers reported discussing a range of topics, including coordination in the event of a more serious outbreak, under what circumstances to close, the health status of clients at each agency in relation to H1N1, vaccination clinic times and locations, access to medical supplies, measures to take if clients became ill and strategies for cancelling programs with as little disruption as possible. Unfortunately, despite these conversations, very few concrete action plans were developed through these interactions, due to lack of funding and personnel resources.

Challenges accessing and retaining supplies

The H1N1 outbreak required homelessness sector agencies to access and store many supplies (such as cleaning products, hand sanitizer, masks and gloves) that may have been outside or beyond their regular stock. Social service providers interviewed for this study were evenly divided on whether gaining access to supplies was a challenge for their respective agencies. Half the providers (such as those in large agencies and/or agencies that offered onsite health services) stated there were no problems getting supplies, or they already carried many of the items needed, while the other half (i.e., smaller agencies and those without health services onsite) had trouble keeping supplies in stock or obtaining more supplies. Four challenges were repeatedly noted by service providers in accessing and retaining supplies during H1N1.

The first and most common challenge was the cost of supplies. Social service providers from several agencies said the cost of H1N1 supplies came out of their regular operating budgets (thus redirecting funds away from other resources). According to one stakeholder, “The homelessness sector is always short of supplies and resources.” When agencies were able to gain access to supplies, another challenge they faced was trying to keep them in stock. The high demand for supplies meant that agencies had difficulty

maintaining the necessary levels. Thus, many social service providers faced situations in which supplies were depleted as rapidly as they became available. Stockpiling supplies was not an option for several reasons. First and foremost, as one stakeholder noted, creating a stockpile does not work when an agency is already short of supplies. Not having enough room to store supplies was another barrier some social service providers identified. Having a sector-wide communal stockpile was suggested as a potential solution to the shortage, but this idea poses the logistical challenges of deciding how supplies would be divided, where they would be stored, and who would fund their purchase. As one stakeholder noted, creating a communal stockpile would be difficult unless other mechanisms, like government fund-matching programs, were put in place.

The third challenge pertained to hand sanitizer. While many agencies understood its importance, and wanted to distribute it to clients, there was a concern that some clients might ingest the sanitizer. This was noted as a concern of many agencies, according to one key stakeholder. One social service agency had to tie the bottle to a staff member's desk to prevent clients from attempting to drink the hand sanitizer. Finally, the issue of masks caused considerable confusion, particularly at the beginning of the outbreak. Among the most common questions were whether surgical masks were needed, what the fit-testing requirements were for different masks, and where the money would come from to pay consultants to do the fitting. Despite the early confusion, not many agencies reported having challenges with masks (likely due to the low rates of illness among the homeless population).

Recommendations: Overcoming Structural Challenges

The H1N1 outbreak highlighted many pre-existing structural challenges in the Toronto homelessness sector, while also identifying opportunities for improvement. Among the challenges that emerged in this study were the chronically high rates of service reliance among Toronto's homeless population, congregate service designs that create close proximity between clients, the limited capacity for public health and pandemic planning within the sector, and the challenges service providers had in accessing

and retaining necessary supplies. Structural issues are deep-seated, and not quickly resolved. However, once they are recognized, measures can be taken to begin to address them. The following recommendations are offered, not as quick fixes, but as steps to improve homelessness sector operations in advance of the next pandemic outbreak.

1. **New social service agencies should be purpose-built with public health considerations in mind.** Newly constructed agencies should consider the health risks associated with congregate living and build solutions, such as independent quarters, into their designs (Davis, 2004; Graham, Walsh, & Sandalack, 2008).
2. **More funding is needed for shelters and drop-in centres to cover the costs associated with operations, supplies and staff salaries.** At least part of these funds should be made available for executive directors to use at their own discretion (as opposed to being earmarked for specific expenses or initiatives).
3. **Internal agency pandemic planning should be a collaborative effort, but led by a designated public health staff member.** This person would remain up to date on public health issues within their agency and help with public health training, pandemic planning and network-building within their agency. These duties should be written into the staff member's job description to allow adequate time to undertake them.
4. **Sector-wide pandemic planning should be an ongoing and collaborative effort, facilitated through yearly meetings.** During the H1N1 outbreak, Toronto Public Health and Shelter, Support and Housing jointly hosted meetings for service providers, to facilitate sector-wide information sharing and discussion. Holding similar meetings on a yearly basis, even when there is no pandemic, would help agencies to develop and strengthen their existing networks, form new partnerships and keep public health considerations at the forefront.

5. **Designated funding should be made available to allow homelessness sector agencies to enact public health initiatives.** During H1N1, many social service workers consulted with partner agencies for support and advice, but were unable to enact any concrete plans due to a lack of funding. The City of Toronto could offer a funding program in which partner agencies could apply for small grants to fund specific public health initiatives.
6. **Alcohol-based hand wipes could be distributed to homeless individuals instead of liquid sanitizer, to reduce the risk of ingestion.** Hand washing and sanitizing were encouraged during H1N1 to reduce the spread of disease. However, some agencies reported that difficulties arose as some clients tried to drink the alcohol-based hand sanitizing liquids. To address this, individual alcohol-based wipes could be distributed to clients instead.
7. **The homelessness sector should develop a communal stockpile for pandemic supplies, to be rationed between agencies, as determined by factors such as agency size, client need and type of facility.** This communal stockpile would be funded through a number of sources, such as individual agency budgets (on a sliding scale), Toronto Public Health and the Ministry of Health and Long-Term Care. Logistical issues would need to be addressed, such as finding a warehouse or space where supplies could be held, formalizing policies for supply distribution and organizing delivery of supplies.

Concluding Remarks

Pandemic outbreaks are difficult for many individuals, but may be particularly challenging for those with the pre-existing vulnerabilities of homelessness, poor physical and/or mental health and social isolation. Informed advance planning will ensure the needs of these individuals are not overlooked in a health crisis. While it may not be possible to avoid a pandemic altogether, advance planning and preparation will help alleviate the burden on the homelessness sector.

References

- Ali, S. H. (2010). Tuberculosis, homelessness, and the politics of mobility. *Canadian Journal of Urban Research*, 19(2), 80-107.
- Ali, S. H., & Keil, R. (Eds.). (2008). *Networked disease: Emerging infections in the global city*. Oxford: Wiley-Blackwell.
- Appleyard, T. (2009). *Bridging the preparedness divide: A framework for health equity in Ontario's emergency management programs*. Toronto: Wellesley Institute. Retrieved from <http://www.wellesleyinstitute.com/wp-content/uploads/2011/11/Bridging%2520the%2520Preparedness%2520Divide.pdf>
- Barnaby, L., Penn, R., & Erickson, P. G. (2010). *Drugs, homelessness & health: Homeless youth speak out about harm reduction*. Toronto: Shout Clinic.
- Basrur, S. (2004). Tuberculosis prevention and control services for homeless/underhoused persons and inmates of correctional facilities. Toronto: City of Toronto, Medical Officer of Health.
- Bender, K., Ferguson, K., Thompson, S., Komlo, C., & Pollio, D. (2010). Factors associated with trauma and posttraumatic stress disorder among homeless youth in three U.S. cities: The importance of transience. *Journal of Traumatic Stress*, 23(1), 161-168.
- Blickstead, J. R., & Shapcott, M. (2009). *When it comes to pandemics, no one can be left out*. Toronto: Wellesley Institute. Retrieved from http://www.wellesleyinstitute.com/health-care-reform/health-reform-through-an-equity-lens/emergency-preparedness/when_it_comes_to_pandemics__no_one_can_be_left_out/
- Blumenshine, P., Reingold, A., Egerter, S., Mockenhaupt, R., Braveman, P., & Marks, J. (2008). Pandemic influenza planning in the United States from a health disparities perspective. *Emerging Infectious Diseases*, 14(5), 709-715.
- Buccieri, K., & Gaetz, S. (2015). Facing FAQs: *H1N1 and homelessness in Toronto*. Toronto, ON: The Canadian Observatory on Homelessness. Available on-line at: <http://www.homelesshub.ca/resource/facing-faqs-h1n1-and-homelessness-toronto>

- Chan, M. (2009, April 29). *Influenza A (H1N1)*. Geneva: World Health Organization Media Centre. Retrieved from http://www.who.int/mediacentre/news/statements/2009/h1n1_20090429/en/index.html
- Chen, J., Wilkinson, D., Richardson, R. B., & Waruszynski, B. (2009). Issues, considerations and recommendations on emergency preparedness for vulnerable population groups. *Radiation Protection Dosimetry*, 134(3-4), 132-135.
- City of Toronto. (n.d.). Homelessness services. Toronto: City of Toronto. Retrieved from <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=4ec8c0e9f7301410VgnVCM10000071d-60f89RCRD&vgnnextchannel=cfa2d62869211410VgnVCM10000071d-60f89RCRD>
- City of Toronto. (2013). *Street needs assessment 2013*. Toronto: City of Toronto, Shelter, Support and Housing Administration.
- Daiski, I. (2007). Perspectives of homeless people on their health and health needs priorities. *Journal of Advanced Nursing*, 58(3), 273-281.
- Davis, S. (2004). *Designing for the homeless: Architecture that works*. California: University of California Press.
- Forchuk, C., Csiernik, R., & Jensen, E. (Eds.). (2011). *Homelessness, housing, and mental health: Finding trusts — creating change*. Canada: Canadian Scholars' Press Inc.
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2005). Homelessness and health in Canada: Research lessons and priorities. *Canadian Journal of Public Health*, 96, S23-S29.
- Gaetz, S., O'Grady, B., & Buccieri, K. (2010). *Surviving crime and violence: Street youth and victimization in Toronto*. Toronto: Justice for Children and Youth and The Canadian Observatory on Homelessness. Available on-line at <http://www.homelesshub.ca/survivingthestreets>
- Graham, J. R., Walsh, C. A., Sandalack, B. A. (2008). *Homeless shelter design: Considerations for shaping shelters and the public realm*. Canada: Brush Education Inc.
- Grinman, M. N., Chiu, S., Redelmeier, D. A., Levinson, W., Kiss, A., Tolomiczenko, G., Cowan, L., & Hwang, S. W. (2010). Drug problems among homeless individuals in Toronto, Canada: Prevalence, drugs of choice, and relation to health status. *BMC Public Health*, 24(10), 94.

- Haldenby, A. M., Berman., H., & Forchuk, C. (2007). Homeless and health in adolescents. *Qualitative Health Research*, 17, 1232-1244.
- Hutchins, S. S., Truman, B. I., Merlin, T. L., & Redd, S. C. (2009). Protecting vulnerable populations from pandemic influenza in the United States: A strategic imperative. *American Journal of Public Health*, 99(S2), S243.
- Hwang, S. W. (2001). Homelessness and health. *Canadian Medical Association Journal*, 164, 229-233.
- Hwang, S.W. (2006). Homelessness and harm reduction. *Canadian Medical Association Journal*, 174, 50-51.
- Hwang, S. W., et al. (2008a). The effect of traumatic brain injury on the health of homeless people. *Canadian Medical Association Journal*, 179, 779-784.
- Hwang, S. W., Kiss, A., Gundlapalli, A. V., Ho, M. M., & Leung, C. S. (2008b). Infectious disease exposures and contact tracing in homeless shelters. *Journal of Health Care for the Poor and Underserved*, 19, 1163-1167.
- John Hopkins Berman Institute of Bioethics. (n.d.). *The Bellagio meeting on social justice and influenza*. USA: John Hopkins University. Retrieved from <http://www.bioethicsinstitute.org/web/page/905/sectionid/377/pagelevel/3/interior.asp>
- Kelly, K., & Caputo, T. (2007). Health and street/homeless youth. *Journal of Health Psychology*, 12(5), 726-736.
- Kirst, M., Frederick, T., & Erickson, P. G. (2011). Concurrent mental health and substance use problems among street-involved youth. *International Journal of Mental Health and Addiction*, 9, 543-553.
- Ng, S. Y. M. (2009). *Emergency preparedness in Canada: Case studies on vulnerable populations in large-scale crises*. Canada: Department of Public Safety and Emergency Preparedness Canada.
- Rokach, A. (2005). Private lives in public places: Loneliness of the homeless. *Social Indicators Research*, 72, 99-114.
- Sager, R. (2011). Faith-based social services: Saving the body or the soul? A research note. *Journal for the Scientific Study of Religion*, 50(1), 201-210.
- Sasaki, T., Kobayashi, M., & Agui, N. (2002). Detection of bartonella quintana from body lice (anoplura: pediculidae) infesting homeless people in Tokyo by molecular technique. *Journal of Medical Entomology*, 39(3), 427-429.

- Story, A. (2013). Slopes and cliffs in health inequities: Comparative morbidity of housed and homeless people. *The Lancet*, 382(S3), S93-S93.
- Svoboda, T., Henry, B., Shulman, L., Kennedy, E., Rea, E., Ng, W., Wallington, T., Yaffe, B., Gournis, E., Vicencio, E., Basrur, S., & Glazier, R. H. (2004). Public health measures to control the spread of the severe acute respiratory syndrome during the outbreak in Toronto. *New England Journal of Medicine*, 350(23), 2352-2361.
- The SARS Commission. (2004). *SARS and public health in Ontario: Volume four*. Toronto: The SARS Commission. Retrieved from http://www.archives.gov.on.ca/en/e_records/sars/report/v4.html
- The SARS Commission. (2006a). *Spring of fear: Volume one*. Toronto: The SARS Commission. Retrieved from http://www.archives.gov.on.ca/en/e_records/sars/report/v1.html
- The SARS Commission. (2006b). *Spring of fear: Volume three*. Toronto: The SARS Commission. Retrieved from http://www.archives.gov.on.ca/en/e_records/sars/report/v3.html
- The SARS Commission. (2006c). *Spring of fear: Volume two*. Toronto: The SARS Commission. Retrieved from http://www.archives.gov.on.ca/en/e_records/sars/report/v2.html
- Thompson, S. A., McManus, H., Lantry, J., Windsor, L., & Flynn, P. (2006). Insights from the street: Perceptions of services and providers by homeless young adults. *Evaluation and Program Planning*, 29, 34-43.
- Topolovec-Vranic J, et al. (2012). Traumatic brain injury among people who are homeless: A systematic review. *BMC Public Health*, 12, 1059.
- Toronto Public Health. (2011). *Toronto public health plan for an influenza pandemic*. Toronto: City of Toronto.
- Tuberculosis Action Group. (2003). *TB or not TB? There is no question. Report of A Public Inquiry into the State of Tuberculosis Within Toronto's Homeless Population*. Toronto: Tuberculosis Action Group.

