Citizenship in a Post-Pandemic World: A Foucauldian Discourse Analysis of H1N1 in the Canadian Print News Media

by

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Dalla Lana School of Public Health
University of Toronto

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Abstract

The 2009/2010 outbreak of H1N1 thrust pandemic influenza into the media spotlight. Not only did the outbreak dominate media coverage during that time, but news coverage also played an integral part in the official public health response for public communication across Canada. As influenza pandemics are notoriously fraught with scientific uncertainty, much of that news coverage centred on risk (e.g. infection, vaccination). Over the past several decades, risk has emerged as a central organizing principle and a prevailing characteristic of modernity, and recent studies on the discursive constitution of risk claim that risk discourses operate as a technology of governance within neoliberal societies. To date, very little work has been done to explore the discursive constitution of H1N1, or H1N1 risk, within the news media. To address this gap, I analyzed print news coverage of the H1N1 outbreak within two major English-language, Canadian daily newspapers, *The Globe and Mail* and *The Toronto Star*. Applying a governmentality and risk perspective as an analytic lens, and informed by the theoretical concepts of biopower and biopedagogy, I explored how media discourses on risk made possible particular ways of acting, seeing, and talking about ourselves, both as individuals and in social groups. The results indicate that three distinct strands of risk discourse were operating in the media during the H1N1 pandemic: ‘causal tales’ which serve as explanations of risk; ‘cautionary tales’ which warn of expanded H1N1 risk; and, ‘precautionary tales’ which offer instructions for
managing H1N1 risk. I argue that these results suggest a shifting discursive terrain surrounding
H1N1 risk and its management, in which each new ‘tale’ recalibrates the conditions of
possibility for H1N1, and hails the audience into a new H1N1 storyline and a heightened
awareness of H1N1 risk. Further, I argue that this expansion of ‘risk space’ makes possible a
particular kind of ‘pandemic subject’ which operates as a neo-liberal bio-citizen. Lastly, I posit
that there is a heretofore untheorized risk rationality, operating in the context of pandemic
influenza, that pertains to the case-by-case assessment of risks located within the social
interactions of daily life, which I term ‘social-interactive risk’.
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# Table of Contents

Acknowledgments................................................................................................................... iv

Table of Contents.................................................................................................................... vi

List of Figures ............................................................................................................................ ix

List of Appendices ..................................................................................................................... x

Chapter 1 Introduction ............................................................................................................... 1

Chapter 2 Background ............................................................................................................... 8
  2.1 H1N1 and influenza pandemics ......................................................................................... 9
    2.1.1 The 2009 pandemic ................................................................................................... 12
    2.1.2 Influenza pandemic as a public health problem ....................................................... 13
  2.2 The media and health ....................................................................................................... 20
    2.2.1 H1N1 and the news media ....................................................................................... 24
    2.2.2 Media discourses on infectious disease .................................................................... 27
  2.3 Conclusions ...................................................................................................................... 34

Chapter 3 Theoretical Perspective ............................................................................................. 35
  3.1 Governmentality ................................................................................................................ 35
    3.1.1 Power, knowledge and discourse ............................................................................. 37
    3.1.2 Subjectivity ............................................................................................................... 39
    3.1.3 Expert knowledge .................................................................................................... 40
  3.2 Biopower and Biopedagogy ............................................................................................... 42
    3.2.1 Discipline of the body ............................................................................................. 43
    3.2.2 Biopolitics ............................................................................................................... 44
    3.2.3 Where the two poles of biopower meet - The family ............................................. 45
    3.2.4 Biopedagogy .......................................................................................................... 46
6.2 The pandemic subject as a contemporary, neoliberal bio-citizen ........................................145
   6.2.1 Potential victim and potential vector .........................................................................146
   6.2.2 Self-surveillance and self-regulation in multiple domains of life ............................148
   6.2.3 The convergence of self-interest with the public good ...........................................150
   6.2.4 Social-interactive risk ...............................................................................................153
6.3 Conclusions .....................................................................................................................154

Chapter 7 Conclusions ........................................................................................................156
   7.1 Overview of the study ..................................................................................................156
       7.1.1 Major contributions .............................................................................................158
   7.2 Major Implications .....................................................................................................163
   7.3 Directions for future research .....................................................................................165
   7.4 Final thoughts .............................................................................................................168

References ............................................................................................................................170

Appendices ..........................................................................................................................192
   Appendix A: Key sampling decisions ..............................................................................192
   Appendix B: Inclusion and exclusion criteria used to generate the study pool ...............193
   Appendix C: Study pool ‘talk’ categories and the major topics each category contained ..194
   Appendix D: Inclusion and exclusion criteria used to generate the study sample .........195
   Appendix E: List of study sample articles ........................................................................196
List of Figures

Figure 1. Correspondence between news coverage of H1N1 and major H1N1 events from May 2009 through December 2010 73

Figure 2. Relative volume of ‘talk’ categories within study pool from May 2009-December 2010 77

Figure 3. Causal Tale Exemplar 90

Figure 4. Cautionary Tale Exemplar 102

Figure 5. Precautionary Tale Exemplar 114

Figure 6. The great vaccine debate 131
List of Appendices

Appendix A: Key sampling decisions

Appendix B: Inclusion and exclusion criteria used to generate the study pool

Appendix C: Study pool ‘talk’ categories and the major topics each category contained

Appendix D: Inclusion and exclusion criteria used to generate the study sample

Appendix E: List of study sample articles
Chapter 1
Introduction

Influenza is not a tidy or predictable disease, and those who attempt to label it and put it in a box do so at risk. (Kilbourne, 1987, p. 13)

This thesis explores risk discourses within Canadian news media coverage of the 2009-10 H1N1 influenza pandemic. Informed by the theoretical concepts of governmentality (Foucault, 2003), biopower (Foucault, 2007), and biopedagogy (Wright & Harwood, 2009), and applying a governmentality and risk perspective as an analytic lens, I analyzed Canadian print news coverage of the H1N1 influenza pandemic in order to consider the ways in which risk discourses in the media make possible particular ways of acting, seeing, and talking about ourselves, both as individuals and in social groups.

Medical historians suggest that the word, ‘influenza’, originated during an outbreak in late medieval Italy during which the illness was “attributed to the influence [influenza] of the stars” (Dehner, 2007, p. 712), or to the influenza di freddo, the influence of cold weather (Beveridge, 1977). More recently, analysis of archived tissue samples taken from the lungs of several victims of the 1918-1919 ‘Spanish Flu’ (Taubenberger & Morens, 2006) indicate that the genetic origins of influenza are avian (Dugan, Chen & Spiro, et al., 2008; Reid, Taubenberger & Fanning, 2004)—the ancestral version of the virus at some point having adapted and made its way from the enteric cells of waterfowl to the respiratory epithelial cells of humans, the mechanisms of which are not fully understood (Dugan et al., 2008).

Despite the benefit of advanced laboratory diagnostics and modern epidemiological surveillance, the 2009-2010 pH1N1\(^1\) influenza pandemic, like many influenza outbreaks before it, was fraught with uncertainty (Morens & Taubenberger, 2011) and confusion. A patchwork of different names was used—Mexican flu, swine influenza A, swine flu, pig flu, and so on—which some claim led to controversy and “Babylonian confusion” (Enserink, 2009, p. 871) about what H1N1 was exactly. In Canada, the shared responsibilities for health between federal and provincial jurisdictions complicated logistical aspects of planning and response (Deber, 2014), and the news coverage featured several debates concerning the vaccination program, including

\(^1\) H1N1 outbreak that reached pandemic status
statements from a high-profile Canadian physician who warned that there were, “vested interests flourishing from the fear of pandemics” (Schabas, 2009, para. 7). News reports and retrospective studies have claimed that much of the general public experienced widespread uncertainty about H1N1, particularly about whether or not to get the flu shot, a sentiment that one columnist jokingly referred to as “confusion [emphasis added]” (McGinn, 2009, para.1). The 2009-2010 pandemic was the first in history for which pandemic planners had defined complex strategies for surveillance, public health response, and clinical treatment well in advance. However, it was new terrain, and no one could fully predict what results their efforts would yield, although past attempts at mass-vaccination campaigns in 1957 and 1968 had shown the potential for disastrous results (Dehner, 2007). As the esteemed vaccine pioneer, Edwin Kilbourne, once noted, influenza is neither tidy, nor predictable (Kilbourne, 1987).

Influenza pandemic planning threw into sharp relief issues concerning the role of the individual and family in relation to the population, institutions and the state. Across Canada, and also at the provincial and territorial levels, numerous infection control measures were put in place to reduce transmission and infection (Public Health Agency of Canada [PHAC], 2008). However, these same measures simultaneously posed numerous logistical, as well as social and ethical challenges, including threats to individual liberty in the interest of protecting the larger population (e.g. quarantine); placing some lives at increased risk in order to save others and to maintain social order (e.g. expectations for health care and emergency workers to report to work during a pandemic); and providing priority access to state funded health care and resources to some groups before others (e.g. vaccine prioritization). Arguably the most contentious aspect of H1N1 response in Canada concerned the vaccine roll-out, which saw fluctuating public demand, accusations of queue-jumping and corruption, as well as arguments between various scientists, health experts, and the public, played out in the media coverage. During the second wave of the pandemic, erstwhile Toronto Star reporter, Judy Gerstel, mused about the troubled vaccine roll-out, “Someone could write a book about the psychology of the H1N1 flu. It's fascinating to observe people's attitudes to the pandemic and their reasons for not getting the vaccine. Personality, prejudices and politics all play a role.” (Gerstel, 2009, para. 1).

As well, the 2009 outbreak of H1N1 thrust pandemic influenza into the news media spotlight. H1N1 was one of the most prevalent and widely read news stories of 2009 worldwide, and was voted by Canadian news editors to be the most important news story of the year (Galloway, 2009). Following emergency protocol, public health authorities collaborated with
news media platforms to communicate with the public during the course of the outbreak (PHAC, 2009). News coverage of pandemics, however, is neither disinterested, nor value-free, and pandemics in particular challenge conventional assumptions about health promotion, about the role of the media (Lee & Basnyat, 2013), and about the responsibilities of the state toward its citizens, as well as those of citizens toward the state.

In late June 2009, nearly two months after the first reports of a mystery bug began appearing in Mexico, and twelve days after the World Health Organization (WHO) declared H1N1 to be a pandemic, *The Globe and Mail* published the article, “Six-year-old Ontario girl dies of H1N1 virus” (GM062309). It appeared on page 9 of the National News section and was written by former *Globe and Mail* intern Jill Colvin. The article begins with an announcement from the Ontario Ministry of Health regarding the fourth death in Ontario that occurred “in connection with the strain”. No name is given for the deceased, and only in the headline does it note that the six-year-old girl had lived in Peel Region. Although the article states that laboratory testing had confirmed the presence of H1N1, in several points it also mentions that the “exact role” that H1N1 played in the girl’s demise was unclear, and that other “pre-existing health conditions” may have been a factor. Next, Ontario’s Chief Medical Officer of Health, Arlene King, states that the girl’s condition “deteriorated very quickly” and that she had not been in school or hospital while exhibiting symptoms. Ontario Health Minister, David Caplan, offers his condolences, and extolls the public to continue taking precautions such as hand washing, coughing into shirt sleeves and staying home when ill, saying, “This is a reminder of why we need to remain vigilant in monitoring the H1N1 situation”. Next, the article outlines steps being taken in response to the outbreak, including epidemiological contact tracing in the girl’s extended family and school network, and citing Minister Caplan’s position that “the province is prepared to handle the outbreak as it evolves”. The article closes with the latest incidence rates from the Public Health Agency of Canada and the WHO stating the number of “laboratory-confirmed” H1N1 cases in Ontario, across Canada, and worldwide.

Then in late October 2009, five days after the H1N1 vaccine was approved in Canada, an article was published in *The Toronto Star* reporting on the death of Evan Frustaglio, “Son feared getting flu, father says; Parents tried to allay 13-year-old Evan’s concerns after H1N1 scare in spring ‘and now he’s gone’” (GM102809). The article appeared on page 6 of the National News section, amid a swell of news coverage prompted by the boy’s sudden death, and was written by reporter Katie Daubs who specialized in breaking news and feature stories. A photograph of
smiling boys in hockey gear, a shiny golden trophy in the foreground, accompanies the story. Evan Frustaglio is pictured sporting a boyish grin, index finger raised in the air signaling ‘#1’. The picture caption states that the hockey team captain is in quarantine and one team member has been prescribed the anti-viral drug Tamiflu.

“Thirteen-year-old Evan Frustaglio was scared of getting the flu”; the article begins with this dire presage and relates “one painful memory” plaguing Evan’s grieving father, who “like many parents” tried to ease his child’s worries about H1N1: “We told him it was all okay”. A confirmation by public health officials that Evan’s death was “due to H1N1 complications” follows, along with an admission that Toronto Public Health erred in claiming previously that the boy suffered from asthma. A few sentences describe attempts made by the Frustaglio family to seek medical care for Evan, which suggest that the boy received inadequate treatment:

“When Evan had a sore throat and dry cough at a hockey tournament in London on the weekend, he was told by doctors and pharmacists it was a simple seasonal cold. He was sent home from a Toronto walk-in clinic on Sunday and told to take Tylenol” (GM102809).

A quote from Evan’s father immediately follows: ‘I would have brought my son to the hospital... It gave us a false sense of security.’”

The article traces the quick progression of Evan’s demise, “just three days after he began complaining of symptoms,” from sore throat, to cough, to lying unconscious on the floor of the family bathroom. A quotation from Evan’s aunt describes the boy as a “respectful, happy, kind child”. Several times he is referred to as a “young hockey-player”. In the next paragraph, Toronto medical officer of health, David McKeown, says he, “won’t speculate on what might have happened” if Evan had been admitted to hospital, but advises parents to keep children at home, watch for symptoms and consult a doctor “if symptoms become worrisome”. Arlene King, Ontario’s Chief Medical Officer of Health, calls the death a “very rare occurrence” citing only 28 H1N1 related deaths since the preceding April. The article closes with a quotation from Evan’s hockey coach regarding lingering worries among Evan’s hockey teammates who had recently shared close quarters with Evan: “All the boys swam in the pool together, went to the hot tub and shared water bottles at the tournament...” The last line of the article goes to the vice-principal of Hill Academy, Evan’s school, who lauds the boy as a multisport athlete and a “driving force that brought hockey to his school.”
Only three weeks after the death of Evan Frustaglio, on November 12, 2009, the article, “In hand sanitizer we trust”, (GM111209) was published in The Globe and Mail. Written by Montreal correspondent, Ingrid Peritz, it appeared on page 7 of the national news section. The accompanying image features a woman in winter clothes pressing the hand sanitizer dispenser at the doorway of a cathedral. The picture caption lists some of the preventative measures being taken there “as part of the attempt to keep the faithful safe”. The caption reads, in part, “Religious services across Canada are placing cleanliness next to godliness - with Purell at altars, elbow bumps in the pews and waves instead of handshakes in the house of worship’s door”. The article begins with an assurance that houses of worship across the country are modifying traditions and adopting novel approaches to prevent infection, “reshaping religious rituals as ministries struggle to spread the faith without spreading the flu”. A description of a newly-invented, electric holy water dispenser follows, with a quip that parishioners may “worship without worry”. The Italian inventor of the holy-water dispenser is quoted as wanting to “preserve religious tradition in the face of flu pandemic”. Examples of preventive measures put in place across Canada comprise the largest part of the article. These preventative measures range from the communion bread that was served on toothpicks by surgical-gloved servers at Runnymede United Church in Toronto, to the Shaare Zion synagogue in Montreal where the traditional practice of touching or kissing the Torah had been suspended, to the Montreal priest who inadvertently ruined some parishioners clothing by putting bleach in the holy water to “kill germs”. The article notes that, in case the outbreak worsens, many religious organizations have podcasts of their services available so that people can participate “directly in the sanitized safety of their own homes”. The article closes with a list of H1N1 prevention recommendations issued by the Roman Catholic Archdiocese of Toronto to be implemented at all masses. These recommendations include hand cleaning stations at church entrances, staying home when ill, suspending the practice of taking communion from a shared chalice, and bowing or nodding rather than shaking hands.

As these three example news articles demonstrate, over the course of a few short months, news coverage of H1N1 was transformed. In this thesis I will argue that the transformation in news media coverage indicates a shifting discursive terrain around H1N1 risk and its management, during which risk became more extensive as a governmental rationality, and consequently, more extensive as a governmental strategy. In other words, ‘risk’ became a more prevailing way of organizing our thinking and our actions in the context of an influenza
Chapter 2, provides background information about influenza pandemics of the past century and up to the most recent 2009-10 H1N1 outbreak, after which I describe some of the particular kinds of problems that influenza pandemics pose for public health, including vaccination campaigns and communicating with the public. Next, I turn to the theoretical literature from media studies and the sociology of the media in order to discuss the importance of studying media representations of health issues. Following that discussion, I summarize the current empirical research on H1N1 and the media, locating this thesis empirically within studies of discursive representations of infectious disease in the media, more broadly, and of H1N1, more specifically.

Chapter 3 lays out the logic of the theoretical approach taken in this thesis. First, I describe the major theoretical constructs that guided this study: governmentality, biopower and biopedagogy. Next, I discuss how risk discourses function as a rationality and a governmental strategy with particular social, political, and ethical implications. Lastly, I address the analytic implications of a governmentality and risk theoretical framework for understanding and conceptualizing media texts and representations of risk within those texts.

Chapter 4 describes my central research questions and objectives and explicates the methodological approach taken to generate and analyze the news media data. After outlining my central research question and objectives, I describe Foucauldian discourse analysis as a methodological approach. I then discuss the implications of that approach for data collection and analysis. Next, I lay out, step by step, the techniques used to generate, organize, and analyze the news media data, pausing at several points along the way to elaborate and reflect on methodological tensions and questions that arose during the course of the study. Lastly, I reflect on research quality.

Chapter 5 presents the results of the analysis which I present as the following themes: ‘causal tales’, ‘cautionary tales’, and ‘precautionary tales’. Causal tales draw upon epidemiological and clinical expert sources to trace infection from source to case, thereby explaining how and why H1N1 spreads. They promote the official recommended pandemic preparation and response measures. Cautionary tales heighten awareness of and warn of H1N1 risk through dramatic and unexpected H1N1 cases. Drawing upon the lived experiences of those affected by H1N1 infection, they confound the logic of official pandemic planning and preparation. Precautionary tales offer instructions for managing H1N1 in everyday life. Drawing
from local knowledge and lay-epidemiological accounts, they depict new and/or expanded H1N1 risk management practices across a multitude of domains of daily life.

In Chapter 6 I interpret the study results through a governmentality and risk theoretical perspective, and make two related arguments. Firstly, I argue that the three ‘tales’ indicate a shifting discursive terrain around H1N1 risk and its management in which there is an expansion of ‘risk space’, and secondly, that the discursive constitution of risk within precautionary tales makes possible a particular kind of ‘pandemic subject’ which operates as a neo-liberal bio-citizen.

Chapter 7 concludes this thesis by summarizing the major contributions (substantive, methodological, and theoretical), the major implications, and positing directions for future research based on lingering questions.
Chapter 2
Background

2 Background

There was terror afoot in 1918, real terror. ... The media and public officials helped create that terror – not by exaggerating the disease but by minimizing it, by trying to reassure. ... The fear, not the disease, threatened to break the society apart. ... So the final lesson, a simple one yet one most difficult to execute, is that those who occupy positions of authority must lessen the panic that can alienate all within a society. ... Those in authority must retain the public’s trust. (Barry, 2005, p. 462)

Each year, seasonal influenza causes an estimated 5 million infections, and between 250,000 and 500,000 excess deaths worldwide (Houser & Subbarao, 2015). In Canada, there are approximately 75,000 hospitalizations associated with seasonal influenza each year, and an estimated 6,700 deaths (Shah, 2003), mainly among the immunocompromised, the elderly, and those with chronic disease (Houser & Subbarao, 2015). Healthy children and adults typically do not experience severe complications (e.g. bacterial pneumonia) or die as a result of seasonal ‘flu’ (Monto, 2008; Morens, Taubenberger & Fauci, 2008). After exposure to the virus, usually through inhaled droplets or hand transfer (Killingley & Nguyen-Van-Tam, 2013), and after an incubation period of 1-3 days (Houser & Subbarao, 2015), typical symptoms of influenza infection include cough, fever, sore throat, chills, aches, and fatigue (Khanna, Gupta & Gupta et al., 2009).

The influenza viruses that are responsible for seasonal ‘flu’ outbreaks are subject to mutations, known as antigenic shifts and drifts, which allow for new viral strains to develop (Dehner, 2007). Periodically, a strain develops to which the broader population has little or no immunity, and a global epidemic—otherwise known as a pandemic—can occur. In the last one

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2 The exact mechanisms of human transmission are debated, but the commonly agreed upon means of transmission among humans are droplets, aerosols and contact transmission. See Killingley & Nguyen-Van-Tam (2013).

3 Antigenic drifts are gradual changes that result in annual seasonal influenza and are the reason that new vaccines are needed each year. Antigenic shifts are more dramatic changes that are thought to occur when different viral strains combine (Treanor, 2004). Antigenic shifts are the cause of influenza pandemics (Khanna et al., 2009).

4 Despite widespread use of the term in epidemiology, public health, and the media, there is currently no formal, shared definition of what constitutes a ‘pandemic’ (Doshi, 2011; 2013).
hundred years, four influenza pandemics occurred within a period of 11 to 41 years: in 1918, 1957, 1968, and 2009 (WHO, 2008). Influenza A virus of the H1N1 subtype played a role each time.

In this chapter, I begin by providing a general overview of the influenza pandemics that occurred over the course of the past century. Following this overview, I discuss how pandemic influenza poses significant challenges to public health, and how Canadian pandemic plans attempted to address those challenges. Next, I turn to the literature from the sociology of the media and media studies to discuss the importance of studying news media representations of pandemics. I then provide a brief summary of the empirical studies of H1N1 and the news media that have been done to date. Lastly, I locate this thesis within the empirical literature on discourses on infectious disease in the media more generally, and more specifically, within studies of infectious disease discourses, governmentality and risk.

2.1 H1N1 and influenza pandemics

The 1918-1919 influenza pandemic has been called the “mother of all pandemics” (Taubenberger & Morens, 2006) and is considered to be “among the most deadly events in recorded human history” (Morens, Taubenberger & Harvey et al., 2010, p.10). Despite the moniker ‘Spanish Flu’, which arose due to lack of information amid widespread press censorship during WWI, it is thought to have emerged in either Kansas, USA (Barry, 2004), in northern China (Humphries, 2014), or in crowded French army barracks (Oxford, Sefton & Jackson, et al., 1999). Approximately one third of the global population is thought to have had clinically apparent illness (Taubenberger & Morens, 2006), and it is now estimated to have killed between 50 and 100 million people worldwide (Johnson & Mueller, 2002). Even by the most conservative estimates, “…the 1918 pandemic, in absolute numbers, was the most lethal infectious disease ever to afflict humanity, killing more people in a shorter time than the bubonic plague, HIV, Mycobacterium tuberculosis, or any other microbe” (Vance, 2011, p.102). The pandemic

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5 During WWI, Spain was neutral and the Spanish press was not under the same national security and censorship concerns as other countries. They widely published reports of the influenza outbreak, leading to the misconception that it was a “Spanish” flu. See Dehner (2007) and Barry (2004; 2005) for historical accounts of pandemic influenza in the twentieth century.
occurred in three waves, and was distinguished by both its extremely high infection rate and high mortality, particularly among young and healthy adults (Dehner, 2007; Morens et al., 2010). High fever, pneumonia, and cyanosis (a blue discolouration due to lack of oxygen) in the ears and lips were a horrifying part of what the medical historian, George Dehner, called the, “stunning ferocity of its attack” (Dehner, 2007, p. 713). More recently, some researchers have posited that many of the 1918 deaths were due to cytokine storms, a potentially fatal reaction of a healthy body’s strong immune response (Morens, et al., 2010), but questions remain about exactly why and how so many people died so quickly (Taubenberger & Morens, 2006). The diagnostic tools of the early twentieth century were unable to identify the cause of the pandemic—whether it was caused by a virus, a toxin, or bacteria (Dehner, 2007; Kilbourne, 2006). Pig farmers in the American Midwest, however, reported a rise in ‘hog flu’ cases during the same time period (Schmidt, 2009). In 1995, virologist Jeffrey Taubenberger and team analyzed viral RNA fragments from preserved autopsy materials, eventually sequencing the genome of the virus and identifying the H1N1 subtype (Taubenberger & Morens, 2006; Taubenberger, Reid & Krafft, et al., 1997). Pigs, which can survive the infection, have served as a viral “reservoir” since then (Schmidt, 2009, p. 396).

The mid-twentieth century saw two more, comparatively milder, pandemics. On April 14, 1957, nearly four decades after the ‘Spanish’ influenza, The New York Times reported that an apparent “epidemic” had infected 250,000 people in Hong Kong (Kilbourne, 2006, p. 10). Maurice Hilleman, a microbiologist at Walter Reed Army Medical Center, read the news report and suspected a novel strain of influenza (Dehner, 2007). By 1957, laboratory techniques had sufficiently developed to investigate influenza viruses (Kilbourne, 2006). A sample of the virus was recovered in the Australian outback and was sent to Walter Reed in Washington DC, where it was identified first as influenza A, and later more precisely, as H2N2 (Kilbourne, 2006). In the US, a vaccine to protect against what came to be known as ‘Asian’ flu, was developed but there were several problems with distribution, including complaints that large corporate firms had pre-ordered and monopolized scarce supplies of the vaccine (Dehner, 2007), and that in some cities, professional athletes received their doses before first responders (Cockburn, Delon & Ferreira, 1969). While the 1957 ‘Asian’ pandemic killed an estimated 2 to 4 million people (Vance, 2011), researchers at New York Hospital observed that patients with pre-existing rheumatic heart
disease, and women in the third trimester of pregnancy, appeared particularly vulnerable (Louria, Blumenfeld & Ellis, et al., 1959).