- Upshur, R. E. G., Faith, K., Gibson, J. L., Thompson, A. K., Tracy, C. S., Wilson, K., & Singer, P. A. (2005). Stand on guard for thee: Ethical considerations in preparedness for pandemic influenza. A report of the university of Toronto centre for bioethics pandemic influenza working group. Toronto: University of Toronto Joint Centre for Bioethics. Retrieved from http://www.jointcentreforbioethics.ca/people/documents/upshur_stand_guard.pdf
- Uscher-Pines, L., Duggan, P. S., Garron, J. P., Karron, R. A., & Faden, R. R. (2007). Planning for an influenza pandemic: Social justice and disadvantaged groups. *The Hastings Center Report*, 37(4), 32-39.

7 PANDEMIC PREPAREDNESS IN THE CONTEXT OF HOMELESSNESS: HEALTH NEEDS AND ANALYSIS OF PANDEMIC PLANNING IN FOUR CANADIAN CITIES

Jeannette Waegemakers Schiff, Bernie Pauly & Rebecca Schiff

Introduction

The health outcomes of homeless people are poor, with higher rates of acute and chronic conditions than the general population (Hwang et al., 2011). Even more troubling is that people experiencing homelessness are subject to premature death (Frankish, 2005; Hwang, 2009). It is well known that the conditions under which homeless people live, such as having a lack of permanent and stable housing, inadequate income combined with food insecurity, social isolation, discrimination and marginalization contribute to poor health and early death (Hwang, 2009). The dearth of resources for health care means that people who are homeless are increasingly vulnerable to specific health risks, including contracting communicable diseases during outbreaks. This is evident in the higher rates of HIV and Hepatitis C among homeless populations (Holton, Hwang, & Gogosis, 2010), as it is often difficult to manage and contain disease transmission in compromised and inadequate living situations.

During the past decade, events such as the SARS outbreak have raised serious public health concerns about the challenges of taking measures to reduce disease transmission during pandemics (or potential pandemics) for both the general population and those who are homeless. One such event was the 2009–2010 concern about a potential pandemic caused by the H1N1 virus. While the pandemic did not materialize as feared, it offered significant learnings. In this chapter, we focus on learnings related to the needs of people who are homeless. These learnings arise from the unique social conditions and circumstances that contribute to homeless people's heightened vulnerability to communicable disease transmission, and they offer insights into how to mitigate this population's potential vulnerability in a communicable disease outbreak.

Based on the results of a national survey in four Canadian cities, we explore findings related to health and access to health care in the event of a pandemic. Through a discussion of issues that emerged during the H1N1 period, we offer suggestions to inform future public health planning for communicable disease outbreaks, taking into consideration the unique needs and circumstances of those who are homeless. A closer examination of the stresses and vulnerabilities reported by people experiencing homelessness can help to guide health officials in planning for pandemics, prioritizing preventive practices, and offering health services in ways that will, we hope, mitigate the risks of serious health impacts in the event of future outbreaks of virulent communicable diseases.

Background

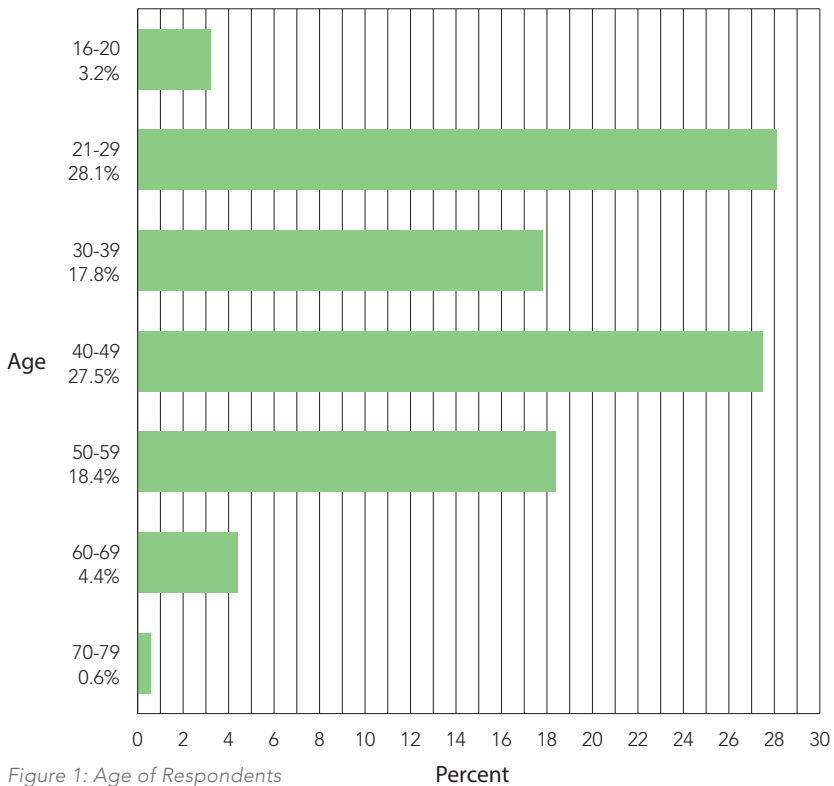
Research purpose and questions

As a result of a special call for proposals related to pandemic planning by the Canadian Institutes of Health Research (CIHR), a survey of people experiencing homelessness in four Canadian cities was conducted. The survey instrument consisted of a series of multiple-choice questions that inquired about living practices and health-seeking behaviours by persons who were homeless at the time. A copy can be found in the Appendices of this book.

Methodology

Participants were recruited at and near drop-in day programs and shelters in Toronto, Regina, Calgary and Victoria. They were offered a small stipend for their time and were asked about their health and experiences with health care during H1N1, as well as strategies to reduce risk in the event of a pandemic. Ethics approval was obtained from the University Ethics Boards of the principal investigators in each participating city. Data collection was facilitated by university-based researchers. Toronto and Regina employed students as research assistants, while Calgary and Victoria also included peer researchers as members of the research team. The collection period was over the colder months of the year, from October 2009 to March 2010, thus ensuring that most people who choose rough sleeping during the warmer months would be more likely to seek food and shelter at designated sites,

and thus be more available to be surveyed. The total sample consisted of 351 participants (Calgary, 118; Regina, 40; Toronto, 144; and Victoria, 44), which is proportional to the estimated homeless population in each city). Participants were recruited for the study at or near 24 drop-in programs and shelters that serve single adults across the four cities. The youngest was 16 years of age and the oldest 75, with 26% of the group aged 25 or younger. While the mean age was 38, the age spread is best depicted by Figure 1, which indicates that there was a significant cohort of young adults.



The cluster of young persons (aged 16–25) in part reflects the locations where we collected data. In Toronto, youth services constituted one data collection location, providing 65 respondents (46% of all respondents in that city). This skews the age cohort, since no youth services were targeted as data collection places in the other cities. However, as Figure 1 shows, the overall sample had a diverse age range.

Overall, 69% of respondents reported going to a shelter at night at least some of the time, and 66% said they go to a shelter every night. In Toronto and Victoria, 58% reported never using a shelter, while in Regina and Calgary this group was considerably larger at 82%. These differences between cities may relate to shelter bed availability in Victoria. Since 2010, that city's shelters have been running at over 100% capacity as once emergency beds are full, mats are being placed on the floor to accommodate the overflow (Pauly, 2013). These differences may also be due to the data collection sites: in Calgary and Regina the sites tended to be in and around shelters, while Victoria and Toronto also included respondents who only frequented drop-in programs and did not sleep at shelters. While shelter use among respondents varied across the cities, many issues that were raised about experiences with shelters did not elicit statistically different responses among these locations.

In the following sections, we highlight concerns related to the health vulnerability of people who are homeless, and their access to health services in the event of a pandemic, as well as their perceptions of where and how information and services would best be provided in a pandemic. Following this, we discuss insights and recommendations to inform public health and pandemic planning to meet the unique needs and circumstances of people who are homeless.

Self-reported Health Status of Homeless Canadians

For the survey, several questions related to self-reported health paralleled questions used by Statistics Canada (Statistics Canada, 2016) in its database of national health indicators. This made it possible, at least for some indicators, to compare the self-reported health of those who are homeless with the general population. As Statistics Canada reports 2-year rather than 1-year averages for the last 6 years, we were able to use the same time frame for comparison with our study data. Also, data among data periods (between 2009 and 2014) were quite similar (less than 1.0% difference between these time periods in each category we referenced). By extension, we posit that the data about health conditions and usage that emerged from this survey probably also reflect current and continuing health issues and concerns among homeless people.

Very good or excellent health was reported by 34% of our sample, while 72.6% of the general population reports very good or excellent health (Statistics Canada, 2016). Nationally, 39% of our subjects reported fair or poor health, compared to 11.6% percent of the general population. Of the four cities included in the research, we found that fair or poor health reported by study participants ranged from 33.4% to 47%. See Table 1 for the breakdown by city. In Toronto, 44% of our participants reported fair or poor health compared to 10.6% of the general population. In Regina, 33.4% of participants reported fair or poor health compared to 10.1% of the general population, while in Calgary, 47% of participants reported fair or poor health compared to 9% of the general population. Finally, for Victoria, fair or poor health was reported by 43.2% of participants compared to 11.8% of the general population. Thus, depending on the city, homeless people report fair or poor health at three to four and one-half times the rate for the general population across all provinces and territories.

Population	Average	Victoria	Calgary	Regina	Toronto
Homeless	39.0%	43.2%	47%	33.4%	44%
General (Statistics Canada)	11.6%	11.8%	9.0%	10.1%	10.6%

Table 1: Participants reporting fair or poor health by city: Comparing the homeless population to the general population

Across the four cities, 26.4% of our sample said their health was worse than a year ago, which is six times the national average of 4.6% in the general population. This means that among the homeless population, between one in three and one in four persons experienced deteriorating health, compared to fewer than one in 20 in the general population. In addition to reporting deteriorating health, just over half the respondents in the four survey cities consider themselves to have a disability that prevents them from engaging completely in work and leisure pursuits.

A series of questions focused on specific medical conditions (Table 2). A few diagnoses, including diabetes, cancer, HIV and tuberculosis, were explored. It is clear that people experiencing homelessness had numerous chronic conditions that would increase their vulnerability in the event of a pandemic.

Health condition	Homeless sample	General population
HIV/AIDS	3.8%	0.09 ¹
Lung cancer	5.3%	0.005%
Asthma	13.7%	8.1%
Hepatitis A, B or C	16.1%	6%-7% ²
Arthritis	23.9%	15.3%
Consider oneself to have a disability	50.6%	14.3%

Table 2: Self-reported health conditions

Over 50% of the participants experiencing homelessness reported a disability. In the general population, 10.1% of Canadians between the ages of 15 and 64 reported a disability (Statistics Canada, 2012). The participants in this study self-reported disability (“limited in what you can do at home, school or work because of a disability or chronic health problem”) at a rate five times that of the Canadian population as a whole (Statistics Canada, 2016). These findings confirm previous reports by Health Canada and other researchers that the overall health of homeless individuals is significantly poorer, by a wide margin, than that of the general population, and that being homeless increases the risk of deteriorating health (Frankish, 2005; Hwang, 2009). Furthermore, these data highlight that those experiencing homelessness are already experiencing poor overall health, and that situation, along with unstable living conditions, would increase their vulnerability in the event of a pandemic.

Use of Health Care

An important consideration for any type of health care services, including pandemic planning in the context of homelessness, relates to homeless people’s experiences with the health care system. In Canada, health care services, such as doctors and hospitals, are funded universally for all Canadian residents. Ready access to health care, outside of a crisis or a

¹ Rates reported by statistics Canada as 212 per 100,000 for AIDS and 56 per 100,000 for lung cancer have been converted to percentages.

² Variation between hepatitis B and C prevalence.

health emergency, begins with possession of a valid health card, which is obtained based on an established address within the province or territory of residence. In our study, nearly 83% of respondents reported having a valid health card. In other research, reported possession of a health card by homeless people was much lower, with 34% or more lacking a health card in two separate studies of homeless people in Toronto shelters (Hwang, Windrim, Svoboda, & Sullivan, 2000; Khandor et al., 2011). A possible explanation for the much higher rate of health card possession in this study may be the more recent attention to providing homeless people with access to personal identification, including health cards. Another possibility, since we did not ask our subjects to provide proof of health card possession, is that our positive response numbers were inflated. Because these rates were consistently high, hovering around 80% in all cities except Regina, where 95% of respondents reported having a health card, there is less possibility that differences in research assistants or data-gathering approaches account for these results. It is more plausible that reported recent advocacy efforts aimed at ensuring that homeless people have personal identification and a health card may have proven to be effective (St. Michael's Hospital, 2011).

While health card possession is an indicator of potential universal access to health care, it does not ensure that adequate and acceptable health care is readily available or accessible. In fact, many homeless people do not have a regular primary care provider or a regular source of care, which means, even with universal coverage, they may go without care or delay health care until it is an emergency. In this survey, we asked participants if they had a regular source of care, and if it was easy to see a doctor or nurse if necessary. Of our sample, 54.9% said they had a regular doctor or nurse. This percentage of respondents who indicated having a regular nurse or doctor is much lower than the 85.1% reported for the general Canadian population (Statistics Canada, 2014) and does not reflect how recently a person had seen that practitioner.

Most participants in our study (84.6%) reported that it would be easy to see a doctor if they needed to. However, when participants were asked whether they see a doctor for health care, only 30% of those who indicated they had a regular source of care said they saw the doctor or nurse identified as their

regular health care provider. In the general population, 81.3% of Canadians reported seeing their doctor in the last year. Of our participants, 39% reported having a doctor they see at least once a year, which is less than half the rate of the general Canadian population, despite much higher self-reports of poor health and prevalence of chronic disorders for the homeless population than for the rest of the population. Not only are homeless people more likely to suffer from a variety of serious and debilitating health problems, their substantially lower use of health care from a regular practitioner means they are likely to have less access to health services in the event of a pandemic.

When asked about where they usually access health care, 40% of respondents indicated accessing a community health clinic or a walk-in clinic, 20% receive health care at a shelter or drop-in program and 18% report using a hospital emergency department. Access to and use of health care services suggests that homeless people know where to obtain health care, but their identification of a personal practitioner may be based on minimal or infrequent contact. Responses may also have been based partly on a wish to provide a 'socially desirable response,' in that having a regular health care provider is considered a norm in Canadian society.