Then, in 1968, ‘Hong Kong’ flu emerged (Dehner, 2007). Since epidemiological communication with mainland China was limited in 1968 (Kilbourne, 2006), news of the outbreak reached the West through reports in *The London Times* (Dehner, 2007). Diagnostic testing revealed that a novel combination of the H3N2 virus was responsible (Morens et al., 2010). Again, attempts were made at developing a vaccine, but pharmaceutical developers were unprepared and the pandemic ‘peaked’ before the vaccine could be distributed (Dehner, 2007). 1 to 2 million died as a result of ‘Hong Kong’ flu, making it the mildest influenza pandemic of the twentieth century (Vance, 2011). It was later determined that the viruses responsible for both the ‘Asian’ and ‘Hong Kong’ pandemics were composed of genes derived from the 1918 ‘Spanish’ virus, that had shifted by combining with genes from other circulating avian influenza strains (Taubenberger & Morens, 2006), making both the 1957 and 1968 influenza strains the direct viral descendants of the 1918 virus (Scholtissek, Rohde & Von Hoyningen, et al., 1978).

On February 13th, 1976, *The New York Times* published a warning from prominent influenza virologist, Edwin D. Kilbourne, that another pandemic was likely. That same day, reports began to circulate that soldiers at the Fort Dix military base in New Jersey were exhibiting flu-like symptoms (Kilbourne, 2006). Ten years earlier, H1N1 had been infecting troops in military bases in Japan, Korea and New Jersey (Kilbourne, 2006) but the outbreak had petered out. This time, however, an estimated 230 soldiers became infected and one died (Gaydos, Top & Hodder, et al., 2006). The viral strain was later identified as H1N1 (Gaydos et al., 2006), similar in its genetic make up to that of the ‘Spanish’ influenza that swept the globe in 1918. With the backing of then US President Ford (Neustadt & Fineberg, 1978), and venerated medical scientists Jonas Salk and Albert Sabin (Begley, 1977), the US government undertook the ambitious goal of inoculating 210 million Americans. That goal was never reached. After several false starts with the program, it became apparent that there were major problems when the vaccine was administered to children, namely that the minimum effective dosage needed to provide immunity came with dangerous side effects (Begley, 1977). By the close of the year, CDC administration was alerted to an extraordinary number of cases of the rare, serious autoimmune disorder, Guillain-Barre syndrome, among those who had received the vaccine. Investigation into those cases brought the influenza inoculation campaign to a halt within a
matter of weeks (Safranek, Lawrence & Kuriand, et al., 1991). Not only did the thwarted immunization program fail to ensure immunity through a safe and effective vaccine, but it has been argued that the campaign profoundly damaged relationships between the federal government, healthcare agencies, and the American citizenry (Neustadt & Fineberg, 1978). The entire vaccination effort was denounced as a “fiasco and disaster” (Kilbourne, 2006, p. 11). Public trust in mass immunization programs and in the safety of influenza vaccines plummeted (Begley, 1977).

2.1.1 The 2009 pandemic

Based on this history, public health planners in the early years of this century anticipated that another influenza pandemic was approaching, but were unable to predict precisely when it would happen (Kotalik, 2005). The failed vaccination programs of 1957 and 1968 had spurred public health officials and researchers globally to prepare for future pandemics, for instance by increasing surveillance of disease in pigs and birds, and by making plans to expedite vaccine production and distribution (Dehner, 2007). Then in April 2009, media surveillance, once again, alerted officials to a potential pandemic (Davis, Lohm & Flowers, et al., 2014). The CDC soon reported that two children in California were infected with a new strain of swine flu virus (Khanna et al., 2009). In the following weeks, more cases followed: 5 in the US, and 18 in Mexico. As of April 13th, 2009, approximately 2000 cases of respiratory illness had been reported, mainly among healthy young adults (Khanna et al., 2009), in a rural Mexican town close to a highly industrialized hog “megafarm” (Vance, 2011, p. 100). It was determined that the 2009 virus was comprised of a hybrid virus (Morens et al., 2010), containing genes from swine, human, and avian influenza, some of which were descended from the 1918 strain (Garten et al., 2006). Like the 1918 strain, pandemic H1N1 (pH1N1) produced severe cases in young adults while the elderly experienced partial protection (Morens et al., 2010), as well as a remarkable “capacity for human-to-human transmission” (Schmidt, 2009, p. 396). By June 11th,

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6 H1N1 is a zoonotic disease, meaning that it can be spread from animals to humans. Domestic poultry and pigs have become zoonotic sources for influenza viruses to enter the human population (Houser & Subbarao, 2015).
The World Health Organization declared a global pandemic after an estimated 24,000 people had been infected, and 143 had died. After fifteen months, the end of the pandemic was announced in August 2010 (Bangerter, 2014). Recent estimates range widely, putting the total death toll of the 2009-2010 ‘swine flu’ pandemic between 151,700–575,400 worldwide (Doshi, 2013).

### 2.1.2 Influenza pandemic as a public health problem

In addition to logistical planning and clinical research, public health measures are vital components of influenza pandemic preparedness (Gostin, 2006). A watershed moment for pandemic preparedness was the 2003 SARS outbreak, which acted as a “wake up call” (Nuttall & Dye, 2013, p. 1287) for public health authorities globally, and revealed the need for comprehensive plans for public health measures during epidemics and pandemics. In Canada, particularly—where SARS was heavily reported in the news media (Berry, Wharf-Higgins & Naylor, 2007) and where responses included widespread surveillance and the first implementation of quarantine in Toronto in at least fifty years (Basrur, Yaffe, & Henry, 2004)—SARS had a major impact on public health by revealing “critical gaps” (Kort, Stuart, & Bontovics, 2005, p. 409) in emergency response capacity. A federal report published by the National Advisory Committee on SARS and Public Health, *Learning from SARS: renewal of public health in Canada: a report of the National Advisory Committee on SARS and Public Health*, called for an overhaul and a strengthening of public health’s capacity to identify, respond to, and manage future infectious disease outbreaks (Naylor et al., 2003). The SARS outbreak sensitized Canadian authorities to the potential harm posed by future pandemics, and prompted provincial and federal governments to develop emergency pandemic plans (Kort et al., 2005). The Public Health Agency of Canada document, *Canadian Pandemic Influenza Preparedness: Planning Guidance for the Health Sector* (CPIP), serves as an overall guide for influenza pandemic planning at the federal, provincial, territorial, municipal and organizational levels, and

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7 See Doshi’s (2011) discussion of the controversy surrounding the 2009 H1N1 outbreak being labelled as a ‘pandemic’. Doshi argues that although the WHO has been producing pandemic planning documents for over a decade, it has never issued a formal definition of what constitutes a pandemic.

8 Modelling was used to estimate global H1N1 mortality rates because diagnostic specimens were not always collected, and influenza cannot always be detected at time of death (Dawood et al., 2012).
outlines recommended strategies for pandemic response, including vaccination, public health measures, and communications with the public during an influenza pandemic (PHAC, 2008).

### 2.1.2.1 The pH1N1 vaccination program

The CPIP hailed vaccines as a “cornerstone” of the public health response to influenza prevention (PHAC, 2008, Annex D p. 3). The word ‘vaccine’ is found over 300 times within that document⁹, and, in the 2006 archived version of the CPIP document¹⁰, vaccination was referred to as, “the primary means to prevent disease and death from influenza during an epidemic or pandemic” (PHAC, 2006, p. 5). Early clinical research into the safety and efficacy of the 2009 vaccines indicated that they were well tolerated and resulted in a protective immune response in adults of all ages (Talaat et al., 2010), and in children under 10 years of age (Frey et al., 2012). After the rise of Guillain-Barré syndrome after the 1976 outbreak, vaccine safety surveillance had been increased (Yih et al., 2012). Although some recent research points to a small, but statistically significant, association between Guillain-Barré syndrome and influenza vaccines, particularly in pandemic influenza vaccines (Martín-Arias, Sanz, Sáinz, Treceño, & Carvajal, 2015), other researchers have found no significant elevation in adverse events following the 2009 H1N1 vaccination (Yih et al., 2012).

Canada was the first country worldwide to secure a domestic supplier for vaccine production (Tyshenko & Paterson, 2010), and it was in the province of Ontario in 2000 that the world’s first universal influenza immunization program was initiated (Shah, 2003). The CPIP explicitly states the goal to provide a “safe and effective vaccine program to all Canadians as quickly as possible” (PHAC, 2008, Annex D, p. 6) in the event of an influenza pandemic. Production of a vaccine against a pandemic virus, however, cannot begin until the novel virus is first isolated and cultured. This means that the particulars of the vaccine strategy and clinical guidelines (e.g. minimum effective dosage, adverse effects, individual risk factors for poor outcome of infection, etc.) cannot be conclusively resolved in advance (Arras, 2005; PHAC,

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⁹ In the more recent version available online, as of 2016.

¹⁰ Previous version(s) of the CPIP document had a slightly different full title but the same acronym as the present version. The 2006 version was known as the Canadian Plan for an Influenza Pandemic for the Health Sector.
Additionally, vaccines are typically not available during the initial months of a pandemic, as they take approximately 6 months to develop, manufacture, and distribute (Osterholm, 2005). During the 2009-2010 pandemic, Canada’s vaccine manufacturer began shipping vaccine supplies to federal and provincial agencies in late October 2009 (Ontario Ministry of Health and Long-Term Care [MOHLTC], 2010). Health Canada approved the sale of both adjuvanted and non-adjuvanted vaccines by November 12th, just over 6 months after the initial outbreak, and 5 months after the pandemic was declared (PHAC, 2010).

Due to the time required to prepare and distribute, vaccines are in short supply during the early stages of a pandemic and some form of prioritization, or ‘rationing’, is seen to be necessary (Arras, 2005; Zimmerman, 2007). Ostensibly, priority lists are determined by the likelihood and severity of infection (Rosella et al., 2013), and by which groups or individuals are deemed necessary to societal function during a pandemic (such as first responders). Priority access lists in Canada are informed by WHO and PHAC, but the order in which recommended priority groups may access the vaccine are ultimately under provincial jurisdiction (12). Vaccination uptake rates during pH1N1 varied widely across Canada, and between age groups (PHAC, 2010). About half of the Canadian population was vaccinated (Boerner, Keelan, Winton, Jardine, & Driedger, 2013), which was one of the highest vaccination rates worldwide (Quigley, Macdonald, & Quigley, 2016).

However, the Canadian pH1N1 vaccine program was fraught with controversy from the start (Rachul, Ries, & Caulfield, 2011). Debates centred on three points: the effectiveness of the

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11 Vaccine adjuvants provide enhanced protection.

12 In Ontario, the first priority groups included the following: people aged < 65 with chronic illness; pregnant women; children between the age of 6 months to 5 years; people living in remote settings or communities; health care workers; and household contacts and caregivers of high-risk individuals (Ontario Ministry of Health and Long-Term Care, 2010). By November 16th, more groups had been added: front line first responders; institutional corrections workers; people > 65 living in long-term care homes; children <13; people >65 with chronic conditions. By November 19th, the pH1N1 vaccine was made available to all (Ontario Ministry of Health and Long-Term Care, 2010).
vaccine; the safety of the vaccine—in particular the safety of thimerosal\textsuperscript{13} and vaccine adjuvants for children, pregnant women and people with allergies and autoimmune disorders; and regional variation in priority group listing (Rachul et al., 2011). Safety concerns over adjuvants led to changes in recommendations after the vaccine roll-out began; pregnant women were initially instructed to get the adjuvanted vaccine, but later those recommendations were changed\textsuperscript{14} (Ritvo et al., 2010). To further complicate matters, in late October, just after the death of a 13-year-old Canadian boy, Evan Fustaglio, many vaccine clinics were overwhelmed with long queues when a sudden surge in demand outstripped supply (Quigley et al., 2016).

Recent research suggests that pH1N1 vaccine behaviour among the general public was shaped by multiple factors, including trust in public health and government, trust in the mass media, and safety concerns. An online survey of Canadians during the pandemic indicated low levels of vaccination intent generally (Taha, Matheson, & Anisman, 2013), however, those same respondents indicated that they would change their minds about vaccination, “if a single person they knew contracted the illness” (Taha et al., 2013, p. 278). Further, Taha et al., (2013) found that participants who reported higher trust in media were more likely to be vaccinated, while those who did not trust the media were less likely to intend to vaccinate. In another study, Henrich and Holmes (2011) conducted a content analysis of online reader comments posted in response to Canadian news articles about vaccines. They found the following ‘themes’ were most common: fear of H1N1, fear of the vaccine, government competency, government trustworthiness, media responsibility, personal protective measures, and pharmaceutical companies (Henrich & Holmes, 2011). Boerner et al., (2013) examined vaccine behaviour in three Canadian provinces (Alberta, Manitoba and Ontario), and found that the best predictor of pH1N1 vaccination was having been vaccinated previously against seasonal influenza, with

\textsuperscript{13} Thimerosal is a mercury based preservative added to some vaccines. Since the late 1990’s there has been controversy within some parent’s groups concerning claims of thimerosal toxicity and autism.

\textsuperscript{14} Initially, pregnant women were offered the adjuvanted vaccines because they were understood to be at particular risk of serious infection and complication, and thus in need of increased immune protection. The decision to switch was based on WHO guidelines that recommended pregnant women be offered non-adjuvanted vaccines due to a lack of data on the safety of adjuvanted vaccines during pregnancy. However, Canada had already ordered the adjuvanted vaccine and there was concern that waiting for the non-adjuvanted supply would take additional time. See Rosella et al., (2013) for a more detailed discussion of the Canadian pH1N1 vaccine roll-out.
barriers to access being the major reason for not being vaccinated. A study focussing on vaccine behaviour among Metis communities across Manitoba (Driedger, Maier, Furgal, & Jardine, 2015), however, found that many did not get the vaccine due to safety concerns, distrust of the government, and concerns that Aboriginal communities were being used as “guinea pigs” (Driedger et al., 2015, p. 7).

There have been controversies concerning pH1N1 vaccine safety outside of Canada, as well. For instance, Determann et al., (2016) conducted focus groups in the Netherlands, Sweden and Poland, and found that distrust of government and health authorities made some participants particularly concerned about vaccine safety. A systematic review of vaccine behaviour surveys found that the most significant predictors of intention to vaccinate included the following: risk of infection, proximity or severity of the public health event, severity of personal consequences resulting from the illness, harm or adverse events from the vaccine, acceptance of previous vaccination, and ethnicity (Nguyen et al., 2011), while Bean’s (2011) analysis of anti-vaccine websites post-H1N1 found a dominant rhetoric that the pandemic threat was “manufactured” (p. 1874) and that vaccines were thus unnecessary and unsafe. A review of social science research by Barrelet, Bourrier, Burton-Jeangros, & Schindler, (2013), however, had quite different findings: trust in state authorities, access to scientific information and the ability to consult with medical staff promoted vaccination, while lack of trust in authorities, consulting anti-vaccine websites, fear of adverse effects/adjuvants, and safety concerns reduced vaccination.

2.1.2.2 Additional public health measures

Alongside vaccination programs, additional H1N1 prevention and management measures were recommended at the population or community level (PHAC, 2008), many of which were directed at restricting activities. For instance, the CPIP strongly recommended self-isolation (voluntarily staying home from non-essential public events and locations while experiencing symptoms) in order to decrease the number of people potentially exposed to ill persons, and thereby, limit the spread of H1N1 (PHAC, 2008). Based on the same rationale, school and daycare closures, as well as restrictions on public gatherings, were also recommended under certain conditions. Quarantine (the confinement of people who may have been exposed to a virus but may not yet be symptomatic) was also recommended under certain conditions (PHAC, 2008). Travel restrictions were considered because modern, mass transportation allows for human-transmissible influenza
to travel easily worldwide (Fielding et al., 2005). In Canada, travelers were screened for signs of respiratory illness at international points of entry, four million health notices were distributed to travelers at airports across Canada during the first weeks of the outbreak, and information was posted in airports about quarantine procedures and infection prevention behaviours (PHAC, 2010). Many other preventative public health measures were considered, but were ultimately not recommended, such as use of masks by well individuals and implementing hand sanitizing stations in public places (PHAC, 2008).

2.1.2.3 Public communication, fear and trust

In a pandemic, public health authorities depend on the mass media’s capabilities to rapidly get messages out to a highly mobile and diverse public, spanning a large geographic area (Lawrence, Kearns, Park, Bryder, & Worth, 2008; Quigley et al., 2016). In Canada, the public communication strategy was heavily reliant on mass media (Maunula, 2013), and included sending out press releases, statements and technical briefings, press conferences, as well as having public health organizations conduct frequent scans of media content in order to “ensure quality control” (Public Health Agency of Canada, 2009, p. 5) of its messages. Shortly after the first wave of H1N1 began in Canada, the federal government launched a significant public awareness campaign in anticipation of a coming, deadlier second wave (Quigley et al., 2016). The campaign included the distribution of 10 million brochures, and 1.7 million information guides (Quigley et al., 2016), and centred on “infection prevention behaviours, personal preparedness and a call to action for Canadians to get vaccinated” (PHAC, 2010, p. 54).

Public health often works from the assumption that the general populace is lacking in information, needs to be educated, to be calmed, and to have their misunderstandings and assumptions corrected. Reflecting on media coverage of pH1N1, the quotation below from Davis et al., (2014) summarises this assumption about the public during influenza pandemics:

“It is also the case that, in relation to action on the H1N1 pandemic...the general public is often painted as a problem. They are variously seen as lacking knowledge and motivation; as unwilling to engage with the scientific reason that informs policy; or as easily pitched into panicky overreaction.” (Davis et al., 2014, p. 499-500)
The epigraph quotation at the beginning of this chapter from historian James M. Barry regarding public fear and the ‘Spanish Flu’ illustrates a common set of interrelated assumptions, and an oft repeated sentiment: that influenza pandemics and/or news coverage of pandemic leads to public panic and that this putative public panic must be managed by officials. Along those lines, Cho and Salmon claim that one of the unintended effects of health communication campaigns can be an “epidemic of apprehension” among the public (Cho & Salmon, 2007, p. 293). Additionally, Clare Hooker notes that health professionals often worry not only about the impact of infectious diseases, but also about the impact of public fear and fear-mongering by the media (Hooker, 2008; 2010). Both ‘swine flu’ (Hooker, 2008) and SARS are examples of what Hooker calls ‘health scares’, the latter being a novel disease and its behaviour appearing “uncertain” and “uncontrolled” (Hooker, 2010, p. 133). Hooker asserts that health scares are a new social phenomenon, marked by “sudden mass insecurity” on the part of a significant portion of the population regarding a specific health threat (Hooker, 2008, p. 124). Hooker argues that health scares are, “events in which fears of possible but unlikely catastrophe are entertained in conditions of scientific uncertainty...” (Hooker, 2008, p. 127), which include the following: uncertainty, lack of resources, inexperienced communicators, inconclusive research, and non-accessible, technical content in communication (Hooker, 2010).

Although there were several accusations of pandemic fear-mongering among the press and among public health authorities during pH1N1 (Schabas, 2009; Vance, 2011), post-pandemic research into public fear and H1N1 suggest that, in many countries, the public did not panic. Several studies found that the general population largely did not consider the pandemic to be a serious threat (Davis, Stephenson, Lohm, Waller & Flowers, 2015; Lau, Griffiths, Choi & Tsui, 2009; Rubin, Amlôt, Page & Wessely, 2009; Seale et al., 2010; Sherlaw & Raude, 2013). A scoping review of empirical studies of public opinion on H1N1 by Barrelet et al., (2013) similarly found that among the public overall, H1N1 risk was thought to be low, and even “artificial” (Barrelet et al., 2013, p. 115). Rather than being fearful of influenza, several studies indicate that the public was instead distrustful of government, of public health authorities, and of pharmaceutical companies (Barrelet et al., 2013; Determann et al., 2016; Larson & Heymann, 2010), and marked by cynicism toward the motives of public health authorities, drug companies and media, and skepticism regarding ‘real’ threat posed by infectious diseases (Bangerter, 2014).
Public trust, however, is seen as a key element in the implementation of public health measures (Dupras & William-Jones, 2012), and an integral value within pandemic planning (Upshur et al., 2007). Several studies indicate that higher levels of trust in health agencies during pH1N1 was linked with greater willingness to follow recommended preventative behaviours (Gilles, et al., 2011; Siegrist & Zingg, 2014). A survey of US participants even found that those who closely followed news media coverage reported higher levels of trust (Freimuth, Musa, Hilyard, Quinn & Kim, 2014).

2.2 The media and health

The press, because of its unmatched ability to communicate to vast audiences and to influence public perceptions and beliefs (Gunther, 1998), has been called “the fourth estate” (Hunt, 1850), and a major social institution (Silverblatt, 2004). The media institutions produce, reflect, and circulate (depending on your theoretical perspective) the definitions, ideologies, stories, discourses, or systems of knowledge that concern the social world, and who we are within that social world. Within late modernity, the mass media play a particularly significant role in the discursive construction of the self. Sociologist of the media, Clive Seale, has mused that, “Perhaps the greatest repository of stories in late modern societies is made up from the various organs of the mass media...Here, people find a rich collection of resources to draw upon in telling the story of their selves” (Seale, 2004a, p. 2).

Representation refers to “the process by which meaning is produced and exchanged ... It does involve the use of language, of signs and images which stand for or represent things” (Hall, 1997, p. 15). It is important to study media representations of health issues, because these representations contribute toward our understandings of what particular health issues are, and how we ought to act—or not act—in response to those issues. It has been argued that news reports are increasingly the main source of health information for many people (Keramarou et al., 2011), with reporters surpassing even medical doctors as the main source of medical information (Schwitzer et al., 2005). Various scholars have claimed that media messages and/or media institutions can do the following: “bestow prestige and enhance authority of selected policies, persons and groups” (Lazarsfeld & Merton, 1948, p. 20); define the issues at hand and contribute to the negotiation of definitions (Seale, 2004a); present some issues as more or less important, and some views, arguments, policies and solutions as more or less plausible or
acceptable (Miller, 1999; Priest & Ten Eyck, 2003); display, amplify, and reproduce prevailing discourses and counter-discourses, thereby providing a place where consensus over meaning is negotiated (Hall, 1997); influence social action (Brown et al., 2001); set agendas, including policy agendas (Simonson, 2002); confer legitimacy on the ‘experts’ they interview (Simonson, 2002); and, spur governments to action and provide a forum for raising issues for public debate (Kitzinger, 1999; Seale, 2010).

Similarly, it is important to study media representations of influenza pandemics because those representations help shape public beliefs, behaviours and values with respect to pandemics. The news media platforms serve as a major source of health information, including information for the public regarding pandemic plans, and the responses of health institutions and other organizations (Pan & Meng, 2016), such as vaccination programs and travel restrictions. Mass media coverage is central to the official pandemic response for public communication during an influenza pandemic (Hooker, King, & Leask, 2012) in part, because it can rapidly reach large and varied audiences (Leask, Hooker, & King, 2011).

Traditionally, the mass media have been viewed by health promoters as a tool or vehicle through which the public may be reached to inform, educate and change health behaviours (Roy, 2004). Health educators have largely held the perspective that media coverage of health issues ought to convey “accurate, objective information about health risks and healthy behaviour, free from any distortions of ideology, pressure from commercial interests or obligation to entertain” (Seale, 2003, p. 3). Consequently, media messages tend to be assessed based on the degree to which they convey health information and encourage ‘healthy’ behaviours (Seale, 2003). Along these lines, the mass media (variously either the media actors or the media institutions themselves) have often been accused of misunderstanding, distorting, or exaggerating medical science; with obscuring communications between scientists and the public (Hargreaves, 2001); with giving too much attention and space to scientifically suspect viewpoints in an effort to be balanced (Nelkin, 1996), and with disseminating reports on issues of health and medicine that are confusing and contradictory (Roy, 2004), sensationalized and inaccurate (Leask et al., 2010).

Dorothy Nelkin (1996) has argued that the longstanding tensions between medical science and the media are the result of key differences between the two groups: in their definitions (e.g. definitions of what constitutes ‘newsworthiness’ and ‘evidence’); in their styles of communication (e.g. reporting from a human-interest angle rather than the statistical context of a
Influenza pandemics, however, tend to disturb conventional assumptions about the role that media institutions play in society (Lee & Basnyat, 2013), and to raise questions about their relationship with public health authorities and health organizations. For instance, Hooker et al., (2012) charge that during pandemics, the media does, and ought to, serve an important civic function by “ensuring that citizens are sufficiently informed about significant issues as to be able to make appropriate decisions and to engage in forms of collective action against threats, such as infectious disease” (Hooker et al., 2012, p. 224). On the other hand, Leask et al., (2010) claim that during pH1N1, the media messages were something of a double-edged sword for public health. They characterize the situation as a “challenging task of both using the media to influence health practices while countering this same influence where it encourages unhealthy choices” (Leask et al., 2010, para. 2). Schwitzer et al., (2005) argue that because of the unique challenges and high stakes in covering health news, journalists must assume an educational role, prioritizing society’s need for medically and scientifically accurate and timely information about health issues over balance. Conversely, a qualitative study of the Australian press and avian influenza found that news producers, editors, and reporters placed high value on their journalistic independence (Hooker et al., 2012). Because news coverage plays such a crucial role within the larger public communication strategy during a pandemic (Lee, 2014), it has been argued that public health authorities and institutions ought to nurture good working relationships with the media actors (Sweet, Holland & Blood, 2012). Several studies suggest that it is health scholars who ought to work harder to understand and communicate with the media actors (Smith, Wilson & Henry, 2005; Leask et al., 2010), rather than the converse.