There is a general perception, fueled by studies in the United States (Kushel, Perry, Bangsberg, Clark, & Moss, 2002), that homeless people frequent hospital emergency departments for general health care (Frankish, Hwang, & Quantz, 2005). Despite concerns about overuse of emergency services by the homeless population, overall, only 18.3% of our study participants indicated obtaining health care at an emergency department. While most shelters have some form of health care available, often through the use of nursing staff, most study participants did not use shelters to obtain health care. In our four study cities, only one in five (20%) participants said they would seek health care at a shelter. When we looked at other places where people experiencing homelessness sought health care, the most frequently used sources were community or outreach programs.

The use of community health centres and walk-in clinics for health care, and some use of health facilities at shelters, indicates that homeless people probably use a variety of resources, rather than a single service. Community

health clinics and outreach health care are, in some cases, specifically tailored to meet the needs of people experiencing homelessness in terms of hours and ways that services are delivered. This highlights that these services are important sources of care. It has been demonstrated in other research that these resources are often more likely to be accessed because they are trusted sources of care (Pauly, 2014). Indicators of health care system use and trust in health care providers are important considerations for providing health care for homeless people, especially in the event of a pandemic.

Our findings suggest that both intervention and prevention efforts should target walk-in clinics and community health centres located where shelters and drop-in programs are located, to provide readily accessible and acceptable service locations, while also targeting those who have specific health needs exacerbated by their current living situation. In the next section, we explore the living conditions that increase vulnerability for people who are homeless; we also discuss participants' perceptions about access to information and sources of care during a pandemic.

Living Conditions: Sheltering of Homeless People

Earlier in this chapter, we highlighted that people experiencing homelessness are already experiencing poorer health and less access to health care services than the general population. In this section, we examine the living conditions of homeless people that increase their structural vulnerability in the event of a pandemic. Shelters, in particular, are environments that often increase the risk of communicable disease transmission (Sasaki, Kobayashi, & Agui, 2002). However, not all homeless people use shelters, or use them all the time. Of the participants in this study, 69% of respondents indicated they use emergency shelters, and 66.1% reported sleeping in shelters on a regular basis. In Regina and Calgary, the percentage of those sleeping in shelters every day was 85%, while in Toronto and Victoria only 48% and 30%, respectively, reported regular shelter use. In Calgary there was a clear preference for certain shelters, with 91.1% of respondents indicating they preferred certain shelters over others. Calgary's shelters vary in terms of number of beds (ranging from under 50 to 1,200), strictness of rules, religious orientation, available activities

and expectations, so shelter users' preferences for certain accommodations over others is understandable. In Toronto and Victoria, 68% of participants preferred certain shelters, while in Regina the preference rate of 36.4% was substantially lower than in other locations. These differences may be due, as described previously, to the predominant use of shelters as a site for recruiting study participants in Toronto and Calgary.

Our survey did not include questions addressing reasons for shelter preferences, so we did not identify whether shelter design and spatial proximity were factors in users' preferences. However, these are critical to consider in relation to transmission of communicable diseases. In the qualitative interviews in Victoria and Regina, we found there were few options for isolation rooms, and it was often difficult to maintain spatial proximity requirements in shelters (see chapters by Schiff and Pauly, Cross, & Perkin, in this book). Shelters often occupy spaces retrofitted for this use, rather than spaces designed specifically for housing homeless people (Walsh et al., 2010). It is common for shelters to be dormitory-style, with the maximum possible number of bunks in one room, to respond to the pressures of homelessness in urban centres. In this study, there were concerns about shelter capacity being stretched past the maximum, and in at least one city, Victoria, the response to growing concerns about homelessness was to increase shelter capacity by adding mats on the floor in shelter common areas. While this arrangement must meet fire regulations, it is possible, even likely, that it would not meet guidelines for ensuring one to two meters between beds. This arrangement could also mean up to 40 people in a common area, with overburdened washroom facilities and little privacy. Additionally, people experiencing homelessness, who are service recipients, are generally not consulted in the design of these spaces (Walsh et al., 2010). It is important to consider the advice of people with lived experience of homelessness regarding shelter design and usage, including how these apply to reducing health risks.

Not surprisingly, participants reported sleeping regularly in overcrowded places. Of all respondents, 58.5% reported having slept in a crowded environment in the past year, and 45.3% in the past month. However, rates varied substantially across cities. In Victoria, 80% reported sleeping in a crowded place in the past year. In Regina, that number was only 25%, while Toronto and Calgary had around 50% of respondents reporting crowded

sleeping environments. As previously noted, Victoria shelters have run over capacity since 2010. This overcrowding is especially important when considering the risk of disease transmission by airborne routes, for example, through contact with those who have tuberculosis, in an influenza pandemic or with other infectious diseases. We allowed respondents to self-identify the concept of ‘overcrowded,’ and thus do not know if our figures refer only to shelters, or also to other housing such as ‘doubling up,’ the practice of having two or more times the allowable number of persons in a living unit.

Another important consideration for health and well-being among homeless people is food security, which is critical to a person’s susceptibility to disease transmission and recovery. A significant number, 41.5% of respondents, indicated they had gone without food at least once per week in the past month. This is significantly higher than nationally reported (8%), where skipping meals is considered to be an indicator of severe food insecurity (Tarasuk, Mitchell, & Dachner, 2014). Additionally, 7.3% of respondents had gone without food at least once per day in the past month. Nutrition is important to overall health and immunity, so that food insecurity among homeless people is an important factor when considering risks for disease transmission and health outcomes during a pandemic.

Homeless Canadians’ Experiences During the H1N1 Pandemic

An important aspect of this research was examining homeless people’s experiences during the H1N1 pandemic, including their knowledge about the disease and their access to vaccination. Almost all respondents (97% in Toronto and Victoria and 100% in Calgary and Regina) remembered hearing about H1N1 during the 2010 outbreak. When asked what they remember hearing about it, the answers in some cases showed a lack of specific information or knowledge about H1N1. Most study participants (84.9%) did not know that H1N1 was contagious. Less than half the sample (44.1%) thought it was serious or deadly, except in Regina, where 60% of participants thought it was serious or deadly. When asked specifically whether they were aware that a vaccine was available, 93.4% said Yes. Additionally, 93.4% were aware there was a vaccine for H1N1, and 76.9% were aware of vaccine

clinics in their city. This varied somewhat across locations, with Calgary reporting the highest percentage of awareness at 83.8%, while only 62.5% of respondents in Regina were aware of H1N1 vaccine clinics (Table 3).

	Total study population	Victoria	Calgary	Regina	Toronto
Knew about H1N1 outbreak	98.6%	97.3%	97.7%	100%	100%
Did not know it was contagious	84.3%	84.1%	79.1%	84.6%	90.0%
Knew it was serious or deadly	44.1%	39.3%	53.5%	41.0%	60.0%
Concerned about being infected	44.4%	49.3%	43.9%	41.0%	37.5%
Aware of a vaccine	93.4%	93.9%	90.9%	94.9%	90.0%
Knew vaccine was available	15.4%	20.7%	25.6%	6.0%	12.5%

Table 3: Percentage of study participants aware of the H1N1 outbreak

Across all cities in the study, there was a pervasive lack of awareness that some groups (children, seniors, pregnant women) are more vulnerable to the dangers of contracting H1N1. While 44.1% knew the virus was a serious, potentially deadly illness, 94.8% of all respondents were unaware there were some groups of people who were especially vulnerable. This lack of awareness by a majority of participants may translate into limited concern about becoming infected or taking protective and preventive measures, and indeed, only 45% of study participants were concerned about becoming infected with H1N1. This might also explain rates of vaccination, with 34.9% of respondents being vaccinated, lower than the national average of 41% of Canadians over the age of 12 being vaccinated during the H1N1 outbreak (Statistics Canada, 2016). While more than 90% of participants were aware there was a vaccine, only 15.4% of participants knew it was

available. The rate in Victoria was higher and closer to provincial rates. This may be because there was a concerted effort to vaccinate those who were homeless in British Columbia, not necessarily the case in other centres (Pauly et al., this book).

Infection with H1N1 was reported by only 6% of the study participants, which was lower than the 10% infection rate for the general population. Participants were more likely to have the diagnosis identified by a doctor at a medical clinic than through other sources, although some mentioned self-diagnosis based on reports in the media. An additional 24% of participants reported having had influenza or a chest infection, but of these, 87% said they did not know if they had contracted H1N1, which suggests the possibility of an under-identification of H1N1. Homeless people, who must focus on meeting survival needs, often place less priority on addressing concerns related to their physical health if symptoms are not urgent or debilitating. These findings also indirectly affirm the observation that homeless people are not likely to seek medical help unless symptoms and distress are severe (Pauly, 2008).

Homeless Canadians' Suggestions for Prevention, Planning and Health Care in the Event of Future Pandemic Outbreaks

In light of some of the challenges homeless people experience with their health and health care, we wanted to investigate what might help to improve preventive care and pandemic planning in the context of homelessness. Since homeless people are the experts on their experiences and needs, we were particularly interested to learn, from their perspectives, what might work.

Between 86.5% and 90% of respondents said they were exposed or had access to useful information about H1N1 during the outbreak. We also asked participants specifically about preferred communication strategies. Individual health care providers were viewed as the most reliable sources of information in the event of an outbreak of a viral illness, followed by television (see Table 4). Internet and other forms of media, such as radio and newspapers, were considered much less reliable. This attitude may be

influenced by relative lack of access to the internet and unfamiliarity with its resources. Agency staff were not often seen as reliable informants, which reinforces reports from providers (Waegemakers Schiff & Lane, in this book) that agency staff often felt unprepared and lacked substantive knowledge about H1N1. Less than 1% of the sample considered outreach teams reliable, which is interesting, since these teams sometimes include health professional members, though they are clearly not perceived that way by people experiencing homelessness. Family and friends were also not considered very reliable sources of information. When respondents were asked about future pandemics and information dissemination, between 35% and 46% of participants in Calgary, Toronto, and Victoria indicated that more information sessions would be useful in the event of future pandemics. Many respondents also said more posters would be helpful. However, responses about posters varied widely across cities: in Victoria, 44% recommended this strategy, while in Regina only 9.8% of respondents felt that more posters were needed. Without further information from participants in individual cities, it is difficult to determine if this difference was based on the number of posters distributed or local preferences for obtaining information.

Most reliable source	Total study population	Victoria	Calgary	Regina	Toronto
Health care providers	32.6%	38.6%	19.0%	32.6%	39.4%
Television news	20.5%	11.4%	31.0%	17.5%	15.3%
Agency staff	5.9%	9.1%	4.3%	2.5%	7.3%
Posters and pamphlets	5.6%	11.4%	3.4%	10.0%	4.4%
Newspapers	5.0%	0%	11.2%	7.5%	0.7%
Family	5.0%	4.5%	2.6%	5.0%	7.3%
Friends	3.0%	0%	2.6%	0%	5.1%
Internet	3.0%	6.8%	5.2%	0%	0.7%

Table 4: Most reliable source of health information, according to participants

We also asked if people would change their shelter-seeking behaviour in the event of an outbreak of contagious illness, and 57% said they would still use a shelter. So while there would be a reduction in those who normally stay in a shelter, more than half indicated they would continue to use a shelter. However, 43% indicated that if H1N1 had become more widespread, they would have avoided shelters and drop-in centres. This response was generally consistent across cities, with Toronto, Regina and Calgary reporting between 50% and 57% of respondents who would avoid shelters in the event of a more widespread outbreak. This response was higher in Victoria, at 78%, which might reflect the milder climate in Victoria, allowing participants to choose rough sleeping as an alternative to shelters in the winter, with less risk from weather conditions. A second factor for the higher number in Victoria may be that shelters often run over capacity there. As we did not inquire further about possible reasons, it is impossible to know whether people believed there would be no alternative, or if they believed the potential risk of contagion was not high, since only 44% reported being concerned about contracting H1N1 in the event of an outbreak.

Respondents also indicated they would be more likely to avoid food services at drop-ins and shelters. Under those circumstances, the food insecurity experienced daily by homeless people could be increased. Participants were, in general, also more likely to avoid hospital emergency departments and walk-in clinics. When asked about whether they would change where they went to get health care in a more severe pandemic, there was a wide variation in responses across cities. In Toronto, 70.4% of respondents said they would change where they sought health care. This response was selected by 22.2% of respondents in Victoria, 15.2% in Regina, and only 5.2% in Calgary. This variation in responses may have reflected where respondents usually sought health care. However, this survey did not include questions that would allow for such an analysis. The survey did not ask participants directly about how they would have their needs met in the case of a more severe outbreak. These findings leave important unanswered questions about where homeless people could sleep, find food and access health care in the event of more severe pandemic outbreaks, suggesting the current vulnerability associated with their living conditions could be exacerbated.

When we asked about future preparations for a pandemic, it appears that few people had thought of this possibility. The response rate for specific actions a respondent would take in the event of a pandemic (where to go for the day, where to sleep at night, where to obtain food, where to get health care) dropped from over 80% for most previous questions to between 34% and 40%, even though this question, “If H1N1 had gotten a lot worse, and more people had gotten sick, would that have changed your views about going to drop-ins or shelters?” had a positive response rate of 87%. Clearly, respondents felt more able to react to a presenting situation than to plan ahead for a possible future situation. We suggest this is because being homeless is challenging, and those who must worry about where to stay right now do not have the psychological and social resources to plan for future needs. They may also not want to consider a future where they remain without housing, that is, they do not want to consider the possibility of continuing to be homeless. Given that many people experience cyclical homelessness, and some are homeless only once, these are reasonable reactions. However, these reactions could also make future planning more problematic.

Many respondents offered specific comments on the changes in shelter and drop-in program practices during the H1N1 outbreak. Hand sanitizers were in more frequent use and hand washing was encouraged more often. Gloves were more often used in food preparation and service areas and masks were more often used, sometimes only by staff, but in other situations by both clients and staff. Facilities were observed to be cleaner and, while there were some exceptions, staff was seen as more gentle and understanding overall. Suggestions for improvements in the event of a future outbreak ranged across issues of cleanliness, availability of information, health and hygiene resources. Lack of robust response may be because of general satisfaction, or response fatigue at the end of a lengthy interview.