These diverse expectations and critiques of media coverage of health and medicine are premised upon a range of perspectives concerning the nature of language and communication, the role of media actors, and the role of media institutions in society. For example, claims that media messages about pandemic influenza incite fear and will cause public panic make certain assumptions about how audiences interpret and respond to media messages. Stuart Hall (1997, p. 24-5) describes three key theories of how language is used to represent the world: ‘reflective’
(that language reflects an inherent, pre-existing meaning); ‘intentional’ (that language expresses what the speaker intends it to mean); and ‘constructivist’ (that meaning is constructed through language). Hall further divides the constructionist approach into the ‘semiotic’ approach associated with linguist, Ferdinand de Saussure, and the ‘discursive’ approach associated with Michel Foucault\textsuperscript{15} (Hall, 1997). There are also a range of ontological assumptions and political commitments surrounding health communication that underlie critiques of media health coverage. Dutta and Zoller organize the major theoretical approaches to health communication into the following categories: ‘post-positivistic’, ‘interpretive’, ‘critical’, and ‘culturalist’ (Dutta & Zoller, 2008, p. 5). The post-positivistic approach to health communication is traditionally the dominant perspective and is concerned with the measurement and effectiveness of health messages, and with predicting and explaining health outcomes. The interpretive approach is increasing in popularity (Zoller & Kline, 2008) and is concerned with how meaning about health and medicine are constructed by audiences. The critical approach is focused on how power relations are structured and reinforced through health communication, and the culturalist, or cultural studies, approach combines elements of interpretive and critical approaches, situating the local contexts of health communication within structures of power (Dutta & Zoller, 2008).

This range of different ideas about language and health communication is demonstrated across the three broad areas of media inquiry: studies of “production”, studies of “representation”, and studies of “reception” (Seale, 2004a, p. 3). Studies of media production centre on the factors that shape what messages are produced, as well as how the media, as an institution, operates. Questions about media production might include the impact of government agendas, special interest groups or commercial/advertising interests. An example of a study on media production and pH1N1 is the work by Mandeville et al., (2014) examining how many expert sources have ties to the pharmaceutical industry, and how those commercial interests influenced the expert sources recommendations for pandemic response. Studies of media representation, on the other hand, focus on the content of the messages, such as the degree to which media messages correspond to public health messages, or the ways in which aspects of health and medicine are depicted or framed. These studies may be concerned with accuracy of

\textsuperscript{15}I will discuss Foucauldian discourse in the next chapter.
the messages, or with the dominance of particular ideologies or discursive themes (Seale, 2004a). Angeli’s study of the use of metaphor within English newspapers, likening H1N1 to a natural disaster (Angeli, 2012), is a study of media representation. Lastly, studies of media reception concentrate on the ways in which audiences interpret, consume, or reject media messages (Seale, 2004a). These studies often require qualitative data, like interviews and focus groups. Ghersetti and Oden’s study of the relationship between media consumption and pH1N1 vaccine uptake rates in Sweden (Ghersetti & Oden, 2011) is an example of a media reception study.

This thesis is primarily a study of media representation. My interest centres on the ways in which risk is discursively constituted through media representations, and not on explaining why those representations exist, or how audiences interpret those representations. As I will discuss both in the Theory and Methods chapters, this approach shapes the types of questions I ask of the media data, as well as my interpretations.

### 2.2.1 H1N1 and the news media

H1N1 was the top news story of 2009 in Canada (Galloway, 2009) and a major news story across the globe. Because the pandemic crisis that some had envisioned did not materialize, the media have been accused of excessive volume (Lopes, Ruãºo, Marinho, & Araujo, 2012) and sensational content in news coverage; of “scaremongering” (Cortiñas-Rovira, Pont-Sorribes, & Alonso-Marcos, 2015, p. 165); of creating unwarranted fear, hysteria or public panic (Goodall, Sabo, Cline & Egbert, 2012; Klemm et al., 2016; Krishnatray & Gadekar, 2014; Lopez et al., 2012; Tausczik et al., 2012; Wagner-Egger, et al., 2011); and even of causing a moral panic (Gilman, 2010). To date, much of the empirical research into media coverage of H1N1 concerns the volume and content of news coverage—whether it was proportional to the ‘real’ level of threat, whether it accurately reflected the ‘real’ level of risk, and whether its messages corresponded to public health messages.

Several studies indicate that the Canadian public believed media coverage to be excessive or sensationalized (PHAC, 2010), or confusing (Taha et al., 2013). Boerner et al., (2013) claim that government and public health messaging in Canada had been “drowned out” (Boerner et al., 2013, p. 1481) by news media reporting. Several studies from Europe and Australia echo similar sentiments concerning a lack of public trust in media coverage (Holland & Blood, 2013), the belief that the media followed their own agenda of fear mongering (Wagner-Egger et al., 2011).
and belief that the media had exaggerated the pandemic threat (Hilton and Smith, 2010). A related group of studies assessed the ostensible accuracy of news content and the degree to which messages in the media corresponded to public health communications and/or epidemiological reports. Two studies of Canadian news content assert that media messages did not correspond to official messaging: Luth, Jardine & Bubela, (2013) and Quigley et al., (2016). On the other hand, studies outside of Canada—aside from one media analysis done in Portugal (Rosa, 2014)—claim that overall, press coverage internationally was unexaggerated (Fogarty et al., 2011), “scientific” (Abeyesinghe and White, 2011, p. 379) and factual (Hilton and Hunt, 2011; Klemm et al., 2016).

Other researchers set out to identify factors thought to have shaped or impacted the production of H1N1 media coverage such as journalistic agendas, the influence of industry on news content, and ‘big pharma’ conspiracy. Several papers explored the possibility that conflicts of interest influenced news coverage (Holland et al., 2014; Mandeville et al., 2014), or that media platforms served “powerful interests like the State or shadowy private corporations” (Wagner-Egger et al., 2011, p. 473). Factors affecting ‘newsworthiness’ was another popular subject for researchers, including studies on newsworthiness and pandemic coverage around the world (Smith et al., 2013); newsworthiness and the use of particular media ‘frames’ (Krishnatray & Gadekar 2014; Lee, 2014; Lee & Basnyat, 2013) and the choices made by news producers and editors (Hooker et al., 2012).

Another group of studies focus on the putative effects of news reports on public behaviour. Researchers have explored the relationship between media consumption and vaccination rates in Canada, (Rachul et al., 2011; Taha et al., 2013) and in Europe (Chanel, Luchini, Massoni, & Vergnaud et al., 2011; Gherstetti & Oden, 2011; Sandell, Sebar & Harris, 2013), while other scholars have explored the effect of H1N1 coverage on the following: hospital admission rates (Keramarou et al., 2011); laboratory based H1N1 testing (Olowokure et al., 2012); hand washing practices (Fleischman et al., 2011); the price of pork and feed grain (Attavanich, McCarl & Bessler, 2011); social media use (Chew & Eysenbach, 2010), levels of concern about infection (Mesch, Schirian, & Kolobov, 2013); feelings of worry and compliance with public health recommendations (Rubin, Potts & Mitchie, 2010); public trust (Davis, 2014; Davis et al., 2014; Gherstetti & Oden, 2011; Taha et al., 2013); and, as a source of medical information for physicians (Hosseini et al., 2011).
In Canada, two separate papers argued that news coverage of several high-profile H1N1 deaths resulted in public perceptions of increased risk. Quigley et al., (2016) found that there was a change in the content of *The Globe and Mail* after the October 2009 death of Evan Frustaglio; they claim, “The events of October 2009 underscore the difficulty and importance of responding to media coverage of...risks for which there is a lack of scientific basis for decision making and potentially generate anxious public responses” (Quigley et al., 2016, p. 267). In another study, Rousseau et al., (2015) explored the relationship between H1N1 coverage and public perception of risks. Using the volume and content of telephone calls to influenza information centres as a proxy indicator of public perception, Rousseau et al., found that influenza information centre counsellors attributed, in part, the high volume of calls to media coverage. They assert that, in Quebec, the Info-Santé telephone lines were overwhelmed after two events that served as “turning points” (Rousseau et al., 2015, p. 232): the death of Evan Frustaglio in late October 2009, and the death of a pregnant woman in Vancouver.

These studies of media accuracy, influence, and effect comprise the vast majority of research into H1N1 news coverage to date. Most of these studies assume a post-positivist approach to health communication in that they are concerned with evaluating or improving the efficacy and accuracy news content. Others are more concerned with the media as a social institution and understanding how and why it functions. Most of this research has very little to say about the ways in which representations of H1N1 shape the social world, and our understandings of infectious diseases, risk, and ourselves. Epistemologically I am not interested in assessing the accuracy of news coverage or in uncovering why particular types of coverage exists. Rather, I am interested in exploring the ways in which media discourses constitute H1N1 in particular ways. To that end, in the following section, I step back from the research focussed on news coverage of H1N1, and refocus on studies of media discourses on infectious disease more broadly, in order to situate this thesis within that body of empirical literature.

16 I will say more about my epistemological commitments and how they have shaped this thesis in Chapters 3 and 4.
2.2.2 Media discourses on infectious disease

The past three decades have seen an increase in studies of discourses (on health and in general) within the mass media (van Dijk, 2009). This research is important because media representations contribute toward public understandings of infectious disease risks, as well as toward public understandings of preventative and public health measures such as vaccination programs (Hackett, 2008). It has even been argued that people’s own readings of media messages influence their estimations and perceptions of wider public opinion on health issues (Gunther, 1998).

There is a small, developing body of empirical research that centres on infectious disease discourses within the media. A common theme running through much of this research concerns the ways in which media discourses on infectious disease implicitly or explicitly instruct readers on how to behave in order to manage and minimize risk. These behaviours tend to include preventative practices at the individual level, such as vaccination, and often employ language of fear and blame, in order to incite behaviour change and self-government. For instance, Gagnon, Jacob & Holmes, (2010) conducted a discourse analysis on materials from a campaign on condom use and STD prevention in Quebec. They argue that the campaign employed discourses of fear, which operate as a bio-political\textsuperscript{17} technology in the government of young adults’ sexual practices. They claim that the use of fear as a strategy of government creates a state of “permanent (in)security” (Ganon et al., 2010, p. 252) in which sexual practices must be regularly self-regulated. Leask and Chapman explored Australian news coverage of vaccine preventable diseases and found an emphasis on individual attribution of responsibility and “individual shame” (Leask & Chapman, 2002, p. 450); particularly a language of responsibility and blame was directed at parents for falling vaccination rates, while blame was simultaneously deflected away from politicians, and increases in immunization rates attributed to improved services and regulatory structures (Leask and Chapman, 2002). Several studies don’t address the language of blame, but do present findings with similar implications in terms of sanctioning particular behaviours or groups. For instance, in Connelly & Macleod’s (2003) analysis of HIV coverage, they argue that the news media representations ascribed agency to the HIV virus, personifying it

\textsuperscript{17} I discuss biopolitics in Chapter 3.
as if an enemy. Particular groups of women were represented as “allies” of the “enemy” virus (Connelly & Macleod, 2003, p. 67), for instance, sex workers and pregnant HIV positive women. In Cole’s critical discourse analysis of media and policy documents on hand-washing in the UK (Cole, 2014), hand hygiene was generally represented as effective and that health care workers ought to be held accountable through zero tolerance policies and even necessary disciplinary action if they did not comply with handwashing guidelines and regulations.

In several other studies, being ‘at risk’ was associated with particular behaviours and practices. For example, Brown (2000) asserts that mass HIV/AIDS public education campaigns in the UK discursively construct ‘at risk’ groups according to particular behaviours which were categorized as ‘normal’ or ‘abnormal’. Brown claims that, initially, epidemiological knowledge was used to create at risk groups. Over time, however, those categories grew less distinct, and health promotion interventions began to increasingly target the general population (Brown, 2000). He argues that these discursive boundaries (abnormal/normal, healthy/unhealthy) function as a “disciplinary tactic” that serve to reduce specific behaviours (e.g. intravenous drug use, etc.) while promoting government of the self as well as the care of others (Brown, 2000, p. 1275).

Raimondo (2003) similarly explored the construction of AIDS within US media. Raimondo asserts that the media represented a “geography of danger” (Raimondo, 2003, p. 389) around AIDS in which space, race, and sexuality intersect. Behaviours associated with normative sexuality, within individual family units, were represented as a means to defend national borders against AIDS, while particular places (e.g. Africa, crack dens) were associated with risk (Raimondo, 2003).

Several studies of media coverage describe how discourses of infectious disease constitute the body in particular ways. For instance, in a study of the discursive construction of the neoliberal subject and “actively responsible individual” (Briggs & Hallin, 2007, p. 44) within several metropolitan daily newspapers, Briggs and Hallin note that bodies of neoliberal subject are often depicted as being “at risk” or as a “carrier of disease” (Briggs & Hallin, 2007, p. 43), thereby suggesting vulnerability to disease and inciting self-regulation (Briggs & Hallin, 2007).

In Connelly & Macleod’s (2003) discourse analysis of HIV/AIDS in a major South African daily newspaper, they found that the notion of the ‘responsible body’ is contrasted with the ‘diseased body’, the latter being depicted as the, “point of transmission, the polluter or infector” (Connelly & Macleod, 2003, p. 63). Connelly and Macleod note that the responsible body was always at
risk of becoming a diseased body and must be vigilantly governed (Connelly & Macleod, 2003). In another study of HIV/AIDS in the media, Sacks (1996) posits that within media representations of AIDS, discourses of the body are tied up together with discourses of normative sexuality, in which infected, polluting women pose danger to men (Sacks, 1996). Sacks claims that these representations of HIV/AIDS emphasize self-control, self-discipline, and personal responsibility, and deflect attention away from the social and structural conditions and contexts of transmission (Sacks, 1996).

Several papers discuss bodies as transmitters or carriers of infectious disease in or through particular spaces. Exploring discourses of H1N1 and air travel within UK newspapers, Warren, Bell & Budd (2010) argue that travelling bodies were represented as, “potential transmitter[s] of disease” (Warren et al., 2010, p. 727), with the location of the airport being discursively constituted as a significant place for practices of control in which bodies were “sorted” and “securitized” (Warren et al., 2010, p. 733). Outbound travellers were expected to practice self-government over their own bodies, and to exercise specific behaviour, such as providing proof of fitness to fly, the practice of which was represented as a “personal ethical responsibility to the population of the country they had planned to visit” (Warren et al., 2010, p. 734). In two different studies of tuberculosis (TB) in the news, infection was linked with immigration and immigrant bodies. Lawrence et al., (2008) conducted a combination quantitative and discourse analysis of TB coverage using New Zealand print dailies. They claim that the news media representations linked TB not with determinants of health such as poverty, but rather with immigration. Representation of epidemiological contact tracing by public health officials, they argue, reinforced notions of infectiousness, and of immigrants as carriers of TB. In Canada, Reitmanova, Gustafson & Ahmed, (2015) similarly analyzed press coverage of TB, focussing on the years of 1999-2008, during which Canada experienced a large influx of in-migration. They found that immigrants to Canada were discursively constructed both as “disease breeder” and “irresponsible fraudster” (Reitmanova et al., 2015, p. 471), the latter by providing falsified health documentation to obtain immigration visas and the former by bringing a host of infectious diseases to Canada, thereby acting as “health threats to people walking on the streets, visiting shops, or using subways, streetcars, and buses” (Reitmanova, 2015, p. 478). On the other hand, Wallis and Nerlich (2005) explored coverage of SARS in five national newspapers in the UK. They found that while the ‘SARS body’ was represented in pictures by the “sterile, masked”
traveller (Wallis & Nerlich, 2005, p. 2635), it was the ‘SARS space’ (physical spaces and places in which SARS was circulating), that was represented as “leaky and permeable, dripping with contagion, much as AIDS bodies were often conceptualised in the 1980s and early 1990s” (Wallis & Nerlich, 2005, p. 2636). Wallis and Nerlich claim that discourses around SARS imply the need to contain the disease from leaking or spilling out through measures such as quarantine and epidemiological surveillance (Wallis & Nerlich, 2005).

Another thread running through the empirical literature on media discourses and infectious disease is the ways in which infectious disease discourses construct notions of citizenship, and specifically, neoliberal citizenship. In their study of the actively responsible individual with newspaper coverage, Briggs and Hallin assert that biopolitics and citizenship are “co-constitutive” (2007, p. 43). They argue that the ways in which bodies and bodily practices are ‘read’ and the ways in which biomedical knowledge of individuals and populations is assessed is increasingly an “important site for regulating and rationalizing access to privileges of citizenship” (Briggs & Hallin, 2007, p. 43). Their results describe a neoliberal hybrid patient-consumer who is at times portrayed as frustrated, overwhelmed, and needing to be “infused” with authoritative knowledge (Briggs & Hallin, 2007, p. 45). Adam’s (2006) work on media discourses similarly found that discourses on HIV risk construct HIV subjects consistent with discourses of Western individuals and neoliberalism, whose sexual and intimate relationships behaviours are governed by marketplace notions and principles such as “buyer beware” (Adam, 2006, p. 171). The implication of which being a discursively constituted “neoliberal model of human subjectivity that constructs everyone as a self-interested individual who must take responsibility for himself in a marketplace of risks” (Adam, 2006, p. 175-6). Wilbraham (2008) had somewhat similar results from a discourse analysis of an HIV prevention campaign in South Africa, in that the family was positioned as the pivot point between the goals of public health and individual health. In the South African campaign, mothers were the target of intervention, which emphasized instructing mothers on how to talk about sex with their children in order to ‘risk-proof’ them. Wilbraham asserts that a family–sexuality–risk apparatus of control positioned mothers as a point of contact between the ‘public’ and 'private', and charged them with nurturing a new generation of sexually responsible, HIV-free citizens (Wilbraham, 2008).

This literature on infectious disease discourses within the media speak to the impact of media representations, not as an instrumental or measurable ‘effect’ on certain health behaviours,
but rather as making possible particular ways of thinking and acting with respect to particular
health risks. The literature described below focuses on discursive representations of H1N1,
specifically, within the news media.

2.2.2.1 Discursive representations of H1N1 in the media

There is a small body of empirical literature that explores discursive representations of H1N1
and other outbreaks or pandemics in the media, and the construction of meaning surrounding
particular figures, groups, or elements associated with such outbreaks. Several of these studies
noted shifts or changes in the content of media messaging, or in public understandings of the
pandemic, over time. For instance, Mayor, Eicher, Bangerter & Clemence, (2012) drew from
social representation theory and dramaturgical theory to explore how sense-making patterns
among the public changed during the course of the H1N1 pandemic. They conducted interviews
and textual analysis of the Swiss media texts, and argued that as the pandemic progressed, news
coverage shifted from risks that were in geographically distant collectives to risks that were in
local collectives (Mayor et al., 2012). Wagner-Egger et al., (2011) also identified shifting
understandings of the pandemic among Swiss media audiences. Their participants viewed
pandemic actors as either ‘heroes’ (physicians), ‘villains’ (the media actors and platforms, and
the pharmaceutical industry), or ‘victims’ (Mexico, risk groups, affected populations). However,
perceptions of public health and government authorities changed as the pandemic progressed:
they began as heroes but later became villains. Pan and Meng (2016) also found that coverage
changed during the course of the pandemic. They argue that different pandemic stages saw
different media frames being used. Early in the pandemic, health risk, political and legal issues,
societal problems, and prevention/education were the dominant ‘frames’. After the pandemic
threat had waned, there was more emphasis on treatment and research (Pan & Meng, 2016). A
comparative analysis of three national newspapers by Quigley et al., (2016), had particularly
interesting results. They claim that there was a change in The Globe and Mail content after the
death of Evan Frustaglio, specifically that there was a change in the types of problems that health
officials were addressing before and after Frustaglio’s death. Quigley and colleagues state that
Frustaglio’s death, “reframed the H1N1 story from a pandemic that was under control or not
particularly threatening to one which could prove fatal to healthy youth” (Quigley et al., 2016, p.267).
Several papers focussed on media representations of particular populations, and the ways in which those representations assigned blame for H1N1 to particular individuals and groups. For instance, McCauley, Minsky, & Kasisomayojula (2013) claim that the US media coverage contributed to the stigmatization of Mexicans and other Latinos living in US, by representing them as carriers of the pH1N1 virus. This was accomplished, McCauley and colleagues assert, by appealing to, “pre-existing cognitive scripts” (McCauley et al., 2013, p. 1) that blamed Latino immigrants for social problems in the US. In a study of twenty European, French language newspapers, Gilles et al., (2013) examined coverage of avian influenza. Drawing from social psychology and evolutionary theory, they identified an in-group/out-group dynamic in which disease was symbolically associated with “out-groups” (Gilles, et al., 2013, p. 100). In another study of the French press, Atlani-Duault et al., (2015) studied the reader/viewer comments posted in response to print and television coverage, including comments posted to online articles and conversations within online forums associated with news television programs. They identified a “disturbing ‘geography of blame’” (Atlani-Duault et al., 2015, p. 46) and anti-Semitism concerning the origins of the pandemic, which attributed hidden motives to a global alliance of governments, pharmaceutical companies, and figures of Otherness, and drawing upon a history of blame associated with historical epidemics in France.

Another group of studies considered H1N1 news coverage in the context of biosecurity and national security. Stephenson and Jamieson (2009) examined Australian news coverage of H1N1 and assert that pandemic preparedness in the Australian press was primarily represented in terms of nation building. Protection from H1N1, they argue, was presented as being central to Australia's national security (Stephenson and Jamieson, 2009). Abeysinghe and White (2011) report that their narrative analysis of Australian news and pandemic planning policy documents identified symbolic links between the risk of an avian influenza pandemic and contagion via globalisation. They argue that, “notions of contagion link to narratives of interconnection with ‘Othered’ bodies through discourses of globalisation” (Abeysinghe & White, 2011, p. 318). Nerlich and Koteiko’s 2012 study of the interplay between the UK press and social media found that biosecurity and infectious disease control had become even more complex and troublesome for authorities. They argue that, amid the context of digitization, ‘infodemiology’, and “a politics of risk where problem solving was mired in uncertainties and became digitally democratised”
(Nerlich & Koteyko, 2012, p. 715), those responsible for expert or official communications, who had previously had privileged access to information, had now lost control.

Several scholars have focussed on the use of narrative or metaphor within media texts, the understanding being that metaphors function as a meaning-making device which allows people to “make sense” of new phenomena in terms of what is already familiar (Hartley, 2012, p. 171). Angeli (2012) analyzed the metaphors used in reporting on H1N1 in English language electronic media. Angeli asserts that metaphors used to talk about H1N1 included H1N1 as a “natural disaster”, a “scientific and medical concern”, “a battle”, and “a visitor” (Angeli, 2012, p. 215-6). Drawing from the sociology of metaphor and the sociology of expectations literature, Nerlich and Halliday (2007) explored media coverage of avian influenza. Focussing on metaphor and rhetorical devices, they examined UK newspapers, giving attention to which sources used which metaphor rhetorical device and what were they used for. They were surprised to find that metaphors were rarely used, although there was limited use of war/defense metaphor, such as the virus as a “natural bioterrorist” (Nerlich & Halliday, 2007, p. 58). Nerlich and Halliday also argue there was a discourse of uncertainty, in which the avain influenza virus was constructed as “something unknown and above all alien” (Nerlich & Halliday, 2007, p. 61).

I have discussed the literature on discursive representations of influenza pandemics in order to situate this thesis in this body of empirical literature. Whereas many of these studies discussed above have centred on the discursive constitution of particular populations or groups, or have considered H1N1 in terms of nation-level biosecurity, this thesis seeks to contribute toward sociological understandings of H1N1 risk from a governmentality perspective. I know of only one other study to date that draws from Foucault and governmentality to explore media discourses on H1N1. Warren et al., (2010) analyzed UK print media during the first ‘wave’ of the pandemic (April through September 2009), paying close attention to the ways in which global travel was constituted. Warren et al., found that the media represented particular “geographies of health security” in which the ‘outward’ traveller was constituted as a potential disease transmitter, and “as someone who ought to practice control over his/her body, managing the risk it posed to the less advantaged ‘Other’” (Warren et al., 2010, p. 728). The value of this research by Warren et al. is that it identifies the ways in which places like airports become a site of operation for practices of control, of biosecurity, and of government of travelling bodies, thereby destabilizing taken for granted understandings of pandemics, bodies and travel. This
thesis seeks to contribute to the media, governmentality and risk scholarship, focussing on destabilizing taken for granted understandings and representations of H1N1 risk, in order to explore the implications of those representations for a particular kind of subjectivity in a post-pandemic era.

2.3 Conclusions

In this chapter, I have provided contextual background information regarding the impact of the various H1N1 outbreaks that occurred during the past century and this present century. Following that background, I discussed the types of problems that influenza pandemics pose to public health authorities, as well as the attempts made to manage H1N1 infection at a population level, including vaccination and public communication. I then provided a brief overview of the importance of studying media representations of health issues, drawing from the sociology of the media and media studies literature. Lastly, I summarized the existing empirical research on H1N1 and pandemic influenza coverage in the news media, empirically locating this thesis within the literature on media discourses on infectious diseases.