Discussion

To date, much of what we know about the health and health-seeking behaviours and preferences of homeless people comes from studies in several Canadian cities (Toronto, Vancouver and Montreal), but no single study has

provided an overview of different regions. One study that examined the plight of homeless people provided qualitative examples of difficult shelter experiences (Daiski, 2007). We are not aware of any studies that related the perceptions of people who are homeless in terms of pandemic experiences and preparedness. The present study provides the data to show similarities and differences in perceptions in diverse geographic areas, and therefore aims to be more representative of the plight of homeless people in general. The specific focus of this study on events and actions in a potential pandemic (H1N1) allowed us to look at the extent to which health and shelter concerns are similar across communities of different sizes in different areas, and the degree to which they may differ, based on specific local conditions.

The response patterns for questions included in this analysis indicated a very good response rate among our sample increasing confidence in the findings. Most specific items were answered by over 97% of all participants, thus we encountered few items where missing data would influence results. We noted that items focused on health related behaviours and conditions, as well as responses to pandemic planning, were included in the low rate of missing information. Instance of lower rates of replies occurred in some items where people were asked about ways in which services could be improved, which may reflect a desire to minimize criticism, or simply response fatigue at the end of a lengthy interview. In summary, the data set proved to be robust.

We found alarming rates of poor health, and lower self-reported health care utilization than appeared necessary for the adequate care, health and living conditions of our participants. While it was heartening to learn that most homeless people possess a health card, our findings are confirmation that this does not necessarily mean that people experiencing homelessness have consistently available access to a regular source of health care. We also identified that people tend to access community clinics and outreach sources of health care services. Reported rates of disability have important implications for considering the approaches and types of services required by homeless people to allow them to acquire and maintain self-sufficiency. The extent of disability in the homeless population is an important determinant to understanding their requirements for pandemic preparedness, as access to and need for health services are affected by pre-existing conditions and other health vulnerabilities.

Our respondents were very helpful in indicating where they received most of their health-related information, and this knowledge will guide health authorities in planning for future viral outbreaks. Health care workers are considered the most reliable source of information. This is consistent with the findings of the Victoria study (Pauly et al., in this book), in which health care providers were a key source of information, and community clinics and street nurses were integral to effective responses. The media, especially television, is more often relied on than posters and newspapers as sources of accurate information. Health authorities should therefore not rely, at least at present, on shelter workers to disseminate health information, as they are not perceived by clients as having the necessary information. Instead, authorities should plan to deliver accurate and timely information as quickly as possible through homeless people's preferred means. Finally, authorities should include homeless people as important informants for planning dissemination strategies.

Conclusion

Outbreaks of contagious and deadly illnesses will continue to be part of the human condition. In communities where there are people with pre-existing health issues and limited access to health care, and living in close proximity to others is the norm, the potential for transmission is high, and vulnerability to the threat of a communicable disease is increased. Given these realities, it is incumbent on health authorities to protect the most vulnerable members of society from further harm. In the present study, we provide relevant information about homeless people's current health and their access to health care, as well as the multiple vulnerabilities that place them among those who are at increased risk during a pandemic. It is essential that service providers and policy-makers not only recognize this heightened vulnerability, but also understand that a key source of that vulnerability rests in the living conditions to which homeless people are subject. We hope, in the event of future pandemics, the important lessons from H1N1, an outbreak that did not turn out to be as severe as expected, will be taken up by regional and provincial health planners to ensure the health and safety of people who are homeless. There is also a clear need to initiate a public health response to homelessness, even when there is no imminent threat of a pandemic.

References

- Chambers, C., Chiu, S., Scott, A.N., Tolomiczenko, G., Redelmeier, D. A., Levinson, W., & Hwang, S. W. (2014). Factors associated with poor mental health status among homeless women with and without dependent children. *Community Mental Health Journal*, 50(5), 553-559.
- Daiski, I. (2007). Perspectives of homeless people on their health and health needs priorities. *Journal of advanced nursing*, 58(3), 273-281.
- Fischer, P. J., & Breakey, W. R. (1991). The epidemiology of alcohol, drug, and mental disorders among homeless persons. *American Psychologist*, 46(11), 1115.
- Frankish, C. J., Hwang, S. W., & Quantz, D. (2005). Homelessness and health in Canada: Research lessons and priorities (Commentary). *Canadian Journal of Public Health*, 96(Supplement 2).
- Glantz, S., & Gonzalez, M. (2012). Effective tobacco control is key to rapid progress in reduction of non-communicable diseases. *Lancet*, 379(9822), 1269.
- Holton, E., Hwang, S., & Gogosis, E. (2010). *Housing Vulnerability and Health: Canada's Hidden Emergency: a Report on the REACH3 Health and Housing in Transition Study*. Research Alliance for Canadian Homelessness, Housing, and Health (REACH3).
- Hwang, S. W., Aubry, T., Palepu, A., Farrell, S., Nisenbaum, R., Hubley, A. M., ... & Dowbor, T. (2011). The health and housing in transition study: a longitudinal study of the health of homeless and vulnerably housed adults in three Canadian cities. *International journal of public health*, 56(6), 609-623.
- Hwang, S. W., Wilkins, R., Tjepkema, M., O'Campo, P. J., & Dunn, J. R. (2009). Mortality among residents of shelters, rooming houses, and hotels in Canada: 11 year follow-up study. *British Medical Journal*, 339, b4036.
- Hwang, S. W. (2001). Homelessness and health. *Canadian Medical Association Journal*, 164(2), 229-233.
- Hwang, S. W., Windrim, P. M., Svoboda, T. J., & Sullivan, W. F. (2000). Physician payment for the care of homeless people. *Canadian Medical Association Journal*, 163(2), 170-171.

- Khandor, E., Mason, K., Chambers, C., Rossiter, K., Cowan, L., & Hwang, S. W. (2011). Access to primary health care among homeless adults in Toronto, Canada: results from the Street Health survey. *Open Medicine*, 5(2), 94-103.
- Krausz, R. M., Clarkson, A. F., Strehlau, V., Torchalla, I., Li, K., & Schuetz, C. G. (2013). Mental disorder, service use, and barriers to care among 500 homeless people in 3 different urban settings. *Social psychiatry and psychiatric epidemiology*, 48(8), 1235-1243.
- Kushel, M. B., Perry, S., Bangsberg, D., Clark, R., & Moss, A. R. (2002). Emergency department use among the homeless and marginally housed: results from a community-based study. *American Journal of Public Health*, 92(5), 778-784.
- Pauly, B. M. (2008). "Shifting moral values to enhance access to health care: harm reduction as a context for ethical nursing practice." *International Journal of Drug Policy*, 19, p. 195 - 204.
- Pauly, B. M., et al. (2013). Facing Homelessness: Greater Victoria Report on Housing and Supports 2012/2013. Victoria, BC, Greater Victoria Coalition to End Homelessness and Centre for Addictions Research of British Columbia.
- Pauly, B. M. (2014). Close to the street: Nursing practice with people marginalized by homelessness and substance use. *Homelessness and Health in Canada*. S. Hwang and M. Younger. Ottawa, University of Ottawa Press.
- Perry, J., & Craig, T. K. (2015). Homelessness and mental health. *Trends in Urology & Men's Health*, 6(2), 19-21.
- Sasaki, T., Kobayashi, M., & Agui, N. (2002). Detection of Bartonella quintana from body lice (Anoplura: Pediculidae) infesting homeless people in Tokyo by molecular technique. *Journal of medical entomology*, 39(3), 427-429.
- Snow, D. A., Baker, S. G., Anderson, L., & Martin, M. (1986). The myth of pervasive mental illness among the homeless. *Social Problems*, 33(5), 407-423.
- St. Michael's Hospital. (2011, May 24). No health card means no family doctor for many homeless people. Retrieved from: http://www.stmichaelshospital.com/media/detail.php?source=hospital_news/2011/20110524_hn

- Statistics Canada. (2012). Disability in Canada: Initial findings from the Canadian Survey on Disability. Retrieved from <http://www.statcan.gc.ca/pub/89-654-x/89-654-x2013002-eng.htm>
- Statistics Canada. (2016). Health indicator profile, two-year period estimates, by age group and sex, Canada, provinces, territories, census metropolitan areas and influence zones. Retrieved from <http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=1050592>
- Tarasuk, V., Mitchell, A., & Dachner, N. (2014). Household food insecurity in Canada 2012. Retrieved from <http://proof.utoronto.ca/resources/proof-annual-reports/annual-report-2012/>
- Waegemakers Schiff, J. (2015). *Working With Homeless and Vulnerable People*. Chicago: Lyceum Books, Inc.
- Walsh, C., Beamer, K., Alexander, C., Shier, M., Loates, M., & Graham, J. (2010). Listening to the silenced: Informing homeless shelter design for women through investigation of site, situation, and service. *Social Development Issues*, 32(3), 35-49.

CONCLUSION

Rebecca Schiff

The main objective of disaster management is to have an effective plan in place before the event occurs. However, emergency planning is often not prioritized in the allocation of time and resources; particularly for health and social service providers who must dedicate often scant resources to addressing the significant demands of providing direct client services. As a result, little attention is dedicated to effectively plan for vulnerable populations, such as the homeless population. Such planning is necessary to protect their lives and to protect the lives of the general population. While there is a well-documented need for pandemic planning to address high-risk populations, these efforts have often overlooked the complex situations and vulnerabilities of homeless people.

Homelessness presents key challenges for emergency and pandemic planning due to complex health, situational, and structural vulnerabilities. It is widely documented that homeless people suffer from much poorer health status and health outcomes than the general population (Chambers et al., 2014; Daiski, 2007; Fischer & Breakey, 1991; Frankish, Hwang, & Quantz, 2005; Hwang, 2001; Hwang et al., 2011; Hwang, Wilkins, Tjepkema, O'Campo, & Dunn, 2009; Khandor et al., 2011; Krausz et al., 2013; Pauly, 2014; Perry & Craig, 2015; Sasaki, Kobayashi, & Agui, 2002; Snow, Baker, Anderson, & Martin, 1986). These medical and health related issues combine with social exclusion to create particularly significant vulnerability to infectious disease transmission and recovery. Using social exclusion as an analytic framework, Gaetz and Buccieri highlighted earlier in this book the challenges created by homeless people's severely restricted access to social and economic goods and institutions, as well as the spatial marginalization created by their segregation from broader society's living arrangements and access to services. Waagemakers Schiff, Pauly, and Schiff also highlight in a chapter of this book the ways in which homeless people in Canada have profoundly different health status and health service utilization when compared to

the general population. These medical and health care challenges lead to increased individual vulnerability to infectious disease and transmission among the broader population.

As the authors in this book highlight, it is essential to ask what kind of impact an influenza pandemic might have on homeless individuals and others across the country. Estimates suggest there has been a rise in homelessness in Canada, and 200,000 or more individuals use homeless shelters annually (Gaetz, Donaldson, Richter, & Gulliver, 2013; Gaetz, Gulliver, & Richter, 2014). The homelessness response system has historically been focused on emergency responses. This system is characterized by overcrowded sleeping conditions, poor air quality and a range of other public health issues. Homeless shelters are often not open for clients during daytime hours, meaning that if you are homeless and ill then there are poor options for rest and recovery. Homeless people typically suffer from poor health, nutritional vulnerability, compromised immune systems and barriers to accessing health services (Frankish et al., 2005). In the event of a pandemic, it is not clear whether the infrastructure to address homelessness, public health or the health care system in general would be prepared to adequately respond to the risks faced by the homeless population.

A multi-site research study, “Understanding Pandemic Preparedness in the Context of the Homelessness Crisis” (Pandemic Research Project – PRP) was designed to investigate the ways in which current approaches to pandemic planning and the structure of the homelessness service system would affect the vulnerability of homeless populations in the event of a pandemic. Four cities were selected (Victoria, Toronto, Calgary and Regina) in which to conduct the analysis. Recognizing variations in the ways that homelessness is experienced and addressed across Canada, research sites were selected to represent diverse geographic locations, size, and demographics. This book presents findings from this study, as well as a broad look at challenges with and recommendations for pandemic planning for the homeless population.

About two years after H1N1, the results of this research project provide the homelessness sector in particular, and the pandemic planning infrastructure in general, with a detailed review of lessons learned. Although H1N1 did not

result in a severe outbreak, at least in Canada, a thorough analysis of both the planning and implementation stages is urgent to understand the current state and the level of preparedness if a real pandemic outbreak were to occur in Canada.

Gaetz and Buccieri considered the issues created by homelessness service infrastructure, particularly the shelter and emergency shelter systems which exacerbate vulnerabilities to infectious disease among an already vulnerable population. They illustrate how homelessness must be considered through the lens of social exclusion, where that exclusion contributes to homeless people's restricted access to goods and services, resulting in their increased susceptibility to infectious disease. While the existing service infrastructure and shelter system present challenges to infectious disease control, Gaetz and Buccieri suggest that the expertise among existing front-line service workers, in working with homeless and marginalized populations, is critical to pandemic planning in this context. Building on this base of expertise, they suggest that six factors need to be addressed in order to improve planning and coordinate a response in the event of pandemic outbreaks. These factors are highlighted in many of the individual case study chapters and include the need to address: support for planning; infection control capacity in the shelter system; overall service system capacity; inter-sectoral collaboration; communications and training; and the heightened challenges of unpredictability faced by the homeless population.

Mosher's discussion also identified issues of social exclusion as discussed by Gaetz and Buccieri, while highlighting significant legal and ethical concerns related to the current approaches to pandemic planning and infection control. Mosher draws attention to the need for a theoretical shift from the dominant narrative of security and national security to one focused on social justice. This chapter calls for a new narrative that will avoid the victimization of vulnerable populations, including those that are marginalized based on race and socioeconomic status. This chapter also draws attention to recent shifts in public health discourse which highlight the significance of social determinants and which have begun to be included in guidelines for pandemic planning and preparedness. Pauly's chapter on the Victoria case study continues this discussion with a focus on communications and inter-sectoral collaboration for public health agencies. Mosher's chapter concluded

with a few considerable recommendations. In particular, she highlights the duty of law and lawyers to create positive state obligations within the context of pandemic preparedness and response. Mosher also concludes with a recommendation that is echoed in other chapters throughout this book: that is, the need to move beyond reactive responses to health and illness and toward long-term measures that can support health and prevent illness by diminishing or eliminating social and health inequities.

While there are several reports that have documented and demonstrated the poor health status and outcomes of homeless people, most of these have been isolated to individual cities. Waegemakers Schiff et al brought together data on self-reported health status and health-seeking behaviours across four diverse Canadian cities. Their findings confirm existing knowledge, while adding to our understanding of additional vulnerabilities, in part through comparison with the health status of the general population. This chapter also provides insight into the experiences of homeless people during the H1N1 pandemic, along with recommendations for planning that have been drawn from experiences across all four cities, to aid in future planning.

The case studies of four diverse Canadian cities also illustrate many of the concerns and suggestions noted by Gaetz and Buccieri. In her discussion of the Victoria, British Columbia experience, Pauly draws attention to the daily challenges faced by homeless people, challenges that became even more apparent in the response to H1N1. While the Victoria experience highlights some accomplishments in cross-sector collaboration and planning, it also points to some important lessons for future planning and for planning in other locations. Pauly notes that in the Victoria experience, “A key factor in the response to H1N1 was the importance of public health taking a lead role in planning and coordinating services and communicating information.” The benefit of cross-sector collaboration, as seen in the Victoria experience, is identified as a key challenge and area for improvement in the other three cities where such an approach was lacking. Buccieri also notes the need for public health to take a lead role in planning and coordination in the Toronto context.

The four case study chapters also note the need for improved access to supplies and resources to help mitigate and control the spread of infectious disease. A number of specific suggestions regarding supplies and resources

also emerged from the Calgary and Toronto experiences, including suggestions to establish a temporary central distribution point for resources during a pandemic and to develop a communal stockpile in the homelessness sector for pandemic supplies, to be rationed between agencies.

The chapters on Calgary, Regina and Toronto point to a number of additional thematic considerations and recommendations. The Regina and Calgary case studies include a few common suggestions. In particular, they identify a lack of readiness for H1N1 and the need for improved preparedness for future pandemics. They also note a need for improved communication from government and health care authorities in relaying critical information to the homelessness sector.

A number of other issues and recommendations are thematically identified in the Calgary, Regina and Toronto case studies:

- The homeless population needs to be included in definitions of high-risk populations when planning for a pandemic (Calgary).
- Planning for the homeless population is very different from planning for the general population; this planning should be done with rather than for homeless people, as this engagement will help ensure relevant and acceptable approaches (Calgary).
- Immunization/vaccination procedures need improvement (Calgary).
- Improved coordination is needed in the homelessness sector (Regina).
- Improved education and awareness for service providers and homeless people is needed (Regina).
- There are challenges for treatment and isolation of infected individuals, given the current infrastructure at shelters and service provider locations (Regina).
- New social service agencies should be purpose-built with public health considerations in mind (Toronto).
- More funding is needed for shelters and drop-in centres to cover the costs involved in operations, supplies and staff salaries associated with pandemic preparedness (Toronto).
- Designated funding should be made available to allow homelessness sector agencies to enact public health initiatives (Toronto).

Although diverse in terms of geographic location, size and demographics, the case study communities provide some consistent key findings and recommendations for pandemic planning, particularly in the context of homelessness. Many of these findings build upon the base of previous knowledge identified by Gaetz and Buccieri and the legal context discussed by Mosher. In particular, the findings of these case studies and the national data suggest that:

- Homeless people experience significantly worse health status than the general population.
- Homeless people have more difficulty accessing health services and health information, and this is particularly an issue during pandemic outbreaks.
- There is a need for cross-sectoral pandemic planning to improve preparedness for pandemics, and this should include participation by the homelessness sector and people with lived experience of homelessness, with Public Health taking a lead role in these efforts.
- Government and health authorities should identify more effective methods for providing shelters and homeless people access to vaccination and to adequate supplies to mitigate and control infection. This should also include improved education and awareness initiatives which can respond to the unique context of homelessness and associated service provision.
- There is a need to design and build a new service infrastructure that will be adequate in the face of pandemic events and other public health concerns. This will require commitment from government and other funders to ensure adequate and appropriate construction and design.

We suggest that these recommendations might provide a starting point for new approaches to pandemic planning among the homeless population. However, it is critical to consider homelessness as a broader challenge in the work toward achieving social justice and equity for all people. While immediate pandemic planning efforts need to consider the impact of social and economic marginalization, the long-term goal of our collective efforts should be the elimination of those inequalities.

References

- Chambers, C., Chiu, S., Scott, A. N., Tolomiczenko, G., Redelmeier, D. A., Levinson, W., & Hwang, S. W. (2014). Factors associated with poor mental health status among homeless women with and without dependent children. *Community Mental Health Journal*, 50(5), 553-559.
- Daiski, I. (2007). Perspectives of homeless people on their health and health needs priorities. *Journal of Advanced Nursing*, 58(3), 273-281.
- Fischer, P. J., & Breakey, W. R. (1991). The epidemiology of alcohol, drug, and mental disorders among homeless persons. *American Psychologist*, 46(11), 1115.
- Frankish, C.J., Hwang, S.W., & Quantz, D. (2005). Homelessness and health in Canada: Research lessons and priorities. *Canadian Journal of Public Health*, 96, S23-S29.
- Gaetz, S., Donaldson, J., Richter, T., & Gulliver, T. (2013). The State of Homelessness in Canada 2013. Toronto, ON: Canadian Observatory on Homelessness Press.
- Gaetz, S., Gulliver, T., & Richter, T. (2014). The State of Homelessness in Canada 2014. Toronto, ON: Canadian Observatory on Homelessness Press.
- Hwang, S. W., Aubry, T., Palepu, A., Farrell, S., Nisenbaum, R., Hubley, A. M.,...Chambers, C. (2011). "The health and housing in transition study: a longitudinal study of the health of homeless and vulnerably housed adults in three Canadian cities." *International Journal of Public Health* 56(6): 609-623
- Hwang, S. W., Wilkins, R., Tjepkema, M., O'Campo, P. J., & Dunn, J. R. (2009). Mortality among residents of shelters, rooming houses, and hotels in Canada: 11 year follow-up study. *British Medical Journal*, 339, b4036.
- Hwang, S. W. (2001). Homelessness and health. *Canadian Medical Association Journal*, 164(2), 229-233.
- Khandor, E., Mason, K., Chambers, C., Rossiter, K., Cowan, L., & Hwang, S. W. (2011). Access to primary health care among homeless adults in Toronto, Canada: results from the Street Health survey. *Open Medicine*, 5(2), 94-103.

- Krausz, R. M., Clarkson, A. F., Strehlau, V., Torchalla, I., Li, K., & Schuetz, C. G. (2013). Mental disorder, service use, and barriers to care among 500 homeless people in 3 different urban settings. *Social psychiatry and psychiatric epidemiology*, 48(8), 1235-1243.
- Pauly, B. M. (2014). Close to the street: nursing practice with people marginalized by homelessness and substance use. In M. Guirguis-Younger, R. McNeil, & S. W. Hwang (Eds.), *Homelessness and Health in Canada*. Ottawa, ON: University of Ottawa Press.
- Perry, J., & Craig, T. K. (2015). Homelessness and mental health. *Trends in Urology & Men's Health*, 6(2), 19-21.
- Sasaki, T., Kobayashi, M., & Agui, N. (2002). Detection of Bartonella quintana from body lice (Anoplura: Pediculidae) infesting homeless people in Tokyo by molecular technique. *Journal of medical entomology*, 39(3), 427-429.
- Snow, D. A., Baker, S. G., Anderson, L., & Martin, M. (1986). The myth of pervasive mental illness among the homeless. *Social Problems*, 33(5), 407-423.
- Walsh, C., Beamer, K., Alexander, C., Shier, M., Loates, M., & Graham, J. (2010). Listening to the silenced: Informing homeless shelter design for women through investigation of site, situation, and service. *Social Development Issues*, 32(3), 35-49.

APPENDIX A:

CANADIAN DEFINITION OF HOMELESSNESS

CANADIAN OBSERVATORY ON HOMELESSNESS¹

DEFINITION

Homelessness describes the situation of an individual or family without stable, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it. It is the result of systemic or societal barriers, a lack of affordable and appropriate housing, the individual/household's financial, mental, cognitive, behavioural or physical challenges, and/or racism and discrimination. Most people do not choose to be homeless, and the experience is generally negative, unpleasant, stressful and distressing.

Homelessness describes a range of housing and shelter circumstances, with people being without any shelter at one end, and being insecurely housed at the other. That is, homelessness encompasses a range of physical living situations, organized here in a **typology** that includes: 1) **Unsheltered**, or absolutely homeless and living on the streets or in places not intended for human habitation; 2) **Emergency Sheltered**, including those staying in overnight shelters for people who are homeless, as well as shelters for those impacted by family violence; 3) **Provisionally Accommodated**, referring to those whose accommodation is temporary or lacks security of tenure, and finally, 4) **At Risk of Homelessness**, referring to people who are not homeless, but whose current economic and/or housing situation is precarious or does not meet public health and safety standards. It should be noted that for many people homelessness is not a static state but rather a fluid experience, where one's shelter circumstances and options may shift and change quite dramatically and with frequency.

¹The COH established a working group with leaders from the areas of research, policy and practice, to develop, refine and test a new definition. The COH Working Group included: Dr. Stephen Gaetz, Director, Canadian Observatory on Homelessness, York University; Carolann Barr, Executive Director, Raising the Roof; Anita Friesen, Senior Policy Advisor, Program Policy and Planning, Family Violence Prevention and Homeless Supports, Alberta Human Services; Bradley Harris, Social Services Consultant, The Salvation Army; Charlie Hill, Executive Director, National Aboriginal Housing Association; Dr. Kathy Kovacs-Burns, Associate Director, Health Sciences Council, University of Alberta; Dr. Bernie Pauly, Associate Professor, School of Nursing, University of Victoria; Bruce Pearce, President, Canadian Housing Renewal Association; Dr. Alina Turner, VP Strategy, Calgary Homeless Foundation; Allyson Marsolais, Director of Operations, Canadian Observatory on Homelessness. The Canadian Definition of Homelessness was published in 2012.

The *problem* of homelessness and housing exclusion refers to the failure of society to ensure that adequate systems, funding and support are in place so that all people, even in crisis situations, have access to housing. The goal of ending homelessness is to ensure housing stability, which means people have a fixed address and housing that is appropriate (affordable, safe, adequately maintained, accessible and suitable in size), and includes required services as needed (supportive), in addition to income and supports.

Numerous populations, such as youth, individuals from different ethno-cultural backgrounds, families, newcomers to Canada, people impacted by family violence, the elderly, etc., experience homelessness due to a unique constellation of circumstances and as such the appropriateness of community responses has to take into account such diversity. The over-representation of Aboriginal peoples (including First Nations, Métis, and Inuit peoples), for instance, among Canadian homeless populations, necessitates the inclusion of their historical, experiential and cultural differences, as well as experiences with colonization and racism, in their consideration of homelessness.

TYPOLGY

The typology describes the range of accommodations that people without appropriate, stable, and permanent housing may experience. Those without acceptable housing experience a range of different types of homelessness, from being unsheltered to having housing that is insecure or inappropriate. As homelessness is not one single event or state of being, it is important to recognize that at different points in time people may find themselves experiencing different types of homelessness.

1) UNSHELTERED

This includes people who lack housing and are not accessing emergency shelters or accommodation, except during extreme weather conditions. In most cases, people are staying in places that are not designed for or fit for human habitation.

1.1 People living in public or private spaces without consent or contract

- Public space, such as sidewalks, squares, parks, forests, etc.
- Private space and vacant buildings (squatting)

1.2 People living in places not intended for permanent human habitation

- Living in cars or other vehicles
- Living in garages, attics, closets or buildings not designed for habitation
- People in makeshift shelters, shacks or tents

2) EMERGENCY SHELTERED

This refers to people who, because they cannot secure permanent housing, are accessing emergency shelter and system supports, generally provided at no cost or minimal cost to the user. Such accommodation represents a stop-gap institutional response to homelessness provided by government, non-profit, faith based organizations and/or volunteers.

2.1 Emergency overnight shelters for people who are homeless

These facilities are designed to meet the immediate needs of people who are homeless. Such short-term emergency shelters may target specific sub-populations, including women, families, youth or Aboriginal persons, for instance. These shelters typically have minimal eligibility criteria, offer shared sleeping facilities and amenities, and often expect clients to leave in the morning. They may or may not offer food, clothing or other services. Some emergency shelters allow people to stay on an ongoing basis while others are short term and are set up to respond to special circumstances, such as extreme weather.

2.2 Shelters for individuals/families impacted by family violence

These shelters provide basic emergency and crisis services including safe accommodation, meals, information, and referral. They provide a high security environment for women (and sometimes men) and children fleeing family violence or other crisis situations. Residents are not required to leave during the day. These facilities offer private rooms for families and a range of supports to help residents rebuild their lives.

2.3 Emergency shelter for people fleeing a natural disaster or destruction of accommodation due to fires, floods, etc.

3) PROVISIONALLY ACCOMMODATED

This describes situations in which people, who are technically homeless and without permanent shelter, access accommodation that offers no prospect of permanence. Those who are provisionally accommodated may be accessing temporary housing provided by government or the non-profit sector, or may have independently made arrangements for short-term accommodation.

3.1 Interim housing for people who are homeless

Interim housing is a systems-supported form of housing that is meant to bridge the gap between unsheltered homelessness or emergency accommodation and permanent housing. In some cases referred to as ‘transitional housing’, this form of accommodation typically provides services beyond basic needs, offers residents more privacy, and places greater emphasis on participation and social engagement. Interim housing targets those who would benefit from structure, support and skill-building prior to moving to long term housing stability, with the ultimate goal of preventing a return to homelessness. In the case of second-stage housing for those impacted by family violence, the key characteristics of this housing are the safety and security it provides, trauma recovery supports, along with the ultimate goal of preventing revictimization. Interim housing has time limitations on residency, but generally allows for a longer stay (in some cases up to three years) compared to emergency shelters.

3.2 People living temporarily with others, but without guarantee of continued residency or immediate prospects for accessing permanent housing

Often referred to as ‘couch surfers’ or the ‘hidden homeless’, this describes people who stay with friends, family, or even strangers. They are typically not paying rent, their duration of stay is unsustainable in the long term, and they do not have the means to secure their own permanent housing in the future. They differ from those who are staying with friends or family out of choice in anticipation of prearranged accommodation, whether in their current hometown or an altogether new community. This living situation is understood by both parties to be temporary, and the assumption is that it will not become permanent.