Having provided this background information, in the next chapter I will describe the theoretical approach taken in this thesis. First, I will describe the major theoretical constructs that guided this study: governmentality, biopower, and biopedagogy. Next, I discuss how risk discourses operate both as a governmental rationality and strategy under neoliberalism. Finally, I reflect on the analytic implications of the governmentality and risk theoretical framework for understanding and conceptualizing media texts and discursive representations of risk within those texts.
Chapter 3
Theoretical Perspective

3 Theoretical Perspective

Nothing is a risk in itself; there is no risk in reality. But on the other hand, anything can be a risk; it all depends on how one analyzes the danger, considers the event. (Ewald, 1991, p. 199)

In the preceding Background chapter I discussed how the 2009-10 outbreak of H1N1 emerged as a significant concern for public health authorities in Canada. After discussing the importance of studying media coverage of health issues, I then summarized the existing empirical research on pandemic influenza coverage in the media, situating this present study within the empirical literature on discursive representations of H1N1.

This chapter lays out the theoretical logic that underpins this study. As I will describe in this chapter, I apply a governmentality and risk approach to explore media discourses on H1N1 risk, drawing heavily from the theoretical work of Michel Foucault. While Foucault himself did not directly engage with representations of health in modern media texts, numerous scholars have drawn from his theoretical ‘toolkit’ to form conceptual frameworks through which to understand media texts. Foucault’s theoretical work, along with the empirical and theoretical literature that extends Foucault in the study of media discourses, are central to my analytic and interpretive approach. In the first section of this chapter, I discuss a central theoretical construct that guided this study: governmentality. Within that discussion, I attend to several other concepts that are closely related to governmentality and/or are pertinent to my study: power, knowledge, discourse, subjectivity, and expert knowledge. Next, I discuss the notion of biopower, as well as a more recent extension of biopower known as biopedagogy. I then situate risk discourses as a governmental rationality (Dean, 2010) and as a governmental strategy (Lupton, 1999) with social, political and ethical implications. Lastly, I address the analytic implications of this theoretical framework as they apply to the research questions and objectives of this thesis.

3.1 Governmentality

First described in Foucault’s lectures at the College de France in Paris (Gordon, 1991), “governmentality” is a mode of social regulation rooted not in sovereignty or visible displays of force, but rather in a problematization of governmental rationality (Foucault, 2007). Foucault
(2003a) argued that a conceptual shift concerning notions of ‘government’ began in 16th Century Europe, during which demonstrations of sovereign power (e.g. physical violence) began to give way to questions about who ought to govern and how. Notions about the “art” and “rationality of government” (Gordon, 1991, p. 3) began to emerge.

The shift from sovereign power to an art of government occurred alongside changing notions of ‘population’ and ‘economy’ (Foucault, 1980a; 2003a; 2007). With the development of the emerging science of statistics in the 18th Century, population characteristics—such as birth, death and disease rates—were rendered visible for the first time, and the very notion of a ‘population’ began to develop. Concomitantly, the conceptual focus of ‘economy’ shifted from the family to the population level (Foucault, 2003a). In previous centuries ‘economy’ referred to the meticulous attention to and care for the wealth and behaviour of the family; by the 18th century, however, ‘economy’ had become a field of management and intervention aimed at the larger populace—at “the wealth and behaviour of each and all” (Foucault, 2003a, p. 234). These two conditions enabled new ideas about populations and governing, allowing “the emergence of population as a datum, as a field of intervention, and as an objective of governmental techniques” (Foucault, 2003a, p. 243)18.

Governmentality centres on the activity and process of governing. Specifically, Foucault described governmentality as the ensemble of institutions, procedures and tactics directed at population welfare, and the tendency and process toward the “governmentalization of the state” in Western societies (Foucault, 2003a, pp. 244). Otherwise stated, governmentality refers to the branching out of government objectives into society through heterogenous and far-reaching apparatuses. For the governmentality scholar, it is not the institutions or ideology that are of interest, per se, but the practices and the conditions that make possible particular ways of governing (Foucault, 2003a; Gordon, 1991).

18 For a critique of Foucault’s argument on the emergence of ‘population’, see Curtis, 2002. Curtis argues that Foucault applies the word “population” to a conflation of three concepts: ‘populousness’, the ‘social body’, and the statistical construct ‘population’. He challenges Foucault’s claim that modern demographic concepts emerged in the 18th century and that they were indeed ‘discovered’ by political authorities.
3.1.1 Power, knowledge and discourse

Within a governmentality perspective, power and knowledge are considered to be mutually constitutive and ontologically entangled (Foucault, 1995; O’Brien & Penna, 1998). Foucault argued that knowledge is always implicated in relations of power, and that power is both contingent upon and determined by the knowledge that legitimizes and maintains it (Foucault, 2003c). As David Armstrong (1983) said regarding the relationship between power and knowledge: “power assumes a relationship based on some knowledge which creates and sustains it” (Armstrong, 1983, p. 10). Knowledge production, then, is never neutral; there is no knowledge production that does not strengthen some power relations or interests and weaken others. This knowledge/power dynamic is constituted through discourses.

Foucault (1991a) defined discourse as “the laws of existence of statements, that which rendered them possible - them and none other in their place; the conditions of their singular emergence; their correlation with other previous simultaneous events, discursive or otherwise” (Foucault, 1991a, p. 59). Put another way, discourse refers to all talk, text, social practices, and material effects that make possible what may be said and thought about ourselves and particular objects, and issues, at particular times, while other perspectives are simultaneously rendered less possible or impossible (Cheek, 1997). Discourse makes particular representations possible (Nixon, 1997), including media representations. Hall asserts that Foucault had a distinct approach to notions of ‘representation’ (Hall, 1997), one that was less concerned with language and meaning making, and more concerned with the production of knowledge and the “rules and practices that produced meaningful statements” (Hall, 1997, p. 43). Discourse for Foucault meant “a way of representing knowledge about a particular topic at a particular historical moment,” (Hall, 1997, p. 44). Discourses shape the conditions of possibilities of thought that constitutes, and is in turn constituted by, what may be and can be said, thought or written about any given subject.

From this perspective, what we understand to be reality is, therefore, discursively shaped\(^\text{19}\). That is not the same as saying that discourse is the linguistic translation of reality; rather, it is saying that our perceptions of reality are both shaped and regulated by, and in turn,

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\(^{19}\) Some scholars see contradictions and limits in Foucault’s ontological positions and his writing regarding the non-discursive. See Smart (1985) and Donnelly (1986) for critiques of Foucault with respect to the limits of discourse.
shape and regulate the knowledge/power dynamic demonstrated through discourse. As Mills said of discourse “…we can only think about and experience material objects and the world as a whole through discourse and the structures it imposes on our thinking” (Mills, 2003, p. 56). Power operating through discourse enables particular ways of thinking and is therefore not merely repressive or constraining but is also productive (Foucault, 1995; Foucault, 2007). As Foucault stated, “We must cease once and for all to describe the effects of power in negative terms...In fact, power produces; it produces reality; it produces domains of objects and rituals of truth.” (Foucault, 1995, p. 194).

This power is “exercised” (Foucault, 1995, p. 26) rather than owned or held by elite institutions or groups. Governmentality thus strongly differs from many other theories of power and the state; power is not centralized in any institution or crystallized into ideology nor is it possessed by any person, class, institution, economic, political or social structure. Rather, power is understood to be fluid, diffuse and relational: fluid because it is always in flux and circulating, diffuse because it is dispersed throughout society, and relational because people act as vehicles through which power is enacted and resisted (Foucault, 2003b; Mills, 2003).

By way of example, Foucault describes how power operates relationally and through diverse and diffuse strategies in his work on the history of sexuality (Foucault, 1990). In the excerpt below, he describes how power relations converge around sexuality, and how discourses on sexuality, in turn, operate as a place of support for a variety of governmental strategies:

“It [sexuality] appears rather as an especially dense transfer point for relations of power: between men and women, young people and old people, parents and offspring, teachers and students, priests and laity, an administration and a population. Sexuality is not the most intractable element in power relations, but rather one of those endowed with the greatest instrumentality: useful for the greatest number of maneuvers and capable of serving as a point of support, as a linchpin, for the most varied strategies.”

(Foucault, 1990, p.103).

In this example, Foucault claimed that sexuality operates as a “transfer point” at which multiple discourses intersect (e.g. the family, education, religion) and at which power is correspondingly enacted and resisted (e.g. between parents and children, teachers and students, priests and laity). In this way, discourses around sexuality become a “linchpin” upon which multiple and diverse
governmental strategies (e.g. of health, of the family, of individual bodies, etc.) are supported across and within multiple domains. This example also illustrates how discourse shapes how we see and know ourselves, and is central to Foucauldian notions of subjectivity.

### 3.1.2 Subjectivity

For Foucault, the subject is constituted through discourse (Foucault, 1995). There is no pre-existing, universal, essential ‘self’ upon which social forces impose (Wickham, 1986). Drawing from Althusser’s concept of “interpellation”, or “hailing” (Althusser, 2004, p. 321), Foucault claimed that subjectivity is the lifelong process of being hailed by and constituted through discourses, a process wherein individuals take an active role. The active component of subjectivity is vital for Foucault. Individuals are not passively dominated by discourses, but rather, discourses make possible various ways of thinking and talking about ourselves, they guide subjects to govern themselves, and they direct subjects to act in particular ways and to take up particular practices (Crossley, 2006). In other words, the relationship between the reflexivity and the subject and discourse is what allows the subject to “tell the truth about itself” (Foucault, 2003b, p. 95). Subjects thus work upon their own bodies, behaviours, thoughts, and appetites in order to fashion themselves in particular historically contingent ways.

Discourse provides the guidelines and rules through which subjects know and measure themselves. By embracing and internalising the discursive categories according to which they are being observed and ranked, adopting their associated behaviors, and by exercising particular “technologies” upon themselves (Foucault, 2003d, p. 47), subjects come to ‘see’ themselves according to those categories, therein participating in their own government of the self (Crossley, 2006). These categories, or “dividing practices”, provide the ways by which we can identify, for example, “the mad and the sane, the sick and the healthy” (Foucault, 2003c, p. 126).

This conceptualisation of power relations is a “bottom-up” rather than “top-down” conceptualisation (Mills, 2003, p. 34). As Foucault stated, “Individuals are the vehicles of power,

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20 The Foucauldian subject is constituted through discourse (and not by ideology, as Althusser argues). I use the word “hail” to describe how subjects are called upon and incited by/through discourse-- it is the discourses that do the hailing, not particular people or institutions.
not its points of application” (Foucault, 1980b, p. 98). In other words, individuals both exercise power, and are the objects of intervention; as Colin Gordon phrased it, the activity of government applies, in part, to the “relation between self and self” (Gordon, 1991, p. 2). Subjects have the capacity to ‘work’ on themselves, on their own behalf, as well as on the behalf of others.

With respect to health, expert knowledge is particularly significant in shaping the standards and benchmarks against which subjects ‘work’ on themselves. For example, the BMI (body mass index) calculation has been developed through expert knowledge and methodology from the science of statistics, and has been taken up in the fields of public health, medicine, nutrition, exercise physiology, and physical activity. BMI is considered to be an important health indicator (James, 1995). The BMI is also a standard against which many subjects measure and rank themselves (as ‘normal’, ‘healthy’, ‘overweight’ or ‘obese’) and practice self-surveillance and self-regulation (Readdy & Ebbeck, 2012). Emma Rich’s work on obesity discourses within reality television (Rich, 2011) provides another example of the ways in which expert knowledge is brought to bear on subjectivity and health. Rich argues that “public pedagogues” (Rich, 2011, p. 12) such as lifestyle experts and celebrity chefs are often invoked within reality television media to provide expert instructions for audiences to modify their nutritional behaviours. As these two examples illustrate, expert knowledge plays a particularly significant role in practices of subjectification, since such knowledge serves as the standards against which individuals and populations are surveyed, assessed, and ranked, and correspondingly, are socialized and ‘taught’ to act.

3.1.3 Expert knowledge

Expert knowledge is particularly important under governmentality (Lupton, 1999). In any given situation, authority is determined by what knowledge is designated as ‘expert’ and to whom that expertise belongs. As Higgs (1998) noted, expert knowledges, “constitute and define the objects of their knowledge, [and] mediate between individuals and authority…” (Higgs, 1998, p.185). Writing about the relationship between expert knowledge, subjects and government, Nikolas Rose explains that self-government depends upon the relationship between subjects and expert knowledge wherein, “the injunction of the experts merge with our own projects for self-mastery and the enhancement of our lives” (Rose, 2005, p. 41). The surveillance and assessment of individuals and populations by health scientists, for example, generates information on
individual and population bodies. This information is used to develop norms of behaviour and health status, which further “construct understandings of bodies in space and time and to use these understandings to regulate them” (Lupton, 1999, p. 89). Concerning H1N1, particular people who, based upon expert knowledge are designated ‘at risk’ for infection, may come to view themselves as being ‘at risk’ and may, in turn, modify their behaviours accordingly and/or embrace new practices in response to expert recommendations.

Within the standards and practices of journalism, expert knowledge is often tied with notions of expert, official sources and ‘objectivity’. Hackett and Zhao argue that there exists a “regime of objectivity” (Hackett & Zhao, 1998, p. 86) comprised of ideals, assumptions, practices and institutions that organize journalistic practice. Objectivity assumes that facts are knowable and can be separated from values and opinions. The news is thus expected to reflect social reality and the journalist expected to act as a value-free, neutral transmitter of information (Hackett, 1984). Journalists demonstrate objectivity through the use of numerical indicators (Bell, 1991) and expert sources (Cross, 2010). Media coverage of health issues, in particular, often relies on the use of expert or official sources (Lupton, 1994; van Dijk, 1991), who are understood to have access to more accurate and specialized information than the general public and are, therefore, more likely to have their definitions of events accepted as accurate accounts of reality (Hall, Critcher, Jefferson, Clarke & Roberts, 2000). It is these “primary definers” (Cross, 2010, p. 414) of news events whose definitions are most often reproduced within the news media. From a governmentality perspective, for this study I am not concerned with media accuracy, nor with the attainment of objectivity. Rather, I am concerned with the ways in which expert knowledge is used to make truth claims about influenza pandemics, as well as how particular expert sources and expert knowledge offer particular ways to interpret and make sense of influenza pandemics.

21 The development of objectivity as a journalistic standard has philosophic, economic, and political foundations. See Hackett and Zhao (1998) for a fascinating account of the development of notions of objectivity in journalism alongside the emergence of Enlightenment thought and Canadian political and economic history.

22 Notions of objectivity in journalism are not without critique. See Boudana (2011); Hackett, (1984); Hackett and Zhao (1998); Hall et al., (2000); and Reese (1990) for various critiques on the usefulness and attainability of journalistic objectivity.
3.2 Biopower and Biopedagogy

Biopower is a form of governmental rationality aimed at control over life (Foucault, 1990). It is the concern with, and the regulation of, vital population characteristics—the minutia of physical, biological life, including mortality, morbidity, birthrate, health, and sanitation (Foucault, 2003e). Paul Rabinow and Nikolas Rose described biopower as, “a field comprised of more or less rationalized attempts to intervene upon the vital characteristics of human existence” (Rabinow & Rose, 2006, p. 196-7).

Biopower represents the confluence of two concurrent interests: concern with the individual body on the one hand, and with the well-being of the population, or species body, on the other. Foucault traces the emergence of biopower to political and economic transformations of the 18th century and their increased demands to “integrate rapidly increasing numbers of people into the apparatus of production and to control them closely” (Curtis, 2002, p. 516). The vital traits of a population (e.g. fertility, longevity, and disease rates) became objects of surveillance, analysis, and management in the interest of increased economic utility, thereby contributing to the emergence of a new “politics of health” (Foucault, 2007, p. 325).

Under this new politics of health, the objects of power are seen as resources to be fostered and optimized. Unlike previous manifestations of power, such as sovereign power23, which repressed life and dispensed punishment and death, biopower seeks to “foster life or disallow it to the point of death” (Foucault, 1990, p.138). As Foucault (2003a) explained, “In contrast with sovereignty, government has as its purpose … the welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health…” (p. 241).

Government interventions under biopower do not repress life; rather they nurture, cultivate, and direct life in particular ways, while simultaneously increasing economic ‘good’ through a physically healthy and growing labour force. Under biopower, the well-being of the population is a vital political objective (Gordon, 1991). Biopower operates through two interrelated ‘poles’: one pole is focused upon disciplining individual bodies, while the other pole is concerned with

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23 In Society Must Be Defended (Foucault, 2003f), Foucault contrasts biopower with sovereign power, the latter being the use of force to gain and maintain control over a territory, or ‘the right to kill’. For a discussion on the relationship between sovereign power and biopower see De Larrinaga and Doucet (2008).
regulatory controls, strategies, and interventions at the population level (Foucault, 1990; Rabinow & Rose, 2006).

### 3.2.1 Discipline of the body

The first pole of biopower is the “anatamo-politics of the human body” (Foucault, 1990, p.139). It deals with disciplining the individual, anatomical body and rendering it “docile” (Foucault 1995, p.138) so that it may be trained and improved upon. Foucault (1980a) claims that near the end of the 18th century, notions of the individual body emerged. The body became a “bearer of new variables”, distinguishing not only between the sick and healthy, but also among the “more and less utilizable, more or less amenable to profitable investment, those with greater or lesser prospects for survival, death and illness, and with more or less capacity for being usefully trained” (Foucault, 1980a, p.172). Disciplinary techniques aim to optimize the body’s capabilities, to render it more docile and efficient, and thus to become more politically and economically useful (Foucault, 1995).

Discipline operates through three elements to appraise and remold anatomical bodies: hierarchical observation, normalizing judgement, and the examination (Foucault, 1995). Foucault’s *Discipline and Punish* (1995) famously uses examples from the history of the penal system, such as Bentham’s panopticon, to illustrate these three disciplinary elements. A more modern example is David Armstrong’s analysis of milk depots in early 20th century England, which provides an example of disciplinary power operating through a public health campaign (Armstrong, 1983). Armstrong describes how milk depots were opened in towns in the United Kingdom for mothers of infants. Infants were brought to the milk depots, their weights recorded and charted, their homes observed and inspected by health visitors, and their progress reported to the Medical Officer of Health. What resulted was a dossier on the growth of each child’s individual body, with the program having served as a surveillance apparatus through which individual bodies were observed, examined, ranked, and normalized. It is through the elements of the anatamo-politics of the body (observation, normalizing judgement, and examination) that individual bodies are both governed and made governable.

Social theorist and governmentality scholar Nikolas Rose has argued that contemporary biopower is “eth(ic)opolitical” (Rose, 1999, p. 182). ‘Ethico-politics’ is defined as the concern with “self-techniques necessary for responsible self-government and the relations between one’s
obligation to oneself and one’s obligations to others” (Rose, 1999, p. 188). In other words, the politics of life shape our perspectives on how we ought to live and conduct ourselves (Rose, 1999; Rose, 2001). Rose has argued that in Western culture, individuals have increasingly come to understand themselves and make normative\(^2\) judgments of themselves (e.g. good/bad, healthy/unhealthy) based on somatic conditions (Rose, 2001, p. 18). In addition to increased ethical judgements, Rose claimed there are increased obligations for individuals and families to monitor and manage their own health, including acting upon the self in the name of health: “Every citizen must now become an active partner in the drive for health, accepting their responsibility for securing their own well-being” (Rose, 2001, p. 6). Within this current context, the body is becoming a significant site for a medicalized, ethical work on the self\(^2\).

3.2.2 Biopolitics

The second pole of biopower, known as the ‘bio-politics’ of the population, regulates and normalizes population characteristics (Foucault, 1990). The emergence of biopolitics was initially prompted by economic and moral concerns in the second half of the 20th century, and informed by life and human sciences, clinical medicine (Rose, 2001), and population statistics. Statistical data—what Foucault called, “the science of the state” (Foucault, 2003a, p.238)—have allowed administrators to engage in population surveillance and to generate ideas of normality that have been subsequently used to measure individuals within the population (Armstrong, 1995; Jette, Bhagat & Andrews, 2016). As biological traits of the population were made visible and governable, population well-being became “one of the essential objectives of political power” (Foucault, 1980a, p. 170).

Population characteristics are both the object of knowledge and target of intervention under biopower because they are directly relatable to political and economic concerns. For example, a sick population can incur the cost of healthcare and social support while a healthy

\(^2\) Here I mean ‘normative’ in the philosophical sense, referring to value judgements—claims about what ought to be.

\(^2\) There is a long history of different kinds of ‘body work’ as ethical projects (e.g. the Greek gymnasium, and across multiple religions). The ethico-political work on the self differs in that it is a medicalized understanding of the body, centred, for example, on self-surveillance for disease.
and growing population increases the nation’s workforce. Foucault stated that biological traits of the species body are, “relevant factors for economic management, and it becomes necessary to organize around them an apparatus which will ensure not only their subjection but the constant increase of their utility” (Foucault, 1980a, p. 172). For this reason, biopolitics cannot be uncoupled from the political rationality within which it arose (Foucault, 1994).

3.2.3 Where the two poles of biopower meet - The family

Bringing the two poles of biopolitics together, the family holds a privileged role within a rationality based on biopower (Donzelot, 1979, Foucault, 1980a). The family is a main point of access for gathering population data, such as census data, while campaigns to improve health, reduce mortality and encourage vaccination often target the family. In other words, the family serves as an “instrument for the government of the population (Foucault, 2003a, p. 241).

Additionally, the family, and particularly mothers, are typically tasked with taking responsibility for the health of their children (Rose, 1994, p. 66), with developing and maintaining the bodies of children who will live to adulthood, by providing nourishing food, maintaining a clean domestic space, teaching hygiene, etc. (Foucault, 1980a). Foucault describes the role of the family under biopower as:

“a linking role between general objectives regarding good health of the social body and individuals’ desire or need for care. This enables a ‘private’ ethic of good health as the reciprocal duty of parents and children to be articulated on to a collective system of hygiene and scientific technique of cure made available to individual and family demand by a professional corps of doctors qualified and, as it were, recommended by the State.” (Foucault, 1980a, p. 174)

As the quotation above describes, the family serves as a link between population health objectives and individual care, and operates as a near-constant and significant agent of medicalization. Foucault further claimed that the family bears a “moral responsibility” for medicalization?

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26 Medicalization refers to the way medicine and the labels ‘health’ and ‘ill’ become relevant to ever-increasing part of human existence (Zola, 1975), and the process by which process by various issues become defined in terms of “medical problems, usually in terms of illnesses or disorders” (Conrad, 1992, p. 209). For example, aging has become medicalized in many Western societies.
participating in systems of medical care, particularly interventions organized around the child, such as scheduled vaccination campaigns (Foucault, 1980a, pp. 174).

The Triple P-positive parenting program illustrates how the family serves as an agent of medicalization under biopower. The Triple P program is a popular program developed in Australia, aimed at preventing and treating behavioural and emotional problems in young children (Sanders, 2008). It is an “evidence-based” parenting program (Turner & Sanders, 2006, p. 176) rooted upon developmental psychology and social learning models (de Graaf et al., 2008). It was designed as a “comprehensive multilevel parenting and family support strategy” (Turner & Sanders, 2006, p. 176) to develop “positive child management skills” in parents (de Graaf et al., 2008, p. 554). There are specialized programs available for families experiencing divorce and separation, for aboriginal children, for parents of children with a disability, and for parents with overweight children. It is comprised of five levels of increasingly intense intervention, targeting individual families and teaching parents to monitor their child’s behaviour, recognize “deviant acts” (de Graaf et al., 2008, p. 554), and to reward, punish, or model alternative behaviours. The objective is to develop within parents an evidence-based “self-regulation of parental skill” (Turner & Sanders, 2006, p. 184), which is expected to result in a “societal level impact” on mental health and well-being (Sanders, 2008, p. 504). This program illustrates, from a governmentality perspective, how the family becomes a central agent in medicalization as well a link between individual intervention and government, and population level objectives to maximize health.