3.3 People accessing short-term, temporary rental accommodations without security of tenure

In some cases people who are homeless make temporary rental arrangements, such as staying in motels, hostels, rooming houses, etc. Although occupants pay rent, the accommodation does not offer the possibility of permanency. People living in these situations are often considered to be part of the ‘hidden homeless’ population.

3.4 People in institutional care who lack permanent housing arrangements

Individuals are considered to be provisionally accommodated and ‘at risk’ of homelessness if there are no arrangements in place to ensure they move into safe, permanent housing upon release from institutional care. This includes individuals who:

- A) were homeless prior to admittance (where their stay may be short-term or long-term) and who have no plan for permanent accommodation after release; or
- B) had housing prior to admittance, but lost their housing while in institutional care; or
- C) had housing prior to admittance, but cannot go back due to changes in their needs.

In either case, without adequate discharge planning and support, which includes arrangements for safe and reliable housing (and necessary aftercare or community-based services), there is a likelihood that these individuals may transition into homelessness following their release. Institutional care includes:

- Penal institutions
- Medical/mental health institutions
- Residential treatment programs or withdrawal management centers
- Children's institutions/group homes

3.5 Accommodation/reception centers for recently arrived immigrants and refugees

Prior to securing their own housing, recently arrived immigrants and refugees may be temporarily housed while receiving settlement support and orientation to life in Canada. They are considered to be homeless if they have no means or prospects of securing permanent housing.

4) AT RISK OF HOMELESSNESS

Although not technically homeless, this includes individuals or families whose current housing situations are dangerously lacking security or stability, and so are considered **to be at risk of homelessness**. They are living in housing that is intended for permanent human habitation, and could potentially be permanent (as opposed to those who are provisionally accommodated). However, as a result of external hardship, poverty, personal crisis, discrimination, a lack of other available and affordable housing, insecurity of tenure and/or the inappropriateness of their current housing (which may be overcrowded or does not meet public health and safety standards) residents may be 'at risk' of homelessness.

An important distinction to make is between those who are at 'imminent risk' of becoming homeless and those who are 'precariously housed'.

No matter the level of probability, all who can be categorized as being ‘at risk’ of homelessness possess a shared vulnerability; for them, a single event, unexpected expense, crisis, or trigger is all it may take for them to lose their housing. As the risk factors mount and compound, so too does the possibility of becoming homeless.

4.1 People at imminent risk of homelessness

Many factors can contribute to individuals and families being at imminent risk of homelessness. Though in some cases individual factors (such as those listed below) may be most significant, in most cases it is the interaction of structural and individual risk that, in the context of a crisis, influence pathways into homelessness. In other words, what separates those who are at risk of homelessness due to *precarious housing* from those who are at *imminent risk*, is the onset of a crisis, a turn in events, or the increase in acuity of one or more underlying risk factors. Factors that may contribute (as singular or co-occurring factors) include:

- **Precarious employment.** Many people have unstable employment and live pay cheque to pay cheque. Precarious employment describes non-standard employment that does not meet basic needs, is poorly paid, part time (when full time work is desired), temporary, and/or insecure and unprotected. An unanticipated expense, increases in cost of living or a change in employment status may undermine their ability to maintain housing.
- **Sudden unemployment** with few prospects and little to no financial savings or assets, or social supports to turn to for assistance.
- **Supported housing with supports that are about to be discontinued.** Some Housing First models provide supports, but on a time-limited basis. If such resources (aftercare, services) are withdrawn but are still needed, individuals and families may be at imminent risk of re-entering homelessness.
- **Households facing eviction,** lacking the resources needed to afford other housing including social supports, or living in areas with low availability of affordable housing.

- **Severe and persistent mental illness, active addictions, substance use and/or behavioural issues.**
- **Division of Household** – caused by situations (such as separation, divorce, conflicts between caregivers and children, or roommates moving out) where the affected do not have the resources to keep the existing housing or secure other stable housing.
- **Violence/abuse (or direct fear of) in current housing situations**, including:
 - People facing family/gender violence and abuse
 - Children and youth experiencing neglect, physical, sexual, and emotional abuse
 - Seniors facing abuse
 - People facing abuse or discrimination caused by racism or homophobia or misogyny
- **Institutional care that is inadequate or unsuited** to the needs of the individual or family.

4.2 Individuals and families who are precariously housed

Many individuals and families experience severe housing affordability problems, due to their income, the local economy and/or the lack of availability of affordable housing that meets their needs in the local market. The income of these households is not sufficient to cover the household's basic shelter and non-shelter costs. This includes people who are on government benefits but who do not have sufficient funds to pay for basic needs.

The greater the shortfall of income in covering basic costs, the more at risk of homelessness the household is. Those classified as 'precariously housed' face challenges that may or may not leave them homeless in the immediate or near future (in the absence of an intervention). Those who manage to retain their housing in such circumstances often do so at the expense of meeting their nutritional needs, heating their homes, providing proper child care and other expenses that contribute to health and well-being.

Precarious and inadequate housing not only relate to household income and the physical structure of the dwelling, but also to lack of access to necessary supports and opportunities, including employment, health care services, clean water and sanitation, schools, child care centres and other social supports and facilities. Housing that is not culturally appropriate in the way it is constructed, the building materials used, and the policies that support it is also considered inadequate.

Canadian Mortgage and Housing Corporation (CMHC) defines a household as being in core housing need if its housing: “falls below at least one of the adequacy, affordability or suitability standards and would have to spend 30% or more of its total before-tax income to pay the median rent of alternative local housing that is acceptable (meets all three housing standards)” (CMHC, 2012).

- **Adequate** housing is reported by residents as not requiring any major repairs. Housing that is inadequate may have excessive mold, inadequate heating or water supply, significant damage, etc.
- **Affordable** dwelling costs less than 30% of total before-tax household income. Those in extreme core housing need pay 50% or more of their income on housing. It should be noted that the lower the household income, the more onerous this expense becomes.
- **Suitable** housing has enough bedrooms for the size and composition of the resident household, according to National Occupancy Standard (NOS) requirements.

Reference

Canadian Mortgage and Housing Corporation. (2012). “Core Housing Need Status.” Housing in Canada Online. Definitions of Variables. Retrieved from http://cmhc.beyond2020.com/HiCODefinitions_EN.html#_Core_Housing_Need_Status

File: _____
Date: _____
Location: _____

APPENDIX B:
**HOMELESS PARTICIPANT
SURVEY**

Thank you for helping us with this research.

Please answer all the questions the best you can. If any questions don't make sense, please ask for help. If there are any questions you don't want to answer, put an "X" through them. Please note there are questions on both sides of each page.

Remember: All your answers are confidential.

SECTION 1: PERSONAL INFORMATION

- P.1 Please indicate if you are:
Male ____ Female ____ Transgendered ____ Intersexed ____
- P.2 How old are you? ____
- P.3 Where were you born? City ____ Country ____
- P.4 If you were born outside of Canada, when did you move to Canada?
Year ____
- P.5 Do you identify with a particular ethnic or cultural group? (i.e. Italian, Afro-Canadian, Jewish Canadian, Scottish, etc.)
- Please list as many groups as you want.*
- P.6 Do you consider yourself to be Aboriginal or First Nations (i.e. status Indian, non-status Indian, Inuit or Métis)?
Yes ____ No ____ Not sure ____ Choose not to answer ____
- P.8 How would you describe your sexuality?
Straight ____ Lesbian ____ Gay ____ Bisexual ____
Two-Spirited ____ Transgendered ____ Transsexual ____
Not sure ____ Refuse to answer ____
- P.9 What is your immigration status?
Canadian ____ Landed Immigrant ____
Refugee ____ Status not known ____

Justice Issues

J.1 Do you think the **police in your city** do a good job, an average job or a poor job:

	Good job	Average job	Poor job	Don't know
a) ... of enforcing the law?	1	2	3	4
b) ... of promptly responding to calls?	1	2	3	4
c) ... of being approachable and easy to talk to?	1	2	3	4
d) ... of ensuring the safety of the citizens in your area?	1	2	3	4
e) ... of treating people fairly?	1	2	3	4

Contact With The Police

CP.1 During the past 12 months, did you come into contact with the police:

	Never	Once	2-5 Times	More than 5 times	More than once a month
a) ... as a victim of crime?	1	2	3	4	5
b) ... as a witness to a crime?	1	2	3	4	5
c) ... when they stopped to help you?	1	2	3	4	5
d) ... when you were making money (such as panhandling or squeegeeing)?	1	2	3	4	5

(CP.1 continued from previous page)

	Never	Once	2-5 Times	More than 5 times	More than once a month
e) ... because you were being arrested?	1	2	3	4	5
f) ... because they asked you to "move on"?	1	2	3	4	5
g) ... because they gave you a ticket?	1	2	3	4	5
h) ... because they asked you for identification?	1	2	3	4	5
i) ... because you are homeless?	1	2	3	4	5
j) Other (please specify)					

CP.2 In the past year, have you spent any time in jail?

Yes _____ No _____ Choose not to answer _____

CP.2 a) If yes, how many times? _____

CP.2 b) If yes, how long, in **weeks** _____ or **months** _____

Earning Income

We would now like to ask you questions about how you earn money. This involves both regular jobs and other things you might do to earn money.

Remember: all of your answers shall remain confidential.

I.1 In the past 30 days, have you received:

	Yes	No
a) Wages or salary from paid work	1	2
b) Welfare (social assistance, income support)	1	2
c) Family or disability benefits	1	2
d) EI (employment insurance)	1	2
e) Pension	1	2
f) Personal needs allowance (from a shelter)	1	2
g) Money from parents, caregivers or family members	1	2
h) Money from friends	1	2
j) Money from your partner	1	2

I.2 Do you currently have a paying job (with salary or hourly wage)?

Yes ____ No ____ Not sure ____ Choose not to answer ____

I.2 a) If yes, what is the job? _____

I.2 b) If yes, how many hours per week do you spend working there? ____

I.3 People also do other things to make money. In the past month, have you done any of the following activities to make money? Please make a selection for each activity.

	Never	A few times	Few times a month	Once a week	Few times a week	Daily
a) Panhandle	1	2	3	4	5	6
b) Squeegee	1	2	3	4	5	6
c) Street prostitution/ sex trade	1	2	3	4	5	6
d) Theft/ B&E, 'jacking'	1	2	3	4	5	6
e) Sell drugs	1	2	3	4	5	6
f) Sell stolen goods	1	2	3	4	5	6
g) Bottle picking	1	2	3	4	5	6
h) Research studies	1	2	3	4	5	6
i) Odd jobs	1	2	3	4	5	6
j) Scamming	1	2	3	4	5	6
k) Selling your stuff	1	2	3	4	5	6
l) Other (please specify)						

The Places That You Stay

T.1 In the past month, how many places have you stayed at night? Please check all that apply.

Location	Never	Once	2-5 Times	More than 5 times	Most of the time
a) Homeless shelter					
b) Squat					
c) In a park					
d) On the streets					
e) Own rented apartment/house					
f) Couch surfing/ friends' places					
g) Hostel					
h) Transitional housing					
i) Motel/hotel					
j) Jail					
k) Hospital					
l) Other (please specify)					

T.2 Do you regularly live with anyone? A partner, friend or others you share a sleeping space with?

Yes ____ No ____ Don't know ____ Choose not to answer ____

T.2 a) If yes, how many people? ____

T.2 b) Are these people usually (check more than one):

Your friends ____

Your partner ____

Family ____

Strangers ____

T.3) In the past month, where do you spend most of your time during the day? Please check all that apply.

Location	Never	Less than once a week	Once a week	Several times a week	Once every day	More than once a day
a) By myself						
b) With close friends						
c) With my partner						
d) At an agency for people who are homeless						
e) In my own place/ apartment						
f) In places where there are lots of strangers (5 or more people close by)						
g) In parks						
h) In stores or malls						
i) Walking in areas that are crowded						
j) Walking in areas that are pretty empty						
k) Public places like a library or cafe						
l) Other (please specify)						

T.4 Last winter (January or February), during the day, did you spend most of your time...

	When doing things outdoors	When doing things indoors	When sleeping during the day	Not applicable
a) By yourself	1	2	3	4
b) With boyfriend/ girlfriend	1	2	3	4
c) With one or more friends	1	2	3	4
d) In places where there are lots of strangers (five or more people close by)	1	2	3	4
e) Other (please specify)				

T.5 If you did *any* of the following things yesterday, how many people were usually sitting or standing close to you (within two feet)?

Activity	By myself	With 1 other person	With less than 5 people	With more than 5 people	Not applicable
a) On a bus or streetcar	1	2	3	4	5
b) Panhandling/ making money	1	2	3	4	5
c) Sitting on the street	1	2	3	4	5
d) Sitting in a park	1	2	3	4	5
e) Sitting in a café or library	1	2	3	4	5
f) Going to a drop-in	1	2	3	4	5
g) Going to a group meeting	1	2	3	4	5
h) Other (please specify)					

SECTION 2: YOUR HEALTH

H.1 In general, how would you describe your health?

Excellent ____

Very good ____

Good ____

Fair ____

Poor ____

Very poor ____

Not sure ____

H.2 Compared to one year ago, how would you say your health is now?

Much better ____

Somewhat better ____

About the same ____

Somewhat worse ____

Much worse ____

Not sure, don't pay attention ____

H.3 How often are you able to:

	Never	Less than once a week	Once a week	Several times a week	Once every day	More than once a day
a) Wash your hands	1	2	3	4	5	6
b) Wash your clothes	1	2	3	4	5	6
c) Eat on a clean surface	1	2	3	4	5	6
d) Take a shower	1	2	3	4	5	6
e) Brush your teeth	1	2	3	4	5	6

H.4 In the past month, how often have you:

	Never	Less than once a week	Once a week	Several times a week	Once every day	More than once a day
a) Gone without food	1	2	3	4	5	6
b) Had a poor sleep	1	2	3	4	5	6
c) Slept in overcrowded places	1	2	3	4	5	6
d) Felt very stressed	1	2	3	4	5	6
e) Spent the day in overcrowded places	1	2	3	4	5	6
f) Eaten food in overcrowded places	1	2	3	4	5	6
g) Felt unsafe	1	2	3	4	5	6
h) Felt relaxed	1	2	3	4	5	6

H.5 Last winter (January or February), how often did you:

	Never	Less than once a week	Once a week	Several times a week	Once every day	More than once a day
a) Go without food	1	2	3	4	5	6
b) Have a poor sleep	1	2	3	4	5	6
c) Sleep in overcrowded places	1	2	3	4	5	6
d) Spend the day in overcrowded places	1	2	3	4	5	6
e) Eat food in overcrowded places	1	2	3	4	5	6
f) Feel unsafe	1	2	3	4	5	6
g) Feel relaxed	1	2	3	4	5	6

H.6 How often in the past 30 days have you:

	Never	Less than once a week	Once a week	Several times a week	Once every day	More than once a day
a) Felt depressed	1	2	3	4	5	6
b) Felt happy	1	2	3	4	5	6
c) Enjoyed life	1	2	3	4	5	6
d) Felt lonely	1	2	3	4	5	6
e) Been hopeful for the future	1	2	3	4	5	6
f) Felt like doing nothing at all	1	2	3	4	5	6
g) Did not feel like eating	1	2	3	4	5	6
h) Talked less than usual	1	2	3	4	5	6
j) Had trouble getting enough sleep	1	2	3	4	5	6

H.7 Since you have been homeless, have you ever met with a professional (doctor, nurse, psychologist or social worker) because of any of the following problems?