3.2.4 Biopedagogy

‘Biopedagogy’, is an extension of Foucault’s work which brings together the concepts ‘biopower’ and ‘pedagogy’, to examine how learning about bodies takes place outside of official learning institutions; in other words, how multiple sites shape our understandings about our bodies and our behavior with respect to our bodies (Ferry & Richards, 2015; Halse, 2009; Harwood, 2009; Jette et al., 2016; McPhail, 2013; Rail, 2012; Rail & Lafrance, 2009; Rich, 2011; Wright & Harwood, 2009). Scholars within critical obesity studies have employed the concept of biopedagogy in order to attend to the range of “pedagogical sites” (Wright, 2009, p.
7) that offer instructions on *bios:* how to live *(Harwood, 2009).* Biopedagogy offers a theoretical means by which to analyze the “concealed pedagogical practices of biopower” *(Harwood, 2009, p. 21).*

Biopedagogy is premised on the modern-day phenomenon that many sites of socialization have also become pedagogical sites in which we learn to understand, act on, and change our bodies in the name of health *(Harwood, 2009; Rich, 2011).* As Harwood notes,

> “Across a range of contemporary contexts are instructions...: how to live, how to eat, how much to eat, how to move, how much to move, how to look. We are told what to eat, what to do, what to avoid” *(Harwood, 2009, p. 15).*

As the quotation from Harwood, above, explains, the proliferation of digital and new media technologies as well as changes to public spaces and social institutions, have led to learning occurring not only in formalized educational sites, but across a range of channels and formats, such as advertising, sports, and leisure. Media platforms, in particular, have been identified as having a biopedagogical function, including websites, radio, film, and television *(Wright & Harwood, 2009; Rich, 2011).*

At one time, the panopticon was used to illustrate how surveillance operates; biopedagogy posits that surveillance of bodies now operates through the amplitude of mass media, popular culture, digital and mobile technologies *(Rich, 2011).* In her study of obesity in weight-loss reality television, for instance, Emma Rich *(2011)* claimed that media texts participate in larger “assemblage(s)” *(Rich, 2011, p. 6)* of surveillance, connecting with other discourses (such as family and risk) in the discipline of bodies. Biopedagogies operate by placing individuals under constant surveillance and increasing knowledge about the body (e.g. knowledge about obesity and associated risks) therein promoting expanded self-monitoring, and by giving instructions on how to behave with respect to their bodies. Rail and Lafrance succinctly asserted that, “biopedagogies place individuals under surveillance and, through a range of moralising discursive strategies, induce them to monitor themselves.” *(Rail & Lafrance, 2009, p. 76).* As an extension of biopower, biopedagogy is similarly concerned with both the

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discipline of the body and the regulation of the population (Harwood, 2009). Jan Wright has stated that biopedagogies are, “those disciplinary and regulatory strategies that enable the governing of bodies in the name of health and life” (Wright, 2009, p. 9). Like biopower, biopedagogies are both “massifying and individualizing” (McPhail, 2013, p. 290); biopedagogies target and attend to both the individual bodies themselves and to bodies en masse, at the population level.

Some critical obesity scholars have used the concept of biopedagogy to argue that a novel form of virtuous citizenship—that of the ‘bio-citizen’—has emerged (Halse, 2009). The notion of the bio-citizen is an extension of ‘biological citizenship’ (Rose & Novas, 2004) by which particular kinds of medical subjectivities are based upon some shared somatic characteristic (such as a genetic condition or illness).

As an extension of biological citizenship, bio-citizenship, Halse asserts, “weld(s) the body onto the social, cultural, economic and political responsibilities of citizenship and the state” (Halse, 2009, p. 50). Neoliberal principles28 (e.g. individualism) undergird the biopedagogies of bio-citizenship, requiring individuals to manage their own lifestyles through a variety of disciplinary techniques targeting the body (Rail & Lafrance, 2009). In other words, bio-citizenship entails embracing particular body ideals and recommended practices, and acting in accordance with the social and political values of the neoliberal State, including individualism and personal responsibility for health.

The concept of biopedagogy has been used to examine such areas as fitness and educative strategies within reality TV shows (Rail & Lafrance, 2009; Rich, 2011; Sukhan, 2012); physical education (Camacho & Fernández-Balboa, 2006); bullying, ‘boyhood’ and physical education (Atkinson & Kehler, 2012); web-based health promotion (Wright & Halse, 2014); childhood obesity campaigns (Jette et al., 2016); response and resistance to obesity and healthy eating campaigns (McPhail, 2013); digital health mobile apps (Rich & Miah, 2014); and, online weight-loss forums (Ferry & Richards, 2015). Risk discourses are often implicated in biopedagogies—that is, learning to understand and act upon bodies in order to manage risk.

28According to Halse (2009), the values of biocitizenship originated in the polis of Ancient Greece, in which individual obligations were bound up with the organization of the community.
3.3 Risk

There are several broad conceptualisations of ‘risk’. The realist, or techno-scientific conceptualisation of risk—closest to the commonplace understanding of risk as an objective, calculable phenomenon—is used in epidemiology, statistical and actuarial sciences, and risk management (Hillier, 2012). The remaining three perspectives on risk attend to the social and cultural contexts in which risk is understood and negotiated. Deborah Lupton divides these three perspectives into the following categories: the ‘cultural-symbolic’, ‘risk society’ and ‘governmentality’ perspectives (Lupton, 1999). The cultural-symbolic perspective, popularized by Mary Douglas, Aaron Wildavsky and colleagues, takes a structural-functionalist approach and views risk perception and blame as cultural boundary markers (Douglas & Wildavsky, 1983). Parisa Safai’s concept of a “culture of risk” and “culture of precaution” (Safai, 2003, p. 127) within sports medicine is another example of a cultural-symbolic approach to risk and health. In contrast, the ‘risk society’ perspectives of Ulrich Beck and Anthony Giddens examine risk and reflexivity amongst macrosociological conditions of late modernity, such as industrialization and globalization (Wilkinson, 2001). The ‘governmentality’ approach, first advanced by Michel Foucault, concerns itself not with the nature of risk itself, but with the ways in which ‘truths’ about risk emerge and become prominent.

Over the past several decades, a large body of critical social science literature on risk has emerged (e.g. Baker & Simon, 2010; Beck, 1992; Castel, 1991; Dean, 1998, 2010; Douglas, 1992; Douglas and Wildavsky, 1983; Ewald, 1991; Fullagar, 2009; Giddens, 1991; Higgs, 1998; Luhmann, 1993; Lupton, 1999; Nettleton, 1997; O’Malley, 1996; Petersen, 1997; Petersen and Lupton, 1996; Striley and Springer, 2014). Common to all this literature is the argument that ‘risk’ has become a prevailing way of understanding and ordering the world, one that shapes our corresponding approaches to contemporary life, both individually and collectively, and around which Western society is organized (Dean, 2010; Petersen, 1997; Robertson, 2001). Nikolas Rose (2001) stated the following about the role of risk in late modernity:

“By the start of the 21st century, hopes, fears, decisions and life-routines shaped in terms of the risks and possibilities in corporeal and biological existence had come to supplant almost all others as organizing principles of a life of prudence, responsibility and choice” (Rose, 2001, p. 18).
In other words, risk has become so central to modern Western society that it supersedes most other principles of organization.

A governmentality perspective considers ‘risk’ to be discursively constituted. Risk is not understood as an objective reality; as Francois Ewald asserted, “there is no risk in reality” (Ewald, 1991, p. 199). Rather, what we understand to be ‘risk(y)’ is produced through discourses on risk and their attendant strategies, practices, and institutions (Lupton, 1999). In other words, risk is understood through the range of disciplines that generate information about risks and the network of institutions, practices, and strategies that govern risk. Mitchell Dean (2010) eloquently explains the significance of risk, stating that:

> What is important about risk is not risk itself. Rather it is: the forms of knowledge that make it thinkable, such as statistics, sociology, epidemiology, management and accounting; the techniques that discover it, from the calculus of probabilities to the interview; the technologies that seek to govern it, including risk screening, case management, social insurance and situational crime prevention; and the political rationalities and programmes that deploy it, from those that dreamt of a welfare state to those that imagine and advanced liberal society of prudential individuals and communities” (Dean, 2010, p. 206-7).

As the quotation above explains, a governmentality approach to risk is not concerned with assessing or measuring risk, nor with understanding the nature of risk; rather, it focuses on how we come to know something as ‘risky’ and how the ‘truths’ about risk are produced.

### 3.3.1 Discourses on risk as a governmental rationality

The careful, preemptive calculation of risk and a heightened belief in our ability to foresee, manage, and mitigate risks are prevailing characteristics of modernity (Robertson, 2001; Lupton, 1999). Embedded within notions of risk are modernist values of calculability and prediction.  

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29 O’Malley (2004b) has posited that in addition to risk, which is rooted in notions of calculability, ‘uncertainty’ is a twin strategy of governance that addresses situations thought to be unique or where calculations cannot be made. O’Malley claims that uncertainty requires governing through ways such as judgement, guesswork, and analogy (O’Malley, 2004b).
and the belief that the future eventualities can be (and should be) anticipated, intervened upon and governed (Polzer, 2006). Nikolas Rose has claimed that risk, “involv[es] calculations about probable futures in the present followed by interventions into the present in order to control that potential future” (Rose, 2001, p. 7). In the simplest terms, risk is a collection of ways of thinking and acting aimed at calculating, predicting, and intervening upon future events.

Mitchell Dean (2010) has argued that risk discourses constitute a calculative, “governmental rationality” (Dean, 2010, p. 205). To understand risk as a governmental rationality means investigating risk as a way of “ordering reality, rendering it into a calculable form” (Dean, 2010, p. 206) so that events are made governable. Drawing from the work of Ewald (1991) and Weir (1996), Dean identified three types of risk rationalities within neoliberal societies: insurantial risk, epidemiological risk, and clinical (or case-management) risk (Dean, 2010). Insurantial risk deals with population level probabilities of events governed by law and related to a potential loss of capital, for instance litigation or bankruptcy (Dean 2010; Ewald, 1991). Epidemiological risk concerns disease rates and requires statistical and screening technologies to draw links between disease and its causal variables, in order to predict and prevent health risk (Lupton, 1999). Clinical risk, posited by Weir (1996), pertains to assessment and therapeutic intervention for ‘at risk’ groups or individuals (Dean, 2010). Dean asserted that population based strategies and epidemiological knowledge are increasingly being incorporated into clinical risk assessment, specifically into assessing and positioning the individual patient within population level data (Dean, 2010).

In the early 1990s, Robert Castel (1991) argued that the ways in which population level data and risk factors were being employed toward individual patients represented a transformation of notions of the subject. Castel argued that within medicine and health, notions of risk had replaced notions of danger: the former referring to a combination of abstract factors rendering particular outcomes more or less probable, the latter referring to the proximity to a dangerous ‘thing’ or an inherent personal quality (Castel, 1991, p. 287). This transition from danger to risk allowed for old notions of the individual subject to be “dissolved” and replaced with a constellation of risk factors— “statistical correlations of heterogeneous elements” (Castel,
To be considered ‘at risk’, Castel argued, this new subject did not need to possess any symptoms but only the characteristics associated with risk. Castel warned that the dissolution of the subject had important implications for medical practice and public health interventions, including the subordination of health practitioners to administrators and managers of statistical and epidemiological data; the management of a multitude of potential risk factors; and, the assigning of a life trajectory based on those risk factors rather than treating the individual (Castel, 1991, p. 290).

Risk as a calculative, governmental rationality has become a central element in public health and health care (Dean, 2010). In the name of risk, public health and medicine engage in screening interventions, infectious disease surveillance and health promotion programs in order to predict who will become ill, to detect illness in its early stages and—if at all possible—to prevent it from occurring at all. Scholars such as Ashton (1992), Skolbekken (1995), and Petersen (1997) have argued that the goals and focus of health promotion, in particular, have broadened, in such a way that demonstrates risk rationality seeping into other areas of life not traditionally associated with health promotion (e.g. the regulation of urban spaces and community development).

Caroline Fusco’s work on the “healthification” of spaces (Fusco, 2006; 2007) demonstrates how health and risk rationality seeps into other domains. Fusco argues that discourses of health, physical activity, risk and hygiene become inscribed upon particular spaces such as locker rooms (2004), fitness spaces (2005), and urban playgrounds (2007), for example through posted warning signs and the policing of behaviour within those spaces. Fusco argues that within these healthified spaces, subjects govern themselves and others through intensified surveillance and regulation (Fusco, 2004) and “reimagine” themselves as active, healthy-living subjects within those spaces (Fusco, 2007, p. 43).

The advance of risk rationality into multiple, different arenas has given rise to “an endless parade of ‘at risk’ populations and ‘risky’ situations” (Petersen, 1997, p. 195). The increasing medicalization of daily life has dissolved boundaries between healthy and unhealthy populations as the whole of life is becoming subjected to “surveillance medicine” (Armstrong, 1995, p. 393) and to scrutiny for risky behaviours that might pose problems at some point in the future. In other words, as more and more issues, events, and domains of life are being understood in terms of the calculation and prevention of health risk, more and more risk factors, ‘risky’ people, places and behaviours are being discursively produced. In these ways, risk as a
governmental rationality within public health, has significant implications for subjectivity, and for the ways in which medical and public health interventions are understood, operationalised, and responded to.

3.3.2 Discourses on risk as a governmental strategy

Deborah Lupton has asserted that risk can be understood as a, “governmental strategy of regulatory power” (Lupton, 1999, p. 89). Bringing together Dean’s and Lupton’s arguments about risk, my understanding is that, because discourses on risk constitute a governmental rationality (a way of calculating and understanding the world), they become operationalised as a governmental strategy (a way of surveilling and regulating individuals and populations).

Discourses on risk serve a regulatory function, particularly within neoliberal political rationalities (Lupton, 1999). Neoliberal states have been characterized by a scaling back and minimization of government intervention; a dissolution of the welfare state; an emphasis on free market principles or “market fundamentalism” (Ayo, 2015, p. 99); risk management; individual autonomy; individual responsibility; active entrepreneurship (Ayo, 2015; Burchell, 1996; Ericson, Barry & Doyle, 2000; Gordon, 1991; Lupton, 1999; Rose, 1993) and, the “inevitable inequality as a consequence of choice” (Ayo, 2015, p. 99). Citizens within neoliberal societies are expected to be entrepreneurial subjects, to engage in their own active self-government, and to improve upon their own lives by making responsible choices (Peters, 2001; Rose, 2005). The mandate to be an entrepreneurial subject exists because neoliberal states govern through “the regulated choices of individual citizens, now construed as subjects of choices and aspirations to self-actualization and self-fulfillment. Individuals are to be governed through their freedom” (Rose, 2005, p. 41). To encourage this active self-government, neoliberal states adopt strategies to responsibilize individuals and families. The state, thereby, divests itself of responsibilities for the welfare of its citizens, effectively “writing itself out of its traditional responsibilities.

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30 Neoliberal values have profoundly shaped health care and health policy (Mooney, 2012; Navarro, 2008), rendering health care “less as a social right and more as a market commodity” (Muntaner et al., 2006, p. 803). Navarro (2008) asserts that neoliberal objectives have led to the decline of public spending in health care, to the privatization of health care services, to the dismantling of public health infrastructures, and to the preeminence of biological and behavioral perspectives in medicine (Navarro, 2008).
concerning the welfare state through twin strategies of a greater individualization of society and the responsibilization of individuals and families” (Peters, 2001, p. 59).

Under neoliberalism, risk has emerged as a significant governmental strategy within health, and particularly within what has been termed, the ‘new public health’ (Ayo, 2015; Petersen & Lupton, 1996). The health promotion strategies of the new public health rest upon the premise that risk is an individual responsibility and that individuals ought to protect themselves from risk (Petersen, 1997). Ayo (2015), himself drawing from Ericson (2000), asserts that neoliberal principles such as individual responsibility and risk management are invoked within the policies and practices of health promotion. Consequently, health promotion strategies centre not on the role of the government but on individual lifestyle, education, empowerment, and responsibilization of individuals and families to manage their own health. The responsibilization of the self requires subjects to ‘invest’ in their own health and welfare at crucial times, and to actively and vigilantly manage their own risks. Risk management, thus becomes, as O’Malley describes, “an everyday practice of the self” (O’Malley, 1996, p. 200), for prudent, enterprising, ‘entrepreneurial’ subjects, who are not passive recipients, but active partners in their own self-government (Lupton, 1999; Rose, 2001).

Expertise plays a crucial role in the relationship between risk, self-government, and the entrepreneurial self, under the new public health. Entrepreneurial neoliberal subjects seek to actively take up expert recommendations, thereby acting as agents in their own self-regulation (Petersen, 1997; Rose, 2005). As neoliberalism depends upon the willingness of individuals to regulate and act upon themselves, expert recommendations must “merge with our own projects for self-mastery and the enhancement of our lives” (Rose, 1996, p. 61). Notions of health consciousness associated with ‘healthism’, in particular, have become imbricated with neoliberal ideals of personal choice and individual responsibility (Crawford, 1980; 2006). The means of achieving and maintaining good health under neoliberalism have been located within the rhetoric of individual responsibility and choice. Deborah Lupton has used the example of pregnancy to illustrate the relationship between expert knowledge, self-government, and risk; typically, a pregnant woman willingly adopts expert advice regarding diet and behaviours, medical care, and parenting. In this example, the woman is not being forced to comply, but rather does so in order to have both a healthy pregnancy and a healthy child (Lupton 1999, p. 88-90). Rather than having experts intervening directly into the personal lives of individuals, in the name of health.
and risk, individuals act as agents in their own self-government. In that way, risk becomes employed as a strategy of the government of the self.

Additionally, in recent years, critical health scholars have begun to explore the combination of risk with emotional appeals as a strategy of health promotion, specifically the use of graphic imagery and stories that evoke intense emotional responses in order to induce audiences to change particular health behaviours (Lupton, 2013). For instance, images of cancerous lung tissue and diseased teeth and gums have been used within smoking cessation campaigns, thereby associating risk of cancer with feelings of disgust. Similarly, Brown and Gregg’s (2012) study of binge drinking awareness campaigns in Britain and Australia found that public health authorities used nightmarish imagery and fictional scenarios of assault, violence, and public humiliation to associate feelings of fear and regret with binge drinking and risk. These techniques within health promotion have been described as pedagogies of “shame” (Leahy, 2014), “disgust” (Lupton, 2015) and “regret” (Brown & Gregg, 2012), respectively. Lupton has termed this linking of emotion and risk within public health as, ‘the emotion-risk assemblage’ (Lupton, 2013).

The concurrent and mutually reinforcing discourses of risk and individual responsibility for health have implications for health behaviour. In the name of personal freedom, responsibility, and in the interest of minimizing public expenditure, individuals and families are encouraged and required to participate in their own vigilant self-government, self-surveillance and self-evaluation, in order to keep from burdening society with illness that could have been prevented and managed without government interference (Petersen, 1997). Instead of relying on the social safety net provided by welfare intervention, individuals are expected to minimize risk in their own lives. As Robertson (2001) argues, neo-liberal values and risk discourse produce self-care imperatives:

“The argument here is that neo-liberal notions of individual autonomy, the free market and limited government are related, in a mutually producing and sustaining way, to the imperatives to ‘self-care’—in the form of self-surveillance and self-regulation—at the heart of prevailing discourses on health risk” (Robertson, 2001, p. 231).

This relationship between the individual and state with respect to risk has been called a “new reworking of the idea of citizenship” (Higgs, 1998, p. 188), and a new “politics of
This new politics of citizenship is based upon expectations of citizen behaviour and notions of social contract, duty, and mutual responsibility rather than on rights, social security, or community (Higgs, 1998; Lupton & Petersen, 1996). Ideals of active risk management and self-regulation in the name of risk “underpin contemporary assumptions of what it means to be human and what the ideal modern ‘self’ should be” (Lupton & Petersen, 1996, p. 64). Further, Petersen and Lupton (1996) argue that the new public health mandates that citizens participate in creating the conditions for the promotion of health (e.g. through taking part in community fora) in the name of ‘empowerment’. This “participatory imperative” (Petersen & Lupton, 1996, p. 147-50) is premised upon an understanding of obligations of citizenship implied by rights and is shaped by assumptions that the scientific, so-called ‘objective’ knowledge held by health professionals is superior to the ostensibly limited, common-sense knowledge of the lay-public (Petersen & Lupton, 1996, p. 153-4). The reconfiguration of citizenship based on duty, and the perception of inferior lay knowledge, are problematic because they limit the possibilities for what is thinkable and sayable regarding alternative political intervention, and constrain understandings about the interpersonal responsibilities required of those who are hailed into the participatory imperative (Petersen & Lupton, 1996).

The new politics of citizenship has also been linked with discourses of responsibility, virtue, and with the formulation of a moral imperative for individuals to reduce risk through their own preventative actions (Ewald, 1991; Lupton, 1995). Active self-regulation in the name of risk has been characterised as ‘moral’ or ‘virtuous’ citizenship (Halse, 2009; Halse and Wright, 2014; Petersen, 1997). For example, people categorized as ‘high risk’ for particular conditions are often encouraged to practice risk-minimising behavioural norms, both in order to prevent disease, and so that they do not present a risk to themselves or others, the benefits of which extend beyond the individual to society. On the other hand, not taking risk-minimising actions might be viewed as a moral failing and a defaulting of one’s duty as a citizen (Petersen, 1997). Nikolas Rose (2001) has critiqued the expectation of preventative action by “presymptomatic” individuals, claiming that these individuals, despite being asymptomatic or ostensibly healthy, “must nonetheless conduct their lives under the shadow of medical authority if they are to be ‘responsible’” (Rose, 2001, p. 11). Further, even those individuals not assigned to an ‘at risk’ group must monitor and self-regulate in the name of risk, lest they be criticized for not fulfilling their putative duties as responsible citizens (Petersen, 1997, p. 198).
Taking notions of responsibility for health a step further, some scholars have described discourses of blame and culpability, for instance within women’s health and breast cancer, (e.g. Kopelson, 2013; Yadlon, 1997), and within critical obesity studies and public health (e.g. Herrick, 2007; Throsby, 2007); For example, Clare Herrick claims that within health promotion and social marketing campaigns targeting obesity, accusations of culpability are assigned in response to “irresponsible lifestyle choices” (Herrick, 2011, p. 17). Within this reconceptualization of citizenship—based upon individual self-monitoring and self-regulation, and amid expectations of preventative action, and notions of blame and culpability—risk is employed as a significant strategy of the government of the self.

3.4 Implications

In recent decades, numerous scholars have employed and extended Foucauldian theory to explore the conceptual relationship between governmentality and risk: Briggs and Hallin (2007); Castel (1991); Dean (2010); Higgs (1998); Lupton, (1999); O’Malley (2004a); Petersen (1997); Petersen and Lupton (1996); Robertson (2001); Rose (1996); Turner, (1997); and Zinn (2008) to name but a few. A governmentality and risk approach has also been used to empirically explore the relationship between various platforms of popular media, risk, and the implications for subjectivities and citizenship. These empirical studies range in topic from more traditional health concerns such as cancer in the Canadian news (Musso & Wakefield, 2009), and diabetes within North American news coverage (Rock, 2005), to a variety of other media platforms, including sports magazines and images (Thorpe, 2008); reality television (Readdy & Ebbeck, 2012), ‘makeover’ television (Ouellette & Hay, 2008), and fast food advertising within print media (Henderson, Coveney, Ward & Taylor, 2009).

This present study is situated within this body of theoretical and empirical literature on health risk, governmentality, and the media. I chose the governmentality and risk perspective as my analytic approach because it allows for exploration into how particular discourses on risk emerge and operate, their implications for subjectivity, as well how those risk discourses function as a governmental strategy under biopower. This approach is particularly useful when applied to the topic of infectious disease outbreaks/pandemic like H1N1. Pandemics raise questions about the ways in which public health interventions ‘hail’ people into particular kinds of subjects, as well as questions about how individuals, social groups and the state are
discursively constituted in the context of population level infectious disease planning and response. Some theoretical implications of this approach are discussed in the following three points:

Firstly, I understand the news media platforms to be a part of a larger assemblage of complex and heterogenous apparatuses in which health is problematized, as well as a significant site in which the discourses surrounding the “politics of life,” (Rose 2007, p. 3) are displayed, challenged, and circulated. I conceive of the media texts as socially and historically contingent texts in which health, risk, and other discourses are displayed, read, interpreted, negotiated, and resisted. This distinction has several important implications for the study: This is not a study about ‘the media’, nor about ‘H1N1’, nor even about health risk in the news; the substantive issue (H1N1) and the data source (news media texts) are not the main objects of study. Rather, this is a study about risk discourses within news media texts. In the following chapters I focus my analysis on the texts themselves and not on the institutions or individuals that produced them. Nor do I explore issues of media production or reception (Seale, 2004a). In my analysis and discussion, therefore, I do not attempt to explain why certain media content exists, but rather to describe the ways in which the media texts constitute risk, and subjects, in particular ways.

Secondly, I understand both H1N1 risk and media messages of H1N1 risk to be discursively constituted. Thinking of risk as discourse requires asking different questions than those concerned with realist conceptions of risk; social constructions of risk in relation to some objective, pre-existing danger; the motives of news producers; or audience interpretations of the news messages. I do not compare the accuracy of media representations of risk with a biomedical perspective, attempt to uncover why particular representations prevail over others, nor ask audiences about their responses to H1N1 coverage. In the following chapters I instead explore how risk is talked about and written about, focussing on such things as metaphors, imagery, and rhetorical devices. I explore how ‘truths’ about H1N1 risk are communicated within news coverage. How this theoretical perspective shaped data collection and analysis is discussed in more detail in Chapter 4.

Lastly, I am interested in the biopedagogical and regulatory effects of risk—the ways in which media texts school readers on their bodies and instruct readers, both explicitly and implicitly, on how they should come to know and act on themselves in order to be healthy
subjects and responsible citizens. My analysis focuses on the behaviours and practices that media discourses on H1N1 risk encourage and expect, and considers the kinds of subjects and citizens that are made possible within the context of those discourses.

3.5 Conclusions

The aim of this chapter has been to lay out the logic of my theoretical approach, which I have organized around three central concepts: governmentality, biopower/biopedagogy, and risk. I began by discussing how governmentality operates as a mode of social regulation that is focussed on the activity of governing, and is characterized both by an ensemble of various institutions, procedures and tactics directed at population welfare, as well as the tendency and process of spinning off government objectives into various sectors of society. I then discussed how the activities of governing are supported and made possible by the mutually constitutive relationship between knowledge and power. Next, I addressed how the knowledge/power dynamic manifests as discourses, which are central to the Foucauldian understanding of a discursively constituted subject. Within that discussion, I addressed the role of expert knowledges under governmentality, as well as how expert sources have been used in journalistic practice as a way to demonstrate objectivity. Next, I discussed the second major concept that guided this study, biopower, and how it represents two interrelated concerns: the regulation of the individual body, and population well-being. Following that, I drew from more recent scholarship on biopedagogy, which extends the concept of biopower and brings it together with the notion of pedagogy, to describe the ways in which we learn to understand and act upon our bodies in the name of health, amid a range of new media technologies. Then I described the governmentality approach to risk and discussed how risk discourses can be understood to operate both as a governmental rationality and a governmental strategy, particularly within neo-liberal societies. Lastly, I reflected on how my theoretical perspective has shaped my research interests and assumptions in the following ways: an understanding of the media data as socially and historically contingent texts; of media representations of risk to be discursively constituted rather than (imperfect) reflections of some pre-existing reality; and a focus on the biopedagogical and regulatory implications of risk discourses within the media texts.