	Yes	No, don't need to	No, but i would like to have help with this
a) Depression	1	2	3
b) Schizophrenia	1	2	3
c) Anxiety	1	2	3
d) Manic depression (bi-polar)	1	2	3
e) Difficulties with relationships	1	2	3
f) Brain injury	1	2	3
g) Attempted suicide	1	2	3
h) Trauma/assault	1	2	3
i) Alcohol or substance use	1	2	3
j) Other (please specify)			

Food

F.1 During the past month, do you feel you were regularly able to:

	Never	Less than once a week	Once a week	A couple times a week	Most days	Once every day
a) Eat breakfast	1	2	3	4	5	6
b) Eat lunch	1	2	3	4	5	6
c) Eat supper	1	2	3	4	5	6
d) Snack during the day	1	2	3	4	5	6
e) Snack during the evening	1	2	3	4	5	6
f) Drink clean water	1	2	3	4	5	6
g) Have enough food to go to work	1	2	3	4	5	6

F.2 Thinking about the past month, how often did you get one or more meals:

	Never	Less than once a week	Once a week	Several times a week	Once every day	More than once a day
a) From a shelter	1	2	3	4	5	6
b) From a soup kitchen/food bank	1	2	3	4	5	6
c) From a drop-in	1	2	3	4	5	6
d) From a mobile van	1	2	3	4	5	6
e) From a friend	1	2	3	4	5	6
f) From a stranger	1	2	3	4	5	6
g) By buying it yourself	1	2	3	4	5	6
h) Left over restaurant food	1	2	3	4	5	6

Friends

FR.1 In the past, have you ever been involved with a close group of friends that could be described as a “street family” or clique?

Yes ____ No ____ Not sure ____ Choose not to answer ____

FR.2 Do you currently hang around with a group of friends that could be described as a “street family” or clique?

Yes ____ No ____ Not sure ____ Choose not to answer ____

FR.3 From your experience, what are the benefits of this group of friends?
Do they:

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
a) Provide safety and protection	1	2	3	4	5
b) Help you make money	1	2	3	4	5
c) Share food and money	1	2	3	4	5
d) Provide emotional support	1	2	3	4	5
e) Have your back	1	2	3	4	5
f) Help you get drugs and alcohol	1	2	3	4	5
g) Act trustworthy	1	2	3	4	5
h) Give you friendship and companionship	1	2	3	4	5
i) Give you good information about staying healthy	1	2	3	4	5

THANK YOU!

CODE: _____

APPENDIX C:
**HOMELESS PARTICIPANT
INTERVIEW**

To be filled out by staff.

SECTION 1: PERSONAL INFORMATION

P.1 How old were you when you first became homeless? ____

P.1 a) What were the circumstances? Please explain.

P.2 How many times would you say you have been homeless? ____

P.3 When did you most recently become homeless?

Month _____ Year _____

P.4 Were you homeless a year ago? (probe – 2009, summer, fall winter)

Calgary: This includes Transitional housing

Yes ____ No ____ Not sure ____ Choose not to answer ____

P.1 a) What were the circumstances? Please explain.

Education

E.1 How far did you get in school? (Please check all that apply).

Grade 8 or lower ____ Grade 9 ____ Grade 10 ____

Grade 11 ____ Grade 12 ____ Completed high school ____

G.E.D (high school equivalency) ____ College/university ____

Some college/university ____ College degree/diploma ____

Technical or vocational school diploma ____

Some technical or vocational school ____ Other _____

Don't know/remember ____ Refuse to answer ____

E.2 What is the main way you make money?

SECTION 2: HEALTH

H.1 How would you describe your health?

Please explain.

H.2 Have you had any chronic lung disease(s) (e.g. pneumonia, asthma or bronchitis) in the past year?

Yes ____ No ____ Not sure ____ Choose not to answer ____

H.2 a) If yes, what was it? _____

H.3 Have you ever had a chest x-ray?

Yes ____ No ____ Not sure ____ Choose not to answer ____

H.3 a) If yes, have you had one within the past:

H.3 b) 6 months Yes ____ No ____ Not sure ____

H.3 c) One (1) year Yes ____ No ____ Not sure ____

H.3 d) Five (5) years Yes ____ No ____ Not sure ____

H.3 e) Never ____

H.4 In the past year, can you say indicate if you have had any of the following problems for three to four weeks or longer:

	Yes	No	Not sure
a) Chronic cough			
b) Chest pain			
c) Diabetes			
d) Cough up phlegm			
e) Cough up blood			
f) Unexplained weight loss/gain			
g) Fever that persists			
h) Fatigue/tiredness			
i) Night sweats			
j) Shortness of breath			
k) Infection			
l) Other (please specify)			

H.5 Do you have any of the following medical conditions?

	Yes	No	Not sure	How long?	Meds?	Difficulty accessing meds?
a) Arthritis						
b) Lupus						
c) Diabetes						
d) Lung disease						
e) Cancer						
f) HIV/AIDS						
g) Tuberculosis						
h) Hepatitis A, B or C						
i) Other (please specify)						

H.6 Do you consider yourself to have a disability (e.g., limited in what you can do at home, at work, or at school because of a disability or chronic health problem)?

Yes ____ No ____ Not sure ____ Choose not to answer ____

H.6 a) If yes, what kind of disability?

Using Substances

S.1 Do you smoke?

Yes ____ No ____ Not sure ____ Choose not to answer ____

S.1 a) If yes, how often?

Never	Less than once a week	Once a week	Several times a week	Every day	Occasional binge
0	1	2	3	4	5

S.2 Do you drink?

Yes ____ No ____ Not sure ____ Choose not to answer ____

S.2 a) If yes, how often?

Never	Less than once a week	Once a week	Several times a week	Every day	Occasional binge
0	1	2	3	4	5

S.3 Do you use street drugs?

Yes ____ No ____ Choose not to answer ____

S.3 a) If yes, what kinds?

S.3 b) How often?

Never	Less than once a week	Once a week	Several times a week	Every day	Occasional binge
0	1	2	3	4	5

S.3 c) Do you use with other people?

Probe: Who? Friends? Strangers?

S.3 d) What proportion of the people you hang out with use street drugs?

All ____ Most ____ Some ____
None ____ Choose not to answer ____

S.4 Do you gamble?

Yes ____ No ____ Not sure ____ Choose not to answer ____

S.4 a) If yes, what kind of gambling?

S.4 b) How often?

Never	Less than once a week	Once a week	Several times a week	Every day	Occasional binge
0	1	2	3	4	5

S.4 c) Do you gamble with other people?

Probe: Who? Friends? Strangers?

S.4 d) Do you consider your gambling to be a problem?

Yes ____ No ____ Not sure ____ Choose not to answer ____

S.4 e) Do you believe that gambling contributed to your homelessness?

Yes ____ No ____ Not sure ____ Choose not to answer ____

S.4 f) If so, how?

SECTION 3: ACCESSING HEALTH CARE

AH.1 Where do you get health care?

Regular doctor or nurse ____ Emergency department (hospital) ____

Community health center ____ Walk-in clinic ____

Shelter or drop-in ____ Other (please specify) ____

AH.2 Do you have a health card accepted in this province?

Yes ____ No ____ Not sure ____ Choose not to answer ____

AH.3 Do you have a regular doctor or nurse you can see regularly?

Yes ____ No ____ Not sure ____ Choose not to answer ____

AH.3 a) How often do you go to them? (*Probe: Be specific.*)

AH.4 Is it easy for you to see a doctor if you need to?

Yes ____ No ____ Not sure ____ Choose not to answer ____

AH.5 Have you been in the hospital in the past year?

Yes ____ No ____ Not sure ____ Choose not to answer ____

AH.5 a) If yes, for what?

AH.5 b) How long?

AH.6 Do you generally have concerns about how you are treated in hospitals?

Yes ____ No ____ Not sure ____ Choose not to answer ____

Please explain.

SECTION 4: KNOWLEDGE OF H1N1

Last year, there was lots of public awareness about a pandemic called H1N1. It was also referred to as “the swine flu”.

K.1 Do you remember hearing about H1N1 last fall?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.2 What do you know about H1N1?

Please explain.

K.3 There was a lot of talk about H1N1 last year, from the spring of 2009 until early this year. Were you homeless during this period?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.4 During that time, were you concerned about becoming infected with H1N1?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.5 Have you received any vaccines of any kind in the last year? (e.g., flu, mumps, measles, rubella)?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.5 a) If yes, for what? _____**K.6 Were you aware of the H1N1 vaccine?**

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.6 a) If so, where did you hear about it?

Please explain.

K.7 Were you aware of any vaccine clinics?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.7 a) If so, did you know how to access them?

Please explain.

K.8 Did you decide to get the H1N1 vaccine?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.8 a) Why or why not?

Please explain.

K.9 If you wanted the H1N1 vaccine, were you able to get vaccinated?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.9 a) If yes, where?

K.9 b) If yes, when?

K.9 c) If no, why not?

K.10 During the H1N1 pandemic last year, did you ever have the flu or a chest infection?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.11 Do you know if you became infected with H1N1?

Yes ____ No ____ Not sure ____ Choose not to answer ____

Probe: FOR H1N1 ONLY

K.11 a) If yes, who confirmed your case (doctor, nurse, etc.)?

K.11 b) How were you told that you were infected?

*Probe: FOR FLU **OR** H1N1*

K.11 c) Were you ever put in isolation?

*K.11 d) Were you treated at an agency that serves the homeless
or at a hospital?*

*K.11 e) If treated at an agency that serves the homeless, what
treatment did they prescribe/suggest?*

*K.11 f) If at an agency that serves the homeless, could the staff
answer your questions?*

K.11 g) Was your privacy protected?

K.11 h) Anything you want to add?

K.12 If infected, did you wind up in a hospital?

Yes ____ No ____ Not sure ____ Choose not to answer ____

K.12 a) What happened? How were you treated?

SECTION 5: H1N1 AND THE PLACES YOU GO

Now we are going to ask you a number of questions about the places you visit, including shelters and drop-ins or day programs.

Homeless Shelters

PG.1 Do you ever go to homeless shelters at night?

Yes ____ No ____ Not sure ____ Choose not to answer ____

Probe:

PG.1 a) If yes, how often?

PG.1 b) Are there some shelters that you like more than others?

PG.1 c) If yes, which ones and for what reasons?

*PG.1 d) Besides sleeping, do you get any other services
at the shelter?*

PG.1 e) Do you ever do any volunteering there? If yes, explain.

PG.1 f) How long do you stay when you go? Why?

Sleeping Conditions

SC.1 a) When you are there, do you like to be alone or hang out with other people?

SC.1 b) How many people sleep in the same room as you?

SC.1 c) How far apart are they from you?

SC.2 Think of the centre you go to most often. How well do you trust the staff?

Completely	For the most part	Somewhat	Not so much	Not at all	Depends on the staff person
1	2	3	4	5	6

SC. 3 Do the staff at the shelter give you the kind of information and support that you need?

Please explain.

Drop-in Centres and Day Programs

D.1 During the day do you ever go to drop-ins or other services for people who are homeless?

Yes ____ No ____ Not sure ____ Choose not to answer ____

D.1 a) If yes, how often? _____

D.2 What agencies do you go to most often?

Please list.

D.3 Are there some drop-ins that you like more than others?

Probe:

D.3 a) If yes, which ones and for what reasons?

D.3 b) What do you go to the drop-ins for?

D.3 c) How long do you stay when you go?

D.3 d) When you are there, do you like to be alone or hang out with other people?

D.3 e) How many people are usually in the drop-ins in the same room as you?

D.4 Think of the centre you go to most often. How well do you trust the staff?

Completely	For the most part	Somewhat	Not so much	Not at all	Depends on the staff person
1	2	3	4	5	6

Please explain.

D.5 Do the staff at the drop-ins give you the kind of information and support that you need?

Please explain.

SECTION 6: LAST YEAR DURING THE H1N1 OUTBREAK

Now I'm going to ask you some questions about shelters, drop-ins and other services you may use during the day.

Homeless Shelters

SC.4 Did you go to any of these shelters last year during the H1N1 outbreak?

Yes ____ No ____ Not sure ____ Choose not to answer ____

SC.5 Did you have any concerns about staying at shelters during that time?

SC.5 a) If yes, what were your concerns?

SC.6 Did the staff at the shelter ever give you information about H1N1?

Yes ____ No ____ Not sure ____ Choose not to answer ____

SC.6 a) If yes, how did they communicate with you?

Probe: By talking with you? Giving you printed info? Other?

SC.6 b) What did they talk about? _____

SC.6 c) If you had any questions about H1N1, were the staff readily available to talk about it?

Yes ____ No ____ Not sure ____ Choose not to answer ____

SC.6 d) Why or why not?

SC.6 e) Did you trust the information?

Yes ____ No ____ Not sure ____ Choose not to answer ____

SC.6 f) Why or why not?

SC.7 Did the shelter operate any differently because of worries about H1N1?

Yes ____ No ____ Not sure ____ Choose not to answer ____

SC.7 a) If yes, how did they act differently? More stand offish?

More caring?

SC.7 b) Were the shelters cleaner?

SC.8 Do you have any suggestions about how shelter staff could have better handled the H1N1 situation?

Please explain.

Drop-ins and Day Programs

Now we're going to go back and ask you some questions about the drop-ins and day programs you may have been using a year ago.

D.6 Did you go to the drop-ins and day programs you spoke about last year during the H1N1 pandemic?