In the next Chapter, I will explicate the thesis methodology, beginning with the overarching research questions and objectives. In the first section of that chapter I will describe Foucauldian discourse analysis as an analytic approach and will discuss the methodological
implications that approach had for data collection and analysis. Next, I will describe the steps taken to generate, organize and analyze the media data, and will close by discussing issues of research quality.
Chapter 4
Method

4 Method

One isn’t assessing things in terms of an absolute against which they could be evaluated as constituting more or less perfect forms of rationality, but rather examining how forms of rationality inscribe themselves in practices or systems of practices, and what role they play within them, because it’s true that ‘practices’ don’t exist without a certain regime of rationality. (Foucault, 1991b, p. 79)

We suggest that if biopolitical technologies are indeed transferred into regimes of governmentality, citizenship, and the production of subjectivities, a crucial and relatively unexamined site where this process occurs lies in the discursive practices of the news media, with their pedagogical power for reinscribing categories and their performative potential for shaping new ones. (Briggs & Hallin, 2007, p. 44)

In the previous chapter I described my theoretical approach, formulated around four key concepts: governmentality, biopower and biopedagogy, and risk. I discussed how, from a governmentality and risk perspective, risk is discursively constituted, as well as how risk discourses operate as a technology of government under neoliberalism. I also discussed the particular theoretical implications this perspective brought to my understanding of media texts and media representations of risk.

In this chapter I turn to the research interests of this thesis. First, I outline the primary research question and related objectives. Next, I discuss Foucauldian discourse analysis as my methodological approach and the implications of this approach for a study of risk discourses and H1N1 in the news media. Following that, I describe the methods used to collect and analyze the media data, with particular attention to the process of generating a study sample. Lastly, I address the issue of research quality.

4.1 Research question and objectives

This study was guided by the following question:

How is risk talked about in the news media coverage of H1N1 and what are the social and political implications of the ways in which risk is talked about?

Pursuant to this research question, the following three objectives were added:
1) Document and analyze discursive representations of risk within English language, Canadian public news media stories of H1N1 in 2009 and 2010

2) Explore and articulate the interrelationship of underlying discursive themes

3) Explore their implications for subjectivities and notions of citizenship in the context of late neo-liberal political rationalities

These questions and objectives steered data collection and analysis, informing the framework by which I collected particular news articles for analysis and set others aside, asked particular questions of the data, and followed particular ‘leads’ rather than others. As the sections below will describe, they guided my decisions into what data I examined, what I was looking for in that data, and how I went about looking for it.

4.1.1 Methodological Approach

To explore risk discourses within H1N1 news coverage, I used a Foucauldian discourse analysis approach. Discourse analysis is concerned with the ways in which objects, subjects, bodies, and experiences are discursively brought into being and located within particular regimes of truth and power (Malson, 2010). Scholars have previously taken a Foucauldian discourse analysis approach to examine media texts and discourses of masculinity in men’s health magazines (Crawshaw, 2007), femininity in snowboarding culture (Thorpe, 2008), and representations of women and AIDS (Sacks, 1996), to name but a few examples.

The methodological tradition of discourse analysis extends across multiple disciplines including sociology, history, literature, and psychology (Sarangi, 2010), and there are several discourse analysis approaches rooted in different scholarly communities and holding different political commitments. These approaches include conversation and discourse analytic techniques associated with ethnomethodology (Hepburn & Potter 2006), critical discourse analysis (CDA) popularized by Fairclough (2005; 2013), and the socio-cognitive approach developed by van Dijk (2008) and others. Whereas a discourse analytic approach is primarily interested in

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31 Sometimes called “continental DA” (Given, 2008).

linguistic processes within texts (Puchta & Potter, 2004), and CDA is concerned with the emancipatory project of “demystifying ideologies” (Wodak & Fairclough, 2004, p. 185) and uncovering asymmetries of power (Chouliaraki, 2008), a Foucauldian approach to discourse analysis is distinguished by a “predisposition to look at certain questions rather than others” (Kendall and Wickham, 2004, p. 131), and the use of Foucauldian theoretical ‘frames’ for identifying, selecting, and interpreting data (Cheek, 2008). In other words, it is not a prescribed set of empirical or analytic steps but rather a set of theoretically informed “principles of scholarship” (Cheek, 2004, p. 1142). As an “analytic sensitivity to discourse” (Parker, 1992, p. 122), Foucauldian discourse analysis shapes the conceptualizing of a research problem and the gathering and interpreting of data—as Crawshaw states, “discourse analysis is characterised by a rigorous combination of empiricism and theory” (Crawshaw, 2007, p. 1609).

There is no established technique or defined set of procedures that characterize a Foucauldian discourse analysis approach (Cheek, 2004; Chouliaraki, 2008; Powers, 2007). Although a Foucauldian approach is not systematic, the approach has spawned a growing body of qualitative research scholarship that has gained increasing prominence in many substantive areas (e.g. Cheek 2008; Diaz-Bone et al., 2008). I drew from this well of theoretical and empirical work to inform both the overarching methodological framework as well as the analytic techniques for this study.

I began developing the study design by looking to Kendall and Wickham’s popular framework for Foucauldian informed qualitative research (Kendall & Wickham, 1999). They suggest the following five steps for analyzing discourse (Kendall & Wickham, 1999, p. 42). The first of the five steps represents an epistemological stance. The remaining four steps guided the development of my study proposal, particularly in helping to formulate the research question and objectives:

- recognize discourse as a regular and systematic corpus of statements;
- identify the rules for the production of statements;
- identify the rules that delimit what is sayable;
- identify the rules that create spaces in which new statements can be made;
- identify the rules that ensure a practice is at once both material and discursive.
Elsewhere, Kendall and Wickham (2004) provide guidance on employing
governmentality as an analytic lens, and propose the following criteria for such research (Kendall & Wickham, 2004, p. 132):

- ask “how” questions rather than “why” questions;
- base the study on a problem rather than on a specific historical period;
- focus on programmatic texts;
- commit to “keep digging” until the beginnings of a practice are found

These proposed requirements, particularly the recommendations to be ‘problem-based’ and to focus on “programmatic texts”, influenced my thinking on data collection and, later on, helped to shape the ‘corpus of statements’ that comprised my final sample, as I will discuss in following sections.

Along with Kendall and Wickham’s recommendations, which provided high-level guidance for my overarching research questions and approach, I found Lopez and Robertson’s conceptual framework of discursive formation (Lopez & Robertson, 2007) useful for their more detailed description of what to look for when analyzing discourse. Lopez and Robertson outline a four-point analytic approach expanding upon Foucault’s sets of rules for discursive formation. Their first and second points pertain to the processes by which particular people and social institutions may determine and produce knowledge about particular objects. The third and fourth points concern the methodological procedures used to produce knowledge, and the relationship between the particular object and the broader discursive field, respectively:

- objects (the object of knowledge and who is identifying it);
- enunciative modalities (who may speak and with what authority);
- concepts (the rules for legitimate knowledge about an object);
- strategies (how discourses enable and interact with behaviours and practices).

Although this present study was not concerned with identifying the emergence of H1N1 risk discourse specifically, Lopez and Robertson’s approach guided my methodological thinking. In particular, the third and fourth points, concerning ‘concepts’ and ‘strategies’, respectively, helped to refine my thoughts about what would potentially be significant in the media data, subsequently shaping my sampling strategy and my choices about analytic techniques.
Arribas-Ayllon and Walkerdine’s guidelines for developing a “corpus of statements” (Arribas-Ayllon & Walkerdine, 2008, p. 100) for Foucauldian discourse analysis also guided my thinking, particularly about sampling. They suggest that an internally valid corpus of statements should do the following: a) demonstrate the ‘rules’ that govern statements about the object of study, b) reflect the discontinuity and diversity of discursive practices around the object of study, and, c) illustrate their transformation over time and/or across different institutional spaces (Arribas-Ayllon & Walkerdine, 2008). Drawing from these criteria, my study sample would have to contain instances of discourse that constituted H1N1 risk, across multiple H1N1 news topics, and over time.

Deborah Lupton’s pioneering paper on discourse analysis (Lupton, 1992) provided functional instructions, demonstrating how to conduct a discourse analysis using an example text of media coverage of HIV. Lupton explains that discourse analysis requires investigation of both the text and context, and provides practical insight into how to explore each: looking at grammar, syntax, rhetorical devices, metaphor, style, and linguistic structure in the former, and for the latter, looking to the larger social, political and cultural context in which the text in question emerged. She argues that discourse analysis is particularly useful for understanding discourses surrounding health and illness, public health, and health communication (Lupton, 1992). Elsewhere Lupton (1999), herself drawing from Stuart Hall (1997), suggests several strands of inquiry for those who wish to explore the discursive constitution of risk in particular. These strands of inquiry include the following: attention to statements used to shape knowledge about risk; the rules prescribing and excluding certain ways of talking about risk; the types of subjects that risk discourses make possible; the knowledge and authority that risk draws upon; the institutions and practices that deal with risk; and, how new risk discourses emerge and what other discourses they do supplant (Lupton, 1999, p. 34-5).

Finally, Julianne Cheek’s writings on discourse analysis (Cheek, 2004; 2008) and Adele Clarke’s book chapter on discourse and situational analysis (Clarke, 2005) provided additional conceptual and practical guidance. In particular, Cheek articulates a number of theoretical assumptions associated with Foucauldian discourse analysis including the significance of

33 See Arribas-Ayllon and Walkerdine (2008) for guidelines on developing a “corpus of statements”, that is, samples of discourses that express a relationship between ‘rules’ and ‘statements’.
sampling strategy (Cheek, 2008), and the importance of clear and trustworthy reporting for ensuring research quality (Cheek, 2004). I address both points in later sections of this chapter.

In addition to the conceptual work discussed above, I turned to the empirical studies discussed in the Background chapter for more examples of how scholars have conducted Foucauldian discourse analysis studies on the media, in particular, and of health and illness more broadly.

4.1.1.1 Methodological Implications

Following Kendall and Wickham (1999; 2004), Lopez and Robertson (2007), Arribas-Ayllon and Walkerdine (2008), Lupton (1992; 1999), Cheek (2004; 2008), and Clarke (2005), this methodological approach, underpinned by Foucauldian perspectives on discourse and risk, brought several methodological assumptions to bear on this study. There is necessarily some relationship between the methodological assumptions below and the theoretical implications discussed previously in Chapter 3. The points below more specifically address the ways in which discourse analysis shaped data collection and analysis.

One assumption concerns the nature of risk messages and media content. As discussed in the previous chapter, I understand risk to be discursively constituted rather than an objective reality. I understand media texts to be constituted by, and in turn, producing and challenging those discourses, rather than conveying value-neutral information in an uncomplicated channel from producer to audience. The methodological implication of this perspective was that I did not seek to uncover any one, essential version of risk, but multiple, partial, situated ways of thinking and speaking about risk. As such, my aim was not to seek consensus, closure, or complete description of H1N1 risk, but rather to “destabilize” and open “new avenues for thought” (Rossiter and Robertson, 2014, p. 203), being open to multiple, and perhaps contradictory, discourses. To that end, I make no claims that my results or interpretations are a complete or objective account of H1N1 risk messages within the news coverage, nor that my description of risk discourse is generalizable to other media discourses of risk.

A second methodological implication pertains to the nature of Foucauldian discourse analysis, which requires attention to both the text and the context. Cheek argues that discourse analysis is indeed less concerned with content and instead, more about exploring “how certain things came to be said and done, and what has enabled and/or constrained what can be spoken or written in a particular context” (Cheek 2004, p. 1147). My aim as a researcher, then, was to
explore both the content of the media texts, as well as how those texts were ordered, shaped, historically and socially situated—to ask, like Adele Clarke, “Where did this text come from? What work is it intended to do in the world? How so?” (Clarke, 2005, p. 53). I will say more about this later in this chapter.

Another implication of discourse analysis pertains to the role of the researcher. Cheek argues that discourse analysis affects both the research and the researcher, “from the questions asked to those ignored, from whom is studied to whom is ignored, from problem formation to analysis, representation and writing.” (Cheek, 2004, p. 1148-9). In this study, I did not view myself as an objective investigator, but rather, one who participated in the research process and also participates in and produces discourses (Parker, 1992). My aim was not to try to minimize or mitigate my presence and participation, but to be aware that it is a part of the process and to document where I made decisions that shaped the analysis. Further, I understand that meaning is assigned to language and texts by both writers/speakers and readers/listeners; as a researcher I stepped into a place to impose meanings onto texts written by others, bringing to bear my own understandings of each text (Cheek, 2004; Malson, 2010). The resultant implication of the role of the researcher, Cheek argues (2004; 2008), is the need for thorough and detailed reporting on the research process. This reporting should include laying out the researcher’s theoretical stance on both discourse and discourse analysis (which I have attempted to do in the present chapter and in Chapter 3); by articulating the theoretical framework used for analysis; and by providing a “decision trail” (Koch, 2006, p. 91) of the data collection and sampling process and detailed description of which texts were analyzed and why (Cheek, 2004). In following sections of this chapter, I provide detailed description of, and rationale for, my sampling decisions.

A fourth methodological implication concerned the need to determine what exactly would qualify as an instance of risk discourse. In other words, because risk discourse does not exist ‘out there’ to be found, I had to make analytic choices about what I was looking for and how I would know when I found it. As a researcher, I constructed the object of analysis and chose to do so while ‘in the data’ rather than starting with a pre-determined set of criteria or definition of ‘risk’. That is not to say, however, that I went into this analytic process blindly; on the contrary, I had been sensitized to H1N1 and risk through reading empirical studies of risk and infectious disease in the media; reading theoretical work on H1N1 and attendant sociological and ethical issues; as well as through past work in which I was part of a multidisciplinary team of
pandemic influenza researchers analyzing focus group data, participating in seminars and research-based theatre concerning H1N1 and its ethical, political, and social effects. These experiences necessarily shaped the way in which I approached the media data. The practical implication of my constructing the object of analysis while ‘in the data’ was that assembling the sample was a time consuming, iterative, cyclical, and at times frustrating process. In particular, the time spent organizing and profiling the study pool required many analytic steps which shaped the final sample and ultimately, the final analysis; as Miles and Huberman claim, data organization is, in itself, an act of analysis (Miles & Huberman, 1994). The analytic and interpretive implications of constructing the object of analysis while ‘in the data’ are that the resulting conceptualizations and descriptions of H1N1 risk are varied, complex, were at times surprising and unexpected (at least to me), and truly rooted in the media data.

4.1.2 Study Design

Having outlined my methodological approach above, in this section I explain the study design, including the methods used to generate, collect, and analyze the media data. I begin by describing the research materials. Next, I describe the process of generating and organizing the total study pool data, including rationale for the decisions made to include particular media texts and not others. Then I describe how I generated and analyzed the final study sample. This process from data collection to analysis was conducted in the following four broad phases: generating the study pool; organizing and profiling the study pool; generating the study sample; and, qualitative analysis. Data generation, sampling and organization were done from December 2011 through May 2012. Profiling the study pool and qualitative analysis began May through October 2012, then resumed from February through April 2014. Although I have laid out those five phases sequentially below, they were neither perfectly consecutive nor discrete steps, but an iterative and ‘messy’ process that required analytic decisions to be made throughout, as I discuss below.

4.1.2.1 Research Materials

Data for the study came from two major Canadian daily newspapers, The Toronto Star and The Globe and Mail. The Toronto Star was selected because it is a daily newspaper from a large metropolitan centre, and in recent years, has boasted the largest combined print and digital readership of any newspaper in Canada (Newspapers Canada, 2015). Established in 1892 as a
“Paper for the People”, it has been categorized as politically “left-leaning” (Daw, Morgan, Thompson & Law, 2013, p. 69), and is owned by Toronto Star Newspapers Limited, a subsidiary of Torstar Corporation34. The Globe and Mail is a longstanding and internationally influential national paper. Founded in 1844, it has been called Canada’s “newspaper of record” (Soderlund, Lee, & Gecelovsky, 2002, p. 82), and uses the slogan, “Canada’s National Newspaper” (Crossman, Hyslop & Guthrie, 1994). It is owned by The Woodbridge Company, controlling shareholder of Thompson Reuters, and has been characterized as having a “centrist” political stance (Daw et al., 2013, p.69). Similar purposive sampling approaches based on readership and/or circulation have been used in previous discourse analyzes of health issues in the media (e.g. Cheek, 1997; Roy, 2008).

I had initially intended to include The National Post as part of the sample because it is also a national daily, with a wide readership, has a conservative political stance, and was founded in 1998 by Conrad Black with the specific agenda to counteract a perceived liberal bias in the Canadian media (Keshen & McAskill, 2000). However, as I began generating the study pool, (having worked my way first through The Toronto Star and partially through The Globe and Mail), it was apparent that the amount of news articles that would ultimately comprise the study pool was already becoming unwieldy. In consultation with my primary advisor, we decided that including the third set of newspaper articles would be impractical and unnecessary. I will say more about this decision in the Conclusion chapter.

In terms of timespan, I included articles35 published during the 20-month period beginning May 2009—the “initiating event” (Cooper & Yukimura, 2002) being H1N1’s approximate first appearance in Canadian news—through to the end of December 2010. Although the WHO officially declared the pandemic over on August 11, 2010, I wanted to explore coverage several months past that date to see if and how pandemic risk might be represented differently before and after the WHO announcement, and then later into the 2010 flu season.

By focusing on print news texts, my intention was not to privilege particular news media

34 http://www.thestar.com/about/aboutus.html
35 For ease of reading, I use the term articles to refer to all news texts, including columns, news reports, editorials, letters to the editor etc.
data over others (e.g. tabloid newspapers, magazines, radio and television broadcasts, online news sources). Nor were these particular newspapers meant to be representative of all news coverage of H1N1. Instead, my aim was to generate a meaningful and manageable study pool—meaningful in the sense that the research materials chosen had a significant relationship with the object of analysis, and manageable in the sense that the sample was both easily accessible and of a suitable size to complete analysis during the course of a doctoral program.

4.1.2.2 Generating the study pool

In order to explore discourses of H1N1 risk in the news coverage, I first assembled a study pool containing news coverage of H1N1 more broadly. In December 2011, I began generating this study pool purposively by collecting The Toronto Star (TS) and The Globe and Mail (GM) articles, published between May 2009 and December 2010, using the Pro-Quest Canadian Newsstand archive, accessed through the University of Toronto library system, identified through a set of search terms.

The following search terms were chosen: “pandemic flu”, “flu pandemic”, “pandemic influenza”, “influenza pandemic”, “swine flu”, “bug”, “virus” and “H1N1”. Though the search terms may seem redundant, they were deliberately chosen. In my past experience conducting an internet search for H1N1 through Canadian Newsstand (for another study), I found that a search for “pandemic flu” did not always retrieve articles in which the author spoke of “pandemic influenza”. Similarly, Norgaard and Lazarus (2010) found that due to inconsistent naming of H1N1, relevant articles were easily missed during online searches. My intention in using multiple, synonymous search terms was to cast a wide net to gather as many articles covering pandemic flu as possible into the initial study pool. The complete list of search terms was finalized through trial and error. At this stage I included all articles, from any section of the two newspapers, along with editorials, columns, and letters to the editor which contained at least one of the search terms in the headline or body of the text. This process yielded a total pool of 2653 news articles. See Appendix A for a visual summary of key sampling decisions.

The headlines and abstracts\textsuperscript{36} of these 2653 articles were subjected to a quick read to confirm subject matter. During this quick read, I paid particular attention to the headline and the

\textsuperscript{36} The article abstracts were generated by Pro-Quest Canadian Newsstand.
last sentence, following Lupton’s recommendation for analyzing a large amount of media texts (Lupton, 1994, p. 33). My initial intention at this stage was to exclude blurbs as well as any articles that did not contain one of the search terms within the headline or abstract, thereby excluding articles that had only a brief mention of H1N1. In many such instances, H1N1 was only given a passing mention (e.g. a Fashion Week update which joked that perhaps face masks would become a fashion accessory), or the H1N1 content made up only a few sentences within the text. At other times, an article contained the search terms but not in reference to H1N1 (e.g. financial column about “catching the [gold] bug”). Such articles were excluded from the study pool.

However, during this initial scan it became apparent that the chosen search terms were often not included in either headline or abstract of many relevant articles due to the variety of terms and creative phrasing (e.g. “Aporkalypse”, “Conflusion”). Similarly, there were many articles reporting on topics closely related to H1N1—such as H1N1 vaccination, flu-clinic wait times, and quarantine—in which the search terms did not appear in the headline or abstract. Having previously been involved with research concerning H1N1 and public health ethics, I had been sensitized to many of these issues in advance. While developing my research proposal, I had anticipated that news reporting on some of those related topics might contain discourses on H1N1 risk, because, news coverage about vaccination, for example, often makes reference to risk, both implicit and explicit. I began making a list of these closely related topics as I encountered them while reading through the pool and decided to adjust my exclusion criteria accordingly. I went back to the beginning of the pool and, with a list of related topics to watch for, began scanning the entire content of each article. All articles were included that either contained the search terms in headline or abstract, or reported on at least one of the topics closely related to H1N1 based on the list of topics that developed during this stage. After applying these inclusion and exclusion criteria, I had a final study pool of 766 articles (see Appendix B for inclusion and exclusion criteria used to generate the study pool).

4.1.2.3 Organizing and profiling the study pool

After the final pool was assembled, the articles were organized and profiled. This was done both to get a broad overview of the scope and key features of the study pool, and to begin to identify ways to carve a smaller, final sample of texts for detailed qualitative analysis out of this larger pool. The organizing and profiling steps required dozens of seemingly small but significant
analytic decisions which ultimately shaped the final sample.

First, an electric version of each complete article was saved. Standard properties of each article were entered into an NVivo data management software file, including publication date, word count, newspaper, type of article (e.g. news report, column) and section of the paper. These standard properties were taken from the Canadian Newsstand summary description of each article. In several cases, it was not clear from the Canadian Newsstand description whether a particular article came from a column or a letter to the editor, in which case I made the determination myself based on the listed author (e.g. Is the author of the text in question a regular columnist or an unfamiliar name and location: ‘John Smith, Nipigon’?), and the body of the text (Is the text longer and written in a similar style to an editorial or is it a short response to a previously published article?). At the end of this step I assigned each article a code name based on newspaper and date.

Next, using the Google Charts graphics program, the number of articles in both the total and final study pools was graphed month by month from May 2009 through to December 2010. As seen in Figure 1 (below), the number of articles fluctuated from month to month with some months containing many more articles than others. Further, there were several ‘spikes’ in the number of articles, indicating a marked increase in news coverage over a short period of time.

37 The use of numbers and graphs was not to determine statistical associations or to make predictive claims, but rather to identify key features and characteristics of the study pool.
Figure 1. Correspondence between news coverage of H1N1 and major H1N1 events from May 2009 through December 2010. This figure illustrates the number of news stories contained in the total pool (top/red line) and final pool (bottom/blue line), in relation to key H1N1 events.
At this point I began to look through the articles published around the time of those ‘spikes’ to see what topics were most prominent, and noticed that increases in coverage corresponded to certain major H1N1 events (see Figure 1). I made note of these events, particularly the order and approval of H1N1 vaccines and the death of Evan Frustaglio, as topics to watch out for as I continued to work my way from this large study pool down to a smaller study sample.

Next, all study pool articles were read again, in more detail than during the initial scan. As I read, I made a list of major topics contained within the articles as I encountered them, making notes in an NVivo file, comparing and cycling back until I had a list of over fifty topics that were contained within the study pool (see Appendix C for a complete list of these study pool topics). This list of topics ranged from reports on rate of hospitalizations, to commentary on vaccine safety and “big-pharma” conspiracy, to reports on large scale pandemic responses such as travel restrictions and quarantines, to reports of individuals who had become sick or died, to H1N1 jokes and poetry. The list of topics was collapsed into seven categories, which I refer to as H1N1 ‘talk’ categories. These ‘talk’ categories are listed below along with some examples of the kinds of topics each of the categories contained:

Clinical and epidemiological talk: clinical symptoms, antiviral and vaccine dosing, hospitalizations, incidence and prevalence rates, the virus itself

Vaccine talk: the vaccine roll-out (e.g. production, clinic wait times, prioritization schedules) and reports on the vaccine itself (e.g. discussion of safety, efficacy and conspiracy theories)

38 Following Lupton (1994, p. 32-3), I take ‘topic’ to mean any single event, action, person, or group of people in the news. See Lupton’s analysis of press coverage of HIV (Lupton, 1994) for discussion of the significance of ‘topic’ in analysis of media texts.

39 This ‘talk’ categorization was highly interpretive and for the most part was based on my reading of the body of the article. However, sometimes I also looked to the section of the newspaper in which the article was found for additional context. This was particularly the case for instances of ‘industry talk’, which most often appeared in articles from Business or Finance sections.
**Pandemic preparation and response talk:** preparation and response at federal, provincial, municipal, organizational levels (e.g. social distancing, quarantine, animal culls, communicating pandemic plans with the public).

**Industry talk:** effect on pharmaceutical and biotech industries (e.g. research and development, manufacturing, liability, the company’s financial outlook), effect on pork sales and other consumer goods (e.g. vitamins and hand sanitizer), the effect of H1N1 on corporations more broadly (e.g. corporate contingency plans, sick leave and work absences)

**Pandemic in society talk:** the impact of H1N1 on social groups, communities and the larger Canadian and global population (e.g. how particular communities were responding, how individuals ought to respond, pandemic response on First Nations reserves), the role of individuals in relation to the larger population (e.g. a duty to be vaccinated, queue-jumping)

**Personal talk:** the impact of H1N1 on daily and social life (e.g. tips on how to avoid infection in public places), individual accounts of illness and death, poetry and humour

**Other talk:** announcement and decisions related to H1N1 status (e.g. WHO declaration of pandemic status),

During this process of reading and broad categorizing, I noted that some major news topics, now grouped into types of ‘talk’, were common in the sample while other topics were rarer. At this point I went back to my NVivo file notes on each article, tallied up the number of articles that contained the different types of ‘talk’ within each month. This was not a matter of assigning one article to one ‘talk’ category because most articles contained more than one topic, and thus, more than one kind of ‘talk’. For example, an article primarily reporting on clinic wait times (vaccine talk) might also include a few lines of clinical information about the efficacy of the vaccine (clinical and epidemiological talk) and quotations from frustrated people enduring long clinic wait lines (personal talk); in this example, the one article would represent three

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40 During the organization and profiling phase I made a switch from working primarily with NVivo to Google docs.
categories of ‘talk’. I added this new data into a Google docs spreadsheet where I could easily locate articles according to the various ‘talk’ categories they were assigned to.

Using the same Google graphics program, the relative volume of ‘talk’ categories were graphed along the month-by-month H1N1 timeline (See Figure 2 below). As Figure 2 illustrates, the types of ‘talk’ varied proportionally over time. Some of these shifts in ‘talk’ appear to roughly correspond to major H1N1 events: in May and June 2009, following initial coverage of the outbreak and the WHO declaration of a pandemic, there was proportionately more ‘clinical and epidemiological talk’ and ‘pandemic preparation and response talk’, while a surge in ‘vaccine talk’ and ‘personal talk’ corresponded with vaccine approval in late October 2009 and the sudden death of a teenaged athlete shortly thereafter. I did not press on to explore what H1N1 events might have precipitated these shifts, but rather made note of which ‘talk’ categories featured largely across the pool and which did not. Listing major topics chronologically is helpful in gaining an overview of what topics are newsworthy and significant in public discussion within a large body of news data (Lupton, 1994, p. 33). That was my aim during these organizing and profiling steps: to better understand what were the major news topics, and thereby, to better understand the study pool and H1N1 news coverage more generally. Armed with this broad, preliminary understanding of the study pool, I was ready to generate the study sample.
Figure 2. Relative volume of ‘talk’ categories within study pool from May 2009-December 2010. This figure illustrates the relative proportion of different ‘talk’ categories within news coverage, month by month.
4.1.2.4 Generating the study sample

At this stage, my aim was to generate a smaller study sample for detailed qualitative analysis. As I considered how to carve out a sample that was meaningful but still small enough to analyze qualitatively, I began to grapple with the daunting question: How would I recognize ‘risk discourse’ when I saw it? The criteria by which I would identify the object of analysis had to be determined by me as the researcher. Having spent time reading and profiling the study pool articles, it was becoming clear that generating the sample would not be (as I had naively anticipated while writing up my research proposal) a matter of including articles that contained risk discourse and excluding those that didn’t contain risk discourse. Risk was so central to any discussion of H1N1 that risk discourse ran through the whole pool of H1N1 news coverage. Sometimes discussion of risk was overt, like in reports on vaccine safety or incidence rates, but often risk was less conspicuous because the discourses constituting it drew upon ‘common sense’ and more mundane elements of daily life, such as going to work or riding the bus.

I wanted to remain open to the unexpected and to have my descriptions be empirically grounded, so I decided not to use the presence or absence of particular words as inclusion criteria at this stage. Working with a predetermined set of words or definitions might have caused me to miss instances of risk discourse that I had not anticipated. This approach was consistent with my theoretical commitment to destabilize what is taken for granted about H1N1 risk, and to explore the varied, perhaps contradicting representations of risk. Again, I did not go into this process ‘blind’ but brought my experiences as a public health graduate student, a researcher of H1N1, and a reader of news media texts to the sampling stage. I knew, for instance, that health and risk are often expressed in terms of numerical indicators like BMI (Rich, 2011), statistics, and disease rates; through metaphors about chance and probability (e.g. ‘rolling the dice’); through metaphors about what is unnatural or ‘going against nature’ (Campbell, 2011); and metaphors of war and battle (Seale, 2001; Sontag, 1978).

Having spent time looking at the content of the different ‘talk’ categories, at this point I went back to my Google docs spreadsheet and excluded articles that contained only ‘Industry talk’ and/or ‘Clinical and epidemiological talk’ and/or ‘Other talk’. This means that articles which primarily contained topics such as manufacturing or scientific information of H1N1 virus were set aside (see Appendix C for full list of topics in ‘talk’ categories). That is not to say that all reports of H1N1 industry and all clinical and epidemiological reports were eliminated. Because most articles contained several different types of ‘talk’, there was still considerable
overlap of the types of talk between articles. In other words, instances of reporting on industry effects, clinical guidelines and epidemiological rates were included in the final sample. My rationale for excluding these articles was to set aside ones that focussed on industry and on H1N1 in clinical and epidemiological terms. After applying this set of criteria, 643 articles remained (see Appendix A).

As I continued to read through the remaining articles I noticed a number of compelling reports about people experiencing H1N1 illness and death, or trying to prevent H1N1 infection. These articles seized my attention, were memorable, and depicted members of the lay public dealing with the effects of H1N1 infection and taking steps to avoid it. I made note of these articles and discussed with my supervisor how they had captured my interest because they showed people behaving in particular ways in reference to H1N1. Understanding that influenza health promotion is largely targeted at individuals (e.g. vaccination, ‘sleeve sneeze’ and handwashing campaigns), and that individual and societal pandemic preparation and response occurs within the larger context of population level planning, I decided to retain articles that focussed on H1N1 at an individual and social level (e.g. families, churches, clubs, schools and other social groups responding to H1N1). Articles that focussed on clinical or population level planning and response (e.g. vaccination production and administration, clinical care guidelines, communications strategies, advisories) were excluded (see Appendix D for more detail on study sample inclusion and exclusion criteria).

Turning again to my ‘talk’ categories, I retained articles containing ‘Pandemic in society talk’ and ‘Personal talk’ and excluded articles which contained only ‘Vaccine talk’ and/or only ‘Pandemic response talk’. Again, this does not mean that all articles reporting on topics like quarantine, animal culls or vaccine safety were excluded, but rather, those articles which reported on them without also containing some discussion of personal or societal perspective or impacts.41 I carefully read through the remaining articles to determine if any that focussed on population level concerns remained. Including and excluding articles on this basis was the most time intensive and intellectually demanding part of generating the study sample. It required reading and re-reading articles, comparing my developing definitions of ‘individual and societal

41 Nor does this mean that I claim to have retained every instance of reporting on personal or societal experience with respect to H1N1. Some articles may have been missed due to human error.
level’ coverage between articles, cycling back and reading again with new definitions in mind. For example, I decided to exclude articles announcing federal vaccine purchasing and the availability of flu shots at vaccine clinics, but to include ones that focussed on individuals and families debating on whether to get the shot themselves. Editorials that critiqued the communications strategies of public health authorities were excluded, but letters to the editor expressing people’s confusion about wait times and priority access lists were included. I excluded reports on pork advisories and summer camp closures, but included articles highlighting the impact of a pig cull on a Canadian pig farming family, and on parents considering whether to keep their children home from summer activities due to H1N1 fears. Lastly, I excluded articles that did not focus on Canadian events or people (e.g. quarantine in China, cheek-kissing in France, and an infected American celebrity), because similar issues were already included within Canadian examples, and because the sample at that point was still a bit too large. After applying these criteria, a study sample of 141 articles remained. See Appendix D for study sample inclusion and exclusion criteria. Appendix E contains a list of the study sample articles.

4.1.2.5 Qualitative analysis

The study sample was then analyzed through the following four qualitative strategies: qualitative coding, layered reads, summary profiles, and mapping the discursive terrain. Below I present these four analytic strategies as four discrete steps, however, in actuality, the qualitative analysis was not a linear process, but rather a messy, iterative process, done over the course of many months. At several points, insight into the data which was gained through one analytic approach fed back into my analysis in a looping fashion. For example, through the process of writing up ‘summary profiles’ of the content within each article, I noticed patterns that I had not previously explored across the wider sample, and I was prompted to go back and do more layered reads across articles that reported on different topics. As well, along the way I took some wrong turns and met several dead ends, which prompted me to pause, rethink my assumptions about the data and my research objectives, retrace my analytic steps, and adapt my approach. For the sake of simplicity, I will describe the analysis in terms of these four analytic steps, occasionally inserting some additional detail to provide clarity.

Qualitative coding began with a careful, close reading of all 141 study sample articles. By the time I began qualitative coding, I had already read the sample articles several times during
the organization and profiling stage, and was already becoming familiar with them. Each article was read in the manner Clifford Geertz refers to as “hovering close” to the data (Lewis-Beck, Bryman & Liao, 2004, p. 1124). This process of hovering close to the data required unhurried attention to the text itself, noticing and recording anything interesting, surprising, or potentially significant. Sticking only to the words used in the text, I copied out by hand any noteworthy phrases, words, places, significant people, and significant ‘things’, in the right-hand margins of each article. Along with the body of the article, I treated the headline, subheadline, and description of any accompanying image as text. Hovering over the data in this way generated a number of descriptive codes, inclusive for each article, that did not move beyond the words used in the articles.

Next, I took the descriptive codes and copied them out by hand (in my impatience I had begun to type up and physically cut out the codes into their individual phrases, but this proved even more time consuming). Staying within each article, I applied the codes back onto the text and collapsed the descriptive codes into larger descriptive ‘buckets’. For example, codes taken directly from the text, such as “died within hours” and “died suddenly” were collapsed into the larger descriptive category, “sudden death”. Within each article, I went through several rounds of (re)reading and then applying the descriptive buckets back onto the texts, collapsing some and expanding others, until I had a set of descriptive categories for each article.

Halfway through the ‘bucketing’ stage, I began to observe fragments of what would eventually, partially, define my three descriptive themes—causal tales, cautionary tales and precautionary tales. Comparing back and forth between articles, I could start to see that there was something compelling about four elements: the people involved; the actions they took; the spaces and places that were significant; and the descriptions of time and sequencing of events. I took these four elements and applied them back onto the buckets across the articles. I presented this stage of analysis to my thesis committee and, after lengthy discussion, we agreed that the four categories did not quite ‘fit’. There was still something else going on. Based on the feedback from the committee, and having become sensitized to these four elements (people, actions, places, and time), I bucketed 24 more articles. With the benefit of increased insight gleaned

42 After ‘hovering’ over the full sample of 144 articles, I anticipated that I would continue on to ‘bucket’ the full sample as well. I began the ‘bucketing’ stage by dividing articles into month of publication for 2009, keeping one pile for 2010 (There were only 8 articles from 2010 in the study sample). I then took the first 2 articles off the pile
through the additional bucketing, I continued to collapse and expand the descriptive categories within each article until I had a set of descriptive categories that could be applied across the bucketed articles. The four elements (actors, actions, time, place/space) evolved into a set of categories that more fairly and sincerely ‘fit’ the data (e.g. ‘pathways of transmission’ and ‘sources of evidence’). To keep track of the copious amounts of data and my evolving categorizations, I saved digital photographs of both descriptive codes and descriptive categories in a computer file along with my coding notes.

To provide additional depth to the analysis, summary profiles were written for each article in the sample. Starting with a fresh hard copy of each article, I wrote up one or two paragraph summaries noting any of the following:

- **Tone** (e.g. a polemic letter to the editor; a tongue-in-cheek column),
- **Interesting, juicy quotes** (e.g. “Our dream turned into a nightmare”),
- **Sequencing of topics** (e.g. description of H1N1 behaviours followed by recent statistics)
- **Surprises and silences** (e.g. a rare mention of the role of factory farming and pharmaceutical industry practices)
- **The last line** (e.g. a quotation from an epidemiologist to close)

My purpose in writing up these profiles was to construct a ‘snapshot’ of each article similar to an interview participant profile, and also to keep track of what was compelling or unique in each text. The summary profiles were helpful in several ways. First, the exercise of writing the profiles helped me to consider the ways in which the content of the articles supported, contradicted, referenced, or otherwise ‘spoke’ to each other. The summary profiles also ended up being useful as a way of seeing the assumptions that connected the different texts—the patterns and recurring or unique elements. Lastly, writing up the profiles allowed me to ‘zoom out’ and get a different perspective after spending time deep within each article during qualitative coding.

In addition to qualitative coding and summary profiles, each of the 144 articles were subjected to layered reads, first within each article, and then across articles. While reading within

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for each of the 8 months of 2009 (which, after multiple reads, were no longer in strict chronological order) and half of the 2010 articles (20 in total) and started in. When it became apparent that I would not need to bucket the entire sample, I continued with my chronological sampling taking an additional three articles from each of the 8 months in 2009 (24 more articles), which combined with the previous 20, was a final sample of 44 articles ‘bucketed’.
each article, I paid attention to words and pronouns, rhetorical devices (e.g. the use of numbers and other quantifiers of risk), the headline and the last line (Lupton, 1994), imagery, metaphor and analogy (Altheide, 1996), practices, and material ‘things’ (e.g. hand sanitizer). Some of this turned out to be redundant after the qualitative coding step, but I found it helpful to catch things that I had earlier missed (for instance, I hadn’t paid as much attention to the ‘last line’ until I purposefully went looking for it). As I was developing the three descriptive themes, I also did three layered read sweeps across the articles: chronologically in the order the articles were published; across three general topic areas (articles about death and illness, articles about preventative actions/behaviours for individual and family, and articles about preventative actions/behaviours among social groups). This step was infinitely helpful in allowing me to see interactions between article texts, and the ways in which different discourses articulated with, supported, and contradicted each other. This step ultimately helped me to identify the three themes which I will discuss in Chapter 5.

Finally, to help in thinking through my evolving ideas throughout the long process of analysis, I physically drew out visual representations of my changing understandings of the relationships between people, social groups, institutions, discourses, and attendant practices and material effects. Drawing from Lopez and Robertson (2007) and Clarke (2005), this technique of ‘mapping the discursive terrain’ started out on notebook paper and moved to a whiteboard as the maps grew larger and more complex. Mapping out the discursive terrain was helpful to visualize and think through my changing understandings of how particular sources of expertise and preventative practices within the media texts drew upon larger, circulating discourses and how those discourses, in turn, supported particular material practices and behaviours.

The result of applying these analytic strategies was the development of three descriptive themes, which will be discussed in Chapter 5.

### 4.1.3 Research Quality

For Foucauldian discourse analysis, research quality is indicated by an internally cohesive, logical analytic process that is consistent with the theoretical perspective. My goal was to demonstrate that method has flowed from methodology, which had flowed from epistemology (Carter & Little, 2007). Criteria commonly used in quantitative or instrumental research to assess objectivity, neutrality, representativeness, and rigor, are not applicable in this kind of research.
Reflexivity and trustworthiness, rather than objectivity and detachment, are significant and I have attempted to be mindful of and demonstrate these qualities in this study.

Clive Seale, paraphrasing Howard Becker, states that to produce valuable qualitative research, we must, “think about our research as we are doing it” (Seale, 2004b, p. 383). Reflexivity necessitates being aware of, and reflecting on, the ‘fingerprints’ the researcher leaves on the study. Being aware of one’s own fingerprints is a tall order that requires an awareness of situatedness—that the researcher should position themselves within the discourses and articulate their own stance.

For myself, part of this reflexivity concerned changes in to whom I related within the media texts, and with whom I aligned myself with over the course of the analysis, both of which shaped my thinking, and my emotional reactions to the media texts. I began this study without having any background in media studies or journalism, but with graduate level training in public health and epidemiology, a fairly high degree of scientific literacy, and had been previously sensitized to epidemiological terms. As well, I tend to think of myself as a ‘public health person’ more than member of the lay public from a public health and pandemic planning perspective; more often I see myself as one of ‘them’ because of my MPH degree, because I can speak the public health ‘language’ and I can subscribe to most of public health’s broader values and goals. As I began the analysis, I realized that I preferred to see, and wished to see, the media portray the discipline of public health in a flattering light. Occasionally I found it awkward and uncomfortable to read descriptions of people’s frustrations with public health recommendations, and became frustrated reading comments about big-pharma/vaccine conspiracy, and the perceived need to develop so-called “natural immunity” through intentional exposure to pH1N1. Even some of the quotations from public health officials made me cringe, and I wished they had been more diplomatic or clear, and wondered if their words may have inadvertently swayed some opinions against vaccination.

Then mid-way through analysis I became a parent, and my responses to the data began to change. When I began analysis, I could read through and analyze the reports of severe illness and death, even reports of children dying, with minimal discomfort—the stories were not pleasant, but I could easily set them aside at the end of the day. After I had a child, my emotional responses were quite different. The same stories now meant more to me, because I could relate to the parents in the article and imagine their desperation and rage. When my own baby suddenly
developed fever and respiratory symptoms, I was acutely aware that I was bringing him to the same emergency room that the Thindal family had raced to, remembering that those parents had lost their little girl to H1N1 only one day after the onset of fever and respiratory symptoms. It had simply became more emotionally taxing to be ‘in’ the data, and the stories were now leaving a deeper impression on me than they previously had.

As well, I found myself beginning to relate less with the public health officials and more with the lay public described and quoted in the articles. The latter would describe ways that they had changed their behaviours, going above and beyond official recommendations (e.g. staying home from summer camp and modifying family traditions) because of what they were reading in the news, and I had begun to do the same. My behaviours were different (e.g. staying home from baby playgroup when people in my town were getting sick, making a point of getting a flu shot right away, etc.) because those cautionary tales about H1N1 were now in my head. The motivations and rationales they provided in the media texts I could begin to understand and share. It reminded me of what anthropologists might call, ‘going native’, that is, “crossing a line of objectivity to the extent that the researcher comes to experience the world in the same terms as the people he or she studies” (Tresch, 2011, p. 303). In some anthropological circles, going native is seen as problematic and unscientific, but as Lincoln says of quality in qualitative research, “detachment and author objectivity are barriers to quality, not insurance of having achieved it” (Lincoln, 1995, p. 280).

Throughout the study, I kept an electronic research journal, and it became a place to record and wrestle with reflexivity and consider the implications of the emotional responses and a priori assumptions I brought to the data and analysis. I’m not sure that I have any answers as to whether my changing ‘fingerprints’ on the data made for a richer analysis, a more complicated research process, or something else entirely, but I can say that I am aware that my analysis was at no point objective or detached.

Trustworthiness refers to the degree to which the analysis and descriptions are empirically grounded and can be traced back to the data, and that the interpretations and claims being made are adequately supported by the data. Along with reflexive journaling discussed above, Guba and Lincoln suggest the following tools for improving trustworthiness: prolonged engagement with the data, keeping an audit trail and peer debriefing (Guba & Lincoln, 1994).

I am not aware of a formal definition of what constitutes ‘prolonged engagement’ with media data, but my understanding of the notion is that it reflects the perspective that analysis
should not be hurried along in order to produce results before their time, but instead prolonging exploration to ask, “what else?” I did not rush analysis (and in fact I probably took much more time than strictly necessary), but rather spent months generating the study pool and sample, taking time to explore what I thought were interesting features of the study pool and compelling lines of inquiry in the study sample without an instrumental goal in mind or a hypothesis to disprove. I spent months reading, coding, going back, rereading, and rethinking. At the time, I was not engaging so long with the data in the interest of demonstrating trustworthiness per se, but rather, acting based on curiosity that was not easily satisfied, and a desire to stay ‘open to interpretation’ and in retrospect, I think that is in keeping with the spirit behind the technique.

In keeping an audit trail or a “decision trail” (Cheek, 2004, p. 1147)—the explicit reporting of the theoretical frames being used and how they relate to and align with the methodological process—my intention was to demonstrate that my qualitative descriptions were tied to the media data. My notes, data photographs, study pool and study sample records, research journal, and committee meeting recordings comprise an audit trail of the study, and I have laid out my sampling and qualitative analysis procedures, and the rationale behind each decision, in this chapter as well as in Appendices A, B, and C. I kept detailed notes on sampling and coding, including an NVivo file, a Google docs file, and two binders of ‘study pool’ and ‘study sample’ data in hard copy. In the binders, I kept a list of evolving codes, and a detailed listing of exclusion/inclusion criteria, with examples of what each code refers to and the dates in which the exclusion/inclusion criteria and codes were added, collapsed, or modified. Digital photographs were also kept of the ‘hovering’ and ‘bucking’ stages. The research journal was also a place to record decisions and thoughts on sampling and analysis, my rationale, doubts, hunches about the data to make note of and tuck away for later, and to keep track of my changing thinking on the data. It also served as an organizational tool to keep track of progress and analysis and the progression of ideas. These notes and records proved most useful after meetings with my supervisor and committee to talk about the analysis. During those meetings, I would provide examples of media data text and quotations to see if my decisions about the research were defensible, and if my descriptions were plausible and made sense. More than once I had to return to an earlier step to do more thinking, and it was at these times that the benefits of keeping detailed records became clearest.

Lastly, I was fortunate to have a group of sharp and willing fellow students with whom to practice peer debriefing. At the time that I was developing the research proposal and study
design, I happened to be participating in an advanced seminar in qualitative analysis and interpretation. The seminar provided me with opportunities to share some early data and get feedback from the seminar class on my approach and data collection. I also met many times with different colleagues in my program and with other students I had met in classes and seminars along the way, to discuss sampling, coding, and to see if my approach and analysis could stand up to external scrutiny of my peers.

4.2 Conclusion

In this chapter, my aim has been to describe the methodological approach of this thesis. I began by outlining my central research question and attendant research objectives, which were concerned with exploring how risk was talked about within news media coverage of H1N1. Next, I described Foucauldian discourse analysis, which is characterized not by a prescribed set of steps, but rather by a set of epistemological commitments, a predisposition to ask particular questions over others, and a sensitivity to discourse. There were many methodological papers and empirical studies that provided conceptual and practical guidance, and I described how this literature helped to develop my study design. This was followed by a discussion of the methodological implications of a Foucauldian discourse analysis approach. Next, I detailed the study design, beginning with a description of the research materials: Canadian, English language print news media from *The Globe and Mail* and *The Toronto Star*, spanning a twenty-month period from the first mentions of the outbreak in May 2009 through to December 2010, several months after the WHO declared the pandemic to be over. I then gave an account of the four broad steps that comprised data analysis, organization, and qualitative analysis, pausing at several points to reflect on notable tensions and complexities, for instance the process of generating a workable study sample out of the masses of H1N1 news coverage. The chapter closed with a discussion of research quality and my attempts to improve reflexivity as a researcher and ensure the trustworthiness of the data.

In the next chapter, I will present the results of this analytic process described above. The results are presented as three descriptive themes: ‘causal tales’ that explain H1N1 risk, ‘cautionary tales’ that warn of H1N1 risk, and ‘precautionary tales’ that instruct audiences on how to manage H1N1 risk. These three themes represent different ways in which H1N1 risk was discursively constituted within the news media sample.
Chapter 5
Results

5 Results

She had read several nice little histories about children who had got burnt, and eaten up by wild beasts and other unpleasant things, all because they would not remember the simple rules their friends had taught them: such as, that a red-hot poker will burn you if you hold it too long; and that if you cut your finger very deeply with a knife, it usually bleeds; and she had never forgotten that, if you drink much from a bottle marked "poison", it is almost certain to disagree with you, sooner or later.

- Lewis Carrol, Alice’s Adventures in Wonderland

In the previous chapter I outlined the Foucauldian discourse analysis approach taken in this thesis, and discussed the analytic implications for that approach, including an eye to the truth claims being made about H1N1 risk, and the types of evidence and expert knowledge used to legitimate those truth claims. I then detailed the broad steps taken to generate, organize, and analyze the media data, and reflected on research quality.

This chapter presents the study results describing risk discourses within Canadian print news coverage of the 2009/2010 H1N1 outbreak. The results are arranged under the following three descriptive themes: ‘causal tales’, ‘cautionary tales’, and ‘precautionary tales’. These three tales represent three distinct ways that news media coverage talks about H1N1 risk. They represent different narrative strands of H1N1 risk discourse, employing distinct rhetorical devices, drawing on different sources of expertise, and with each having something different at stake. Like the unpleasant histories recalled by Alice in the quotation above, each set of tales divulges the ‘rules’ for navigating H1N1.

In this chapter I lay out the three tales in a linear fashion but they are not linear in their emergence nor in their operation. They are not mutually exclusive, nor do they replace one another. Although each of the three tales was more prominent at some point over the course of

43 My use of the word “tale” is neither meant to imply that the news articles are misleading, false, or exaggerated, nor to accuse the news media of disingenuously ‘telling tales’. Rather, I am using the word ‘tale’ as my own shorthand for ‘discursive representation of H1N1 risk’. For ease of reading from this point onward I refer to the three themes as causal tales, cautionary tales and precautionary tales.
the pandemic, they coexist as three ‘messy’ narrative strands, which together, represent the discursive constitution of H1N1 risk within the news media texts.