Yes ____ No ____ Not sure ____ Choose not to answer ____

D.7 Did you have any concerns about going into the drop-in during that time?

D.7 a) If yes, what were your concerns?

D.8 Did the staff at the drop-in ever give you information about H1N1?

D.8 a) If yes, how did they communicate with you?

Probe: By talking with you? Giving you printed info? Other?

D.8 b) What did they talk about? _____

D.8c) If you had any questions about H1N1, were the staff readily available to talk about it?

Yes ____ No ____ Not sure ____ Choose not to answer ____

D.8 d) Why or why not?

D.8 e) Did you trust the information?

Yes ____ No ____ Not sure ____ Choose not to answer ____

D.8 f) Why or why not?

D.9 Did the drop-in operate any differently because of worries about H1N1?

Yes ____ No ____ Not sure ____ Choose not to answer ____

*D.9 a) If yes, how did they act differently? More stand offish?
More caring?*

D.10 Do you have any suggestions about how drop-in staff could have better handled the H1N1 situation?

Communication

C.1 Where did you get your best information about H1N1? How would you rank these? *(Go through each one.)*

	Very important	Somewhat important	Not important
C.1 a) Friends			
C.1 b) Family			
C.1 c) Agency staff			
C.1 d) Health care providers			
C.1 e) Television news			
C.1 f) Newspapers			
C.1 g) Posters and pamphlets			
C.1 h) Information letter			

C.1 i) Which of these is the most reliable source of information to you and why?

Please explain.

C.1 j) Which of these is the least reliable source of information to you and why?

Please explain.

C.2 Did you receive information from the agencies you go to?

Yes ____ No ____ Not sure ____ Choose not to answer ____

C.2 a) If yes, did you find the information useful?

Yes ____ No ____ Not sure ____ Choose not to answer ____

C.2 b) If yes, did you understand the information that was provided?

Yes ____ No ____ Not sure ____ Choose not to answer ____

C.3 If you had concerns about H1N1, were you able to speak to agency staff about these concerns?

Yes ____ No ____ Not sure ____ Choose not to answer ____

C.4 Do you have any recommendations for the agencies about how they communicate about health issues and pandemics in the future?

In the Event of a Serious Pandemic

SP.1 If H1N1 had gotten a lot worse, and more people had gotten sick, would that have changed your views about going to drop-ins or shelters?

Yes ____ No ____ Not sure ____ Choose not to answer ____

SP.1 a) If yes, how?

Please explain.

SP.2 If there was a severe pandemic in the future, would you go to a drop-in or shelter?

Yes ____ No ____ Not sure ____ Choose not to answer ____

SP.2 a) Why or why not?

SP.2 b) If no, where would you stay during the day?

SP.2 c) Where would you sleep at night?

SP.2 d) Where would you get food?

SP.2 e) Where would you go for health care?

SP.3 What would be the best way to get information to you in the event of a pandemic?

Please explain

FINALLY ...

F.1 How did you find doing this survey?

F.2 Is there anything specific you would like to say about your experiences during the pandemic?

Please explain.

F.3 Do you have any advice for people who provide health care?

Please explain.

F.4 Is there anything else you would like to say?

Please explain.

Thank you for the time you spent speaking with me. Your responses are important as they will be used to help develop new programs. We appreciate your comments. Do you have any questions or concerns that you would like to discuss? If you decide later that you have questions about the project you can contact: _____

THANK YOU!

Name of Interviewer: _____ File #: _____

Location of Interview: _____

Date of Interview: _____

APPENDIX D:

AGENCY AND SERVICE PROVIDER INTERVIEW

Instructions for interview:

- Introduction
- I will be taking some detailed notes while you talk
- Reminder: all your comments are strictly confidential and will only be used for research purposes
- If you do not feel like answering a question, feel free to say that you do not wish to answer it
- If you have questions in the future about this interview, please feel free to contact: _____

ORGANIZATIONAL STRUCTURE

NOTE: If possible, the information about organizational structure should be obtained beforehand, through a web search.

O.1 Can you tell me your role in the organization?

O.2 What is your official title?

O.4 How long have you been in that position?

O.5 Have you had any other roles in this organization?

O.5 a) If yes, please explain.

O.6 How long have you been with the organization in total?

O.7 Can you tell me about the mandate of your organization?

O.8 What would you consider your organization's area of expertise to be?

O.9 What kind of services do you provide?

O.10 Who funds your agency's programs and services?

O.11 How many clients does your agency serve on a standard day?

O.12 What are the eligibility requirements to use your services?

O.13 Do you provide any on site health related services?

O.14 What health related services do you offer?

O.15 Can you tell me about any partnerships your organization has with other agencies around delivery and health services?

Yes ____ No ____

O.15 a) If yes, please explain (Probe: From where? How often do they come?)

O.16 Where would your clients go for health care provision in the event that your agency was unable to provide it?

SERVICE POPULATION

SP.1 Who is your target population?

SP.2 Do you serve client populations who are not specifically homeless? In other words, does your mandate extend to other populations?

Yes ____ No ____

SP.2 a) If yes, please explain.

SP.3 How would you describe the people who come to your organization?

Gender ratio ____ Visible minorities ____ Sexual minorities ____
Families ____ Seniors ____ Youth ____

SP.4 How might your clients be different from other homeless clients who go to other agencies?

PANDEMIC PLANNING IN THE CONTEXT OF H1N1

P. Prior to the H1N1 outbreak:

P.1 Did your organization have a pandemic plan in place?

Yes ____ No ____

P.1 a) If yes, please explain.

P.2 Could you tell me what you knew then about the City of Toronto's
Pandemic plan?

P.3 Had your staff received any training?

Yes ____ No ____

P.3 a) If yes, please explain.

F. When H1N1 first emerged in spring 2009:

F.1 Did your staff raise any concerns?

Yes ____ No ____

F.1 a) If yes, please explain.

F.2 Did your organization have a contingency plan in place in case staff were to fall ill?

Yes ____ No ____

F.2 a) If yes, please explain.

F.3 Did your clients raise any concerns?

Yes ____ No ____

F.3 a) If yes, please explain.

N. Since spring 2009:

N.1 Has your agency reviewed its pandemic plan and procedures?

Yes ____ No ____

N.1 a) If yes, please explain.

N.2 What modifications have been made in pandemic planning and procedure?

N.3 Has the H1N1 pandemic affected the operation of your agency in any way?

Yes _____ No _____

N.3 a) If yes, please explain.

EXTERNAL SUPPORTS FOR PANDEMIC PLANNING

E.1 Have you received any outside support for the development of your pandemic plan?

Yes _____ No _____

E.1 a) From whom (person, organization, LHINs)?

E.1 b) When did this occur and how often?

E.1 c) Where did this occur (outside meeting, in house meeting)?

E.1 d) How was this support helpful?

E.1 e) What were the key learnings?

- E.2 One of the characteristics of H1N1 is that it affects children, youth, pregnant women, people with preexisting health conditions, and young adults (17-24). Has your organization's pandemic plan taken into consideration these high risk groups?

Yes ____ No ____

E.2 a) If yes, please explain.

- E.3 Have you received any special communication or external supports with regard to these high risk groups?

E.3 a) If yes, please explain.

COMMUNICATION

- C.1 What was your main source of information regarding H1N1 and pandemic planning? (*Probe: Public health, news media, other service providers?*)

- C.2 Did you regularly receive updates from your local public health officials?

Yes ____ No ____

C.2 a) How often?

C.2 b) How were they circulated among your staff?

C.2 c) How did you ensure that your staff understood the updates?

C.3 Did you feel your agency received adequate information about H1N1 and pandemics?

Yes ____ No ____

C.3 a) If no, please explain. (Probe: What additional information would have been useful?)

C.4 Has the information provided to you by public health officials been sufficient to allow you to effectively plan for the H1N1 pandemic?

Yes ____ No ____

C.4 a) If no, explain. (Probe: What were the shortcomings?)

C.5 What measures has your agency taken to connect with other agencies and/or services that will be affected in the event of an influenza pandemic?

C.6 Have you been in contact with other homeless agencies about these issues?

Yes ____ No ____

C.6 a) If yes, which ones?

C.6 b) What was discussed?

C.6 c) What action plans were developed?

C.6 d) What challenges did you experience in this process?

C.7 If you have been a part of any committees or planning meetings on pandemic preparedness, what were they?

C.8 Have you been in contact with support services (for example, police, health, justice/corrections, LHINs) regarding pandemic planning?

Yes ____ No ____

C.8 a) If yes, which ones?

C.8 b) What action plans were developed?

C.8 c) What were the challenges in developing action plans?

WORKING WITH STAFF

WS.1 Were the staff given any training for H1N1?

Yes ____ No ____

WS.1 a) If yes, explain. (Probe: Describe the training.)

WS.2 Did your staff receive the H1N1 immunization?

Yes ____ No ____

WS.2 a) Approximately how many were immunized?

WS.2 b) Who coordinated this?

WS.2 c) When did they receive it?

WS.3 What concerns, if any, have staff raised about H1N1 leading up to and throughout the outbreak period?

WS.4 What mechanisms did you put in place for staff to raise their concerns about H1N1?

WS.5 What type of support was available to your staff if they had concerns regarding H1N1?

WS.6 What kinds of resistance did the staff exhibit?

WS.7 How did you witness this?

WORKING WITH CLIENTS

WC.1 In what ways did you prepare your clients for the H1N1 pandemic?

WC.2 What challenges did you face?

WC.3 How was the issue of street youth taken up?

WC.4 What provisions were made for alternative non-western models of health and disease?

WC.5 What concerns, if any, have clients raised about H1N1 leading up to and throughout the outbreak period?

WC.6 What mechanisms did you put in place for clients to raise their concerns about H1N1?

WC.7 What type of support was available to your clients if they had concerns regarding H1N1?

WC.8 What kinds of resistance did your clients exhibit?

WC.9 How did you witness this?

WC.10 Has your client group been identified by an external body as a priority for vaccination?

Yes ____ No ____

WC.10 a) If yes, explain.

COMMUNICATING WITH CLIENTS

CC.1 What has been your communication strategy for working with clients on the H1N1 pandemic?

CC.2 How did you deliver the H1N1 information to your clients?

CC. 3 How did you ensure your clients understood the information provided?

CC. 4 What challenges, if any, did you face in communicating with your clients about H1N1?

CC. 5 What challenges, if any, did the special needs or characteristics of your clients (e.g., addictions, mental health challenges, and language barriers) did you face?

VACCINATION OF CLIENTS

VC.1 Have the clients at your agency been able to receive the
H1N1 immunization?

Yes ____ No ____

If yes, please explain.

*VC.1 a) What procedures have been put in place to assist with
the vaccination process?*

VC.1 b) Who coordinated this?

VC.1 c) Where did they receive the vaccine?

VC.1 d) When did they receive it?

*VC.1 e) If you were to provide an estimate, what percentage of
your clients received the H1N1 vaccine?*

VC.2 In what ways have these procedures been effective?

VC.3 What would you do differently next time?

INFECTED CLIENTS

IC. 1 Did you have any procedures or strategies for identifying clients
with H1N1?

IC.1 a) If yes, explain.

IC.2 What procedures/precautions were your staff to take if an infected client was present in your agency?

IC.3 How were these procedures followed?

IC.4 Describe the procedures followed for the infected client, if any, from the time your staff realized the person was infected.

IC.5 Were you able to isolate the person?

Yes ____ No ____

IC.5 a) If yes, explain.

KEY CHALLENGES AND LESSONS LEARNED

L.1 Having gone through H1N1, what are the major lessons you have learned about how to best address an infectious disease outbreak among the homeless population?

L.2 Was there anything you would have done differently in managing H1N1?

Yes ____ No ____

L.2 a) If yes, explain.

L.3 What challenges, if any, have you experienced working with other stakeholders?

L.3 a) Hospitals (including hospital discharge protocols)

L.3 b) Health care facilities

L.3 c) Public health

L.3 d) Regional health authority

L.3 e) Municipal government or other local coordinating body

L.3 f) Police

L.3 g) Other agencies

L.4 What challenges, if any, have you experienced with access to supplies (e.g., masks and gloves)?

L.5 What challenges, if any, have you experienced in making isolation and quarantine arrangements?

L.6 What challenges, if any, have you experienced because of your facility's design and set-up?

IN THE EVENT OF A MORE SERIOUS PANDEMIC

MS.1 If H1N1 became more serious, how prepared do you feel your agency would be?

MS.2 What are the key concerns you have about your agency's preparedness for a more serious pandemic?

MS.2 a) About the well-being of people who use your services

MS.2 b) Staff availability and responsiveness

MS.2 c) About your agency's ability to respond

MS.2 d) About your access to supplies

MS.2 e) About other kinds of providers (police/hospitals)

MS.2 f) About the overall approach to planning

MS.3 How would a more serious outbreak affect the daily operations of your organization?

MS.3 a) What would your organization do in the event of a staffing shortage?

MS.3 b) What staff positions are essential to keep your agency functional?

MS.3 c) Is there any mandate to close services in the event of a significant outbreak of influenza among your staff and/or clients served?

MS.3 d) If so, how will clients access services needed?

MS.4 Given your experience with H1N1, what are the main challenges that your facility design and set-up would present in the event of a more serious pandemic?

MS.5 Do you have concerns about coordination in the homelessness sector?

MS.5 a) If yes, explain.

MS.6 Is there anything else you would like to tell us about your agency and the topic of pandemics?

Yes ____ No ____

MS.6 a) If yes, explain.

Pandemic outbreaks pose a very real threat to the health of homeless individuals and to the security of the social infrastructure they often rely on for support. *Pandemic Preparedness and Homelessness* brings together the work of Canadian researchers to explore how our current responses to homelessness impact on the vulnerability of homeless populations in the event of a pandemic. During the 2009 and 2010 H1N1 influenza outbreak, a team of Canadian researchers from across the country undertook an analysis of the impact of the outbreak within the context of homelessness, through surveys and interviews with front-line workers, policy-makers, and persons with lived experience. This book details the findings of this multi-site study, including chapters on the challenges of pandemic planning in the context of homelessness, accessing justice amid threats of contagion, and the health and wellness of homeless individuals in Canada, drawing on a large national data set. This book also features case studies of how the four Canadian cities of Victoria, Calgary, Regina and Toronto prepared for, and responded to, the H1N1 outbreak in relation to homeless citizens. This book is a must read for anyone interested in pandemic planning and homelessness in Canada.

ISBN 978-1-77221-056-9



9 781772 210569 >