While the theoretical perspective of governmentality informed the analytic choices made, in particular by inspiring particular kinds of questions to be asked of the data and by cultivating a sensitivity to particular concepts, in this chapter I temporarily lay aside that theoretical perspective. At times, I refer briefly to some of the empirical and theoretical literature on health and the media in order to expound upon particular aspects of the news articles. However, the focus of this chapter is to describe how risk is represented within the sample of H1N1 media coverage.

### 5.1 Causal tales and explanations of H1N1 risk

In this section I present data to illustrate the first theme within H1N1 news coverage, causal tales (see an exemplar causal tale article summarized in Figure 3 below). Causal tales dominated early H1N1 media coverage, from May through early Summer 2009, and then made a resurgence in several pandemic retrospective articles in 2010. They were almost always found in national and local news reports, and usually in reports of illness and death, but also appear in several letters to the editor and short editorials offering flu-prevention advice.

Causal tales explain H1N1 risk. Drawing upon epidemiological and clinical expertise, they explain how and why H1N1 spreads, and promote the official recommended pandemic preparation and response measures. They attempt to track and link particular cases back to known sources of H1N1 risk, thereby explaining why particular people became infected and/or are more or less likely to become infected. Particular places, behaviours, and physical conditions are associated with more or less risk, although in many instances the explanations of what is risky are so ‘common sense’ as to be implicit; the explanations of H1N1 riskiness are made through linkages between particular places, behaviours, and traits and specific H1N1 cases. In other words, causal tales provide accounts of H1N1 causality.

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44 By ‘place’ I refer to a physical or geographic location that has some social meaning (e.g. hospital room; hockey arena; Mexico).
Almost two months after the first reports of a ‘mystery bug’ in Mexico, and twelve days after the World Health Organization (WHO) declared H1N1 to be a pandemic, *The Globe and Mail* published the article, “Six-year-old Ontario girl dies of H1N1 virus” (GM062309). It begins with Ontario Ministry of Health announcement of the fourth death in Ontario, “in connection with the strain”. The deceased is not named, but called is referred to as a six-year-old girl who had lived in Peel Region. The article notes that laboratory tests confirmed H1N1, but also that the “exact role” that H1N1 played in the death was unclear, with “pre-existing health conditions” as a possible factor. Ontario’s chief medical officer of health, Arlene King, states that the girl’s condition “deteriorated very quickly”, and that she had not been in school or hospital while exhibiting symptoms. Ontario Health Minister, David Caplan, offers his condolences, and encourages readers to continue hand washing, coughing into shirt sleeves and staying home when ill, saying, “This is a reminder of why we need to remain vigilant in monitoring the H1N1 situation”. Next, steps being taken in response to the outbreak are described including epidemiological contact tracing in the girl’s extended family and school network. Minister Caplan states that, “the province is prepared to handle the outbreak as it evolves”. The article closes with the latest incidence rates from the Public Health Agency of Canada and the WHO stating the number of “laboratory-confirmed” H1N1 cases in Ontario, across Canada, and worldwide.
5.1.1 Biomedical and scientific expertise

Causal tales draw from biomedical and scientific expertise to explain H1N1 risk. They liberally cite ‘official’ sources of H1N1 information, including public health authorities, hospital spokespersons, physicians, clinical scientists, government officials, and epidemiological reports. These sources speak with authority about H1N1 and advocate for particular pandemic response measures. Often, the last line of causal tales quotes or cites one of these official sources, giving them the final, closing word. Causal tales also employ statistical and scientific methods for seeing and measuring the spread of H1N1. The size and scope of the outbreak is described from an epidemiological perspective. Individual cases of H1N1 infection are described from a clinical perspective.

The causal tale exemplar article, “Six-year-old Ontario girl dies of H1N1 virus” (GM062309), illustrates this predominantly scientific and biomedical perspective. Nearly all the article’s content is comprised of information in the form of quotations and statistical reports attributed to health officials. The first line of the article cites an Ontario Ministry of Health announcement and the last line cites epidemiological data from a World Health Organization report. There are also quotations from Ontario’s Chief Medical Officer of Health and the Ontario Health Minister, along with unnamed “health officials”. Only three sentences in the entire article do not mention or directly reference these expert sources.

5.1.1.1 Epidemiological and clinical explanations

Causal tales measure and describe the H1N1 outbreak through epidemiological, clinical and statistical methods and language. The larger H1N1 scenario is spoken of in epidemiological terms, including “incidence rates”, the number of “active cases”, and rates of death and hospitalization by province. Individual cases are presented from a clinical perspective, with official sources such as physicians and hospital or ministry spokespersons relaying information about the—usually nameless—victims and fatalities. Below are two examples of how causal tales typically represent the broader outbreak and individual H1N1 cases, respectively:

45 Some of the most often cited/quoted official sources include Canada’s Chief Public Health Officer, David Butler-Jones, Ontario’s Chief Medical Officer of Health, Arlene King, and WHO reports.
“Currently, the province is reporting 1,204 swine flu cases.” GM071009

“An otherwise healthy young woman in Calgary has died after contracting the H1N1 virus, the third person in the province to die from the flu, Alberta Health Services says.” GM071009

Further, causal tales reference clinical methods used to see, identify, and measure H1N1. The exemplar, “Six-year-old Ontario girl dies of H1N1 virus” (GM062309), references a laboratory test to confirm infection and lists the number of “laboratory-confirmed cases” across the country. Across causal tale articles, there are dozens of references to “swabs”, “screening”, “tests”, “laboratory tests”, and “autopsies”, each confirming or failing to confirm the presence of H1N1. Causal tales thus explain H1N1 risk by speaking to the scope and severity of the outbreak and of individual cases in clinical, epidemiological, and statistical terms, and by using medical and scientific methods to identify and describe H1N1.

Causal tales primarily feature official and elite sources, usually in the form of quotations and information provided by scientific experts and government sources. Causal tales demonstrate this reliance on official and elite sources, particularly ones associated with medicine and government. These sources are almost always named with their role or credentials noted, thereby lending credence to their statements, as the excerpt below demonstrates:

“In B.C., where there are 39 confirmed cases, Dr. Danuta Skowronski, the epidemiology lead for influenza and respiratory illness with the B.C. Centre for Disease Control, said…” TS050509 (emphasis added)

In these same accounts, however, H1N1 sufferers and victims are almost always anonymous⁴⁶. They are made known to us in such vague terms as “a one-year-old child”, “a young mother”, “an Ontario man”, and, “a child”. The excerpt below illustrates this phenomenon:

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⁴⁶ Understanding that there are often legal and privacy reasons for anonymity, I will say more about this in the Discussion chapter.
“The Winnipeg man is the youngest Canadian to die of the virus. "It's particularly concerning when they occur in people in their 40s," said Joel Kettner, Manitoba's Chief Public Health Officer.” GM061709 (emphasis added)

Although the news articles report on instances of H1N1 illness and death, often in individuals, the names we read and the authoritative ‘voices’ of H1N1 presented, are repeatedly those of the pandemic experts.

### 5.1.1.2 Epidemiological and clinical recommendations

Just as official sources explain H1N1 risk through epidemiological and clinical expertise, official sources recommend H1N1 prevention approaches that are grounded in epidemiological and clinical practice. These recommendations typically include hand-washing, avoiding crowds, consulting a doctor, and staying home when ill. They are as much about protecting others as protecting oneself; as Dr. Michael Finkelstein, associate medical officer of health for Toronto warns, “You can spread it before you know you are unwell” (TS050809). The quotation below illustrates how preventative practices are recommended:

> Canada's chief public health officer, Dr. David Butler-Jones, says that “the message of prevention is critical, at school, camp, daycare, home or at work. That means washing hands, coughing or sneezing into your arm and avoiding others when we're ill.” GM071809

Among these preventative practices, vaccination is the most lauded recommendation, at times called “necessary” and the “best” approach to prevent acquiring influenza:

> “Influenza vaccination is still the best way to prevent getting the flu,” states a letter from Dr. Kathleen Dooling, associate medical officer of health for Peel…” TS090709

Concerns that the public will not follow vaccination recommendations are expressed multiple times. Several causal tale articles contain quotations from health officials expressing frustration or suspicion regarding the public’s views of vaccines, for instance that vaccines are unsafe or unnecessary. One notable example is an article in The Toronto Star from October 2009 in which infectious disease specialist, Alison McGeer, guesses that, “the majority of pregnant
women” think that vaccination isn’t appropriate or necessary and “sincerely hope(s)” that they are advised otherwise by their obstetricians (TS101609). Below is a quotation that illustrates concerns about the public and vaccination:

"The public will need to be reassured that a vaccine is just as necessary as hand washing and other social distancing measures’, Prof. Henrich said.” GM082509

Several post-pandemic news articles from 2010 lament that the majority of the public ostensibly did not follow vaccination recommendations, either as a result of media influence, anti-vaccine messages, or confusion over the vaccine roll-out protocol. Michael Gardam from the Ontario Agency for Health Protection and Promotion frets in several articles over conflicting media reports that confused the public (GM052710) and pregnant women who are reading “stuff about thimerosal and autism and God knows what else” (TS091809). In another instance, a University of Ottawa biochemistry professor claims that low vaccination rates are attributable to public confusion caused by “inconsistent communication from the government” and “anti-vaccine advocates who spread myths about immunization risks” (GM052810). In the excerpt below, a Toronto physician expresses frustration in a letter to The Globe and Mail editor over the “major challenge” to vaccine uptake presented by “non-expert” opinion:

Many of my patients were quoting TV, Internet and newspapers regarding the theoretical risks of the vaccine, resulting in apprehension to being immunized. The same weight was often given to the vaccine’s theoretical risks, frequently voiced by non-experts… GM060510

Along with advocating for particular H1N1 prevention approaches, official sources denounced other approaches to H1N1 prevention being considered by the public. Some of these other approaches included closing schools, keeping healthy children home from summer camp, and deliberate exposure to infected people. In one causal tale article, the assistant deputy minister of public health in Ontario announced that stockpiling antivirals had not been recommended (TS061709), and in another, Toronto Public Health urged schools to, “carry on with business as usual” despite confirmed cases of H1N1 among students (GM061709). One article quotes a Toronto public health spokesperson who explains that “no special measures are required” beyond “good hygiene” because “The H1N1 flu virus causes illness very much like regular seasonal
influenza” (TS060209). The quotation below illustrates how official sources delimit the range of appropriate H1N1 responses:

“You can’t live in a bubble,” Dr. Barbara Yaffe, associate medical officer of health said yesterday...She said parents should keep children home only if they are sick. TS062509

The official recommendations described above were often presented with a sense of measured confidence in the ability to control H1N1’s spread, if those recommendations were properly followed. In one noteworthy example, an article described the infection of two government food safety inspectors who contracted H1N1 while on the job. The article included a statement from the Canadian Food Inspection Agency that reaffirmed the efficacy of their inspection protocols, despite the infected workers, saying, “The agency says it doesn’t intend to change protocols for conducting this type of investigation because its existing protocols, if complied with, would have been adequate to protect the workers” (TS07209). In other instances, often in the last few lines of the article, government and health officials reiterate a sense of cautious optimism, that they are “on the case”, “will manage” (GM092409), and are “prepared to handle the outbreak as it evolves” (GM062309). As Dr. Danuta Skoronski, epidemiology lead for influenza and respiratory illness with the BC Centre for Disease Control, asserted:

“You public health authorities will not get a summer break. We will be preparing for a return of this in the fall.” TS050509

In this section I have presented data to illustrate how clinical and epidemiological sources and methods explain H1N1 risk and recommend actions to minimize risk. The following section will describe the ways in which these same sources further explain H1N1 risk by associating H1N1 infection with particular places, behaviours, and physical traits.
5.1.2 Pathways of infection

In this section, I present data to illustrate how causal tales explain H1N1 risk by tracking the spread of H1N1 through time and space\footnote{I use the word space (without single quotation marks) to refer to a spatial area that carries meaning, that is not necessarily a physical or geographic place (e.g. the space of close contact with an infected individual; the space under holiday mistletoe).} and then attempting to link particular cases back to known sources of H1N1 infection. These explanations are often implicit, relying on ‘common sense’ or previous knowledge of influenza, although at other times, specific places, behaviours and physical traits are explicitly declared to be more or less risky. Thus, particular places (e.g. pig farms), particular behaviours (e.g. going to work while ill) and possessing other physical traits, in particular having “pre-existing” medical conditions, become associated with H1N1 infection. In other words, an association is made between particular places, behaviours and medical conditions before and after the onset of H1N1 symptoms, thereby linking those places, behaviours and medical conditions with a risk of H1N1 infection.

The exemplar article, “Six-year-old Ontario girl dies of H1N1” (GM062309), demonstrates how causal tales mark the progression of H1N1 infection through time and space. Firstly, the article gives an exact date at which the girl’s symptoms appeared; Ontario’s Chief Public Medical Officer of Health is quoted, stating that the girl’s symptoms began on June 14, her condition worsening rapidly soon after. Later, the article mentions that no cases of H1N1 have been reported at the girl’s school, but a few “mild cases” have been found in the girl’s extended family. Dr. Arlene King notes that the girl had not been in hospital and did not attend school while symptomatic. These sentences hint at the significance of schools, hospitals, and the potential role of infected family members in H1N1 transmission.

5.1.2.1 Risky places

Causal tales explain H1N1 by identifying particular places in connection with illness, thereby associating these places with increased or decreased risk of H1N1 infection. For instance, many articles note where the infected person had been prior to becoming ill and where they had travelled, and potentially spread the virus, afterward. The places most commonly mentioned in connection with influenza are “Mexico”, “pig farms”, “barns”, and “schools”. A few articles also
reference “airplanes”, “First Nations reserves”, and “summer camps”. The excerpt below demonstrates how these places of interest are invoked in connection with the outbreak:

*The farmworker returned to Canada from Mexico on April 12 and had contact with the pigs two days later. About 220 pigs in the herd of 2,200 began showing signs of the flu on April 24, said the country’s top veterinary officer, Dr. Brian Evans of the Canadian Food Inspection Agency. TS050309 (emphasis added)*

In most cases, the connection between H1N1 and these places of interest is presented in an informational, matter-of-fact manner. However, a few articles use imagery and metaphor. One article depicts summer camps as possible “breeding grounds” for transmission (GM071609). Another likens classrooms to “incubators” aiding the proliferation of the virus (GM082509).

On one hand, most places of interest are linked with H1N1 infection, rather than it being explicitly stated that H1N1 was contracted there. In other words, the risk of H1N1 exposure is implied, as if someone having physically been in those places is explanation enough for how they might come into contact H1N1. This linking of particular places with suspected and confirmed H1N1 cases explains H1N1 risk in terms of where exposure and infection is more likely to occur.

On the other hand, some places of significance are linked not with increased infection, but rather, with clinical treatment. “Clinics” and “hospitals” are the most frequently mentioned locations, and are almost always mentioned in the context of clinical care. H1N1 patients are “rushed to hospital” and “admitted to emerge” where they are “resuscitated”, “put on ventilators” and otherwise receive treatment after already having been infected elsewhere.

### 5.1.2.2 Risky company

Casual tales track H1N1 by linking individual cases with having been “in close contact” with someone infected with H1N1. “Close contact” is never fully defined, however several articles use phrases such as having “shared eating and living quarters” with someone infected. A smaller number of articles implicate having been in contact with someone suspected to be infected with H1N1, or being in close contact with someone who had recently been in a significant place like Mexico, as a possible explanation for particular cases of H1N1 infection. In several articles, explicit warnings are also given to avoid all crowds and coughing and sneezing people. The
excerpt below demonstrates how being in close contact with an infected person is significant toward the explanation of how and why particular people became infected:

“Health ministry spokesperson Howard May said yesterday there are no indications that the girl or anyone she was in close contact with recently travelled to Mexico, but that is still under investigation.” TS050509 (emphasis added)

Another way that causal tales explain H1N1 is by noting where H1N1 victims erred by not following recommended behaviours, thereby putting themselves or others at risk for infection. Several articles discuss the case of a farm worker suspected of bringing H1N1 to Canada, who transmitted the virus to pigs when he returned to work after contracting an unidentified illness during a church-sponsored work trip in Mexico. In another example, a Canadian school principal in Hong Kong, is said to have succumbed to H1N1 after going to work while still symptomatic. In the case of the infected Canadian Food Inspection Agency workers mentioned previously, the two inspectors were accused of disregarding safety protocols on the job, thereby ostensibly putting themselves at risk for infection:

“...it is known the men did not use proper safety techniques while in the barn, apparently removing the N-95 respirators that covered their noses and mouths because they were hot” (TS072209).

5.1.2.3 Risk factors

A final way that causal tales explain H1N1 risk is by associating particular physical traits and medical conditions with increased risk of infection or complication. The list of traits and conditions include the following: being pregnant, being very young, being under the age of 50, being elderly, and having a compromised immune system. As in the excerpt below, the list of conditions is usually attributed to an official source:

Pregnant women who catch the H1N1 influenza virus are at greater risk than the general public of developing complications, which could lead to miscarriages, the Public Health Agency of Canada says. TS071109
The presence of previous, underlying medical conditions, however, is the most significant of the physical traits associated with H1N1 infection. Nearly every causal tale article mentions underlying conditions, also called “underlying health problems”, “underlying medical complications”, and “previous”, “pre-existing”, or “chronic” conditions, as a risk factor for H1N1. This connection is made either explicitly as in the first excerpt below, or as part of the explanation of illness, as in the second excerpt:

*Individuals with pre-existing medical conditions are at greater risk of contracting the flu and suffering from complications.* TS052309

*Earlier in the week, an 8-year-old was hospitalized at Sick Kids after the virus exacerbated an underlying condition, according to the source.* TS052309

Further, many casual tales describe serious illness and death as being a result of H1N1 in addition to, or aggravating previous medical conditions, rather than as a consequence of H1N1 alone. Numerous articles state that the virus may have “contributed to”, “played a role in”, or have been “a factor in” death. One article quotes Ontario’s acting chief medical officer, Dr. David Williams’ claim that, “it would be premature to assume H1N1 itself was the cause” of a death, given that the victim had another chronic condition (TS050209). The causal tale exemplar also notes that health authorities were investigating the possible contribution of pre-existing medical conditions in the girl’s demise. Several articles reported that it was these underlying medical conditions that led to serious illness and death rather than H1N1 itself:

...the health minister’s press secretary said the man’s case of the H1N1 flu was ‘mild’ and that it is the individual’s underlying health problems that have made him so sick. TS052009

Still other articles suggest that undiagnosed conditions are to blame. These cautious descriptions of H1N1’s virulence suggest hesitance to attribute serious illness and death to H1N1 alone:

*While the Winnipeg death is alarming considering the man’s lack of known risk factors, one infectious-disease expert working on the front lines of Manitoba's*
pandemic response posited that the man likely died of something other than H1N1. GM061709 (emphasis added)

Though the child ... did not have any apparent pre-existing medical problems, the coroner's office is now trying to determine whether she had an undiagnosed condition. TS062309 (emphasis added)

Although in many causal tales no single, definitive source of infection is established, there appears to be an unspoken assumption that a source theoretically could be found through clinical and epidemiological methods. This tracking of the pathways of H1N1 infection suggests that H1N1 can indeed be tracked, measured, and potentially predicted. Serious H1N1 infection and death is implicitly explained as a consequence of either having been in a risky place where H1N1 is known to be circulating (e.g. Mexico); having been in risky company (e.g. close contact with an infected person) or been engaged in risky behaviour oneself (e.g. working while ill); or by exhibiting particular risk factors (e.g. underlying medical conditions). In these ways, causal tales explain H1N1 risk as something that can be measured, predicted, and potentially mitigated. Causal tale explanations for H1N1 risk differ dramatically from cautionary tales, the next descriptive theme, which are discussed below.

5.2 Cautionary tales and warnings of H1N1 risk

Cautionary tales warn of H1N1 risk through compelling, unsettling, and surprising H1N1 cases that confound the logic of official pandemic planning and preparation. In contrast with causal tales, which explain H1N1 by linking particular cases with known risk factors, cautionary tales convey unpredictability, and a sense that the previous H1N1 rules—for some unknown reason—do not always apply. They thus serve to heighten notions of risk and warn readers to take caution because H1N1 did not behave as previously anticipated. Shifting away from the official, expert sources, cautionary tales draw upon the lived experiences of those directly affected by H1N1; they move from clinical and epidemiological descriptions of H1N1, to lay descriptions of what did happen. Cautionary tales recalibrate understandings of H1N1 from something trackable, measurable, and explainable, to something unpredictable and uncontrolled.
Cautionary tales are always found in news reports rather than editorials, columns or letters to the editor. Sudden, severe individual infections and deaths are the most common topic, but there are also several articles covering multiple severe cases in isolated First Nations communities. They begin to appear in late Spring 2009, then peak in October and November, clustering largely around the deaths of several previously healthy young people. This is the smallest section of ‘tales’ in that there are less articles that contain the theme of cautionary tales than contain causal tale and precautionary tales. See Figure 4 (below) for a description of the cautionary tale exemplar.
Son feared getting flu, father says

Parents tried to allay 13-year-old Evan’s concerns after H1N1 scare in spring ‘and now he’s gone’

*The Toronto Star* October 28, 2009

Five days after H1N1 vaccine approval in Canada, “Son feared getting flu, father says; Parents tried to allay 13-year-old Evan’s concerns after H1N1 scare in spring ‘and now he’s gone’” (GM102809) was published in *The Toronto Star*. It features a photograph of smiling boys in hockey gear, a shiny golden trophy in the foreground. Evan Frustaglio is pictured sporting a boyish grin, index finger raised in the air signaling ‘#1’.

The article begins with the statement that, “thirteen-year-old Evan Frustaglio was scared of getting the flu”, then relates the “one painful memory” plaguing the boy’s father: “We told him it was all okay”. Next, the article traces the quick progression of H1N1, “just three days after he began complaining of symptoms” from sore throat, to cough, to lying unconscious on the family bathroom floor. Quotations from relatives and family friends praise the boy as a “respectful, happy and kind child”, and a “young hockey player”. Next, public health officials confirm the death was "due to H1N1 complications” followed by an admission that Toronto Public Health has mistakenly claimed that the boy had asthma. The next sentences describe attempts by the family to access treatment:

“When Evan had a sore throat and dry cough at a hockey tournament in London on the weekend, he was told by doctors and pharmacists it was a simple seasonal cold. He was sent home from a Toronto walk-in clinic on Sunday and told to take Tylenol” (GM102809).

A quote from Evan’s father follows: ‘I would have brought my son to the hospital... It gave us a false sense of security.’” Toronto medical officer of health, David McKeown, says he, “won’t speculate on what might have happened” had Evan been admitted to hospital, but advises parents to keep children home, watch for symptoms and consult a doctor “if symptoms become worrisome”. A quotation from Evan’s hockey coach expressing lingering fears closes the article: “All the boys swam in the pool together…and shared water bottles at the tournament…”
5.2.1 Experience based expertise

In this section I present data to illustrate how cautionary tales warn of H1N1 risk through first-hand accounts of illness and death, and through a chronological commentary on sickness behaviour. Cautionary tales make the shift from citing primary definers to citing first-hand lay accounts of illness experiences. The cautionary tale exemplar article, “Son feared getting flu, father says” (GM102809), illustrates this focus on experiential expertise. Only three times is information in the article attributed to health officials—including the admission of error from Toronto Public Health. Most of the information is in quotations from or is in reference to Evan’s father, introduced as “Paul” in the first sentence. Other commentary is credited to Evan’s cousin, to Evan’s hockey coach, and to the school principal.

5.2.1.1 First hand witnesses

Cautionary tales abound with first-hand accounts of sensational cases. They contain reports from people directly affected by H1N1 illness and death—the victims and those close to them. Cautionary tales quote the parents who watched over a feverish child’s bedside, spouses who frantically drove their infected partners to hospital, and friends, colleagues, neighbours and grieving families “left reeling” (GM071309) after an unexpected and tragic demise. These sources speak of their experiences being ill, of witnessing the infection progress in a friend or loved one, of the effects of H1N1 in their respective communities, and of their grief. The excerpts below illustrate the experiences of a parent, and of a person who was infected with H1N1, respectively:

“I hope and pray my son experiences a total recuperation, but as his mother I know I will never get over the experience of watching him fight the disease.”
GM100410

“If I didn’t make it to the hospital, I thought I would die. I thought I would go to sleep and never wake up...” TS051609

One of the most notable distinguishing features is the way cautionary tales represent those infected with H1N1. First, infected people themselves ‘speak’ about their experiences. This is done through quotations and descriptions of personal experience (e.g. “I approached the bed and tried to blink back the tears” GM100410) or through descriptions of experiences as
recounted by close witnesses (e.g. “Evan had been complaining of a sore back, a classmate said” GM102809). Cautionary tales warn of risk by allowing those with experiential expertise to share their stories first-hand.

Second, in contrast with nameless “cases” and statistics, cautionary tales describe and render specific H1N1 victims visible. Full names are often used, accompanied by poignant descriptives, for instance Perry Chernesky, the “healthy pastor” and “hockey-playing father” (GM070709), and Fatiha Kaitouni, the healthy, young mother and “ball of joy” (GM081509).

Where causal tales usually gave the last line to pandemic officials, cautionary tales often end with a quotation from, or additional detail about, the victim or bereaved. The excerpt below contains the final lines of an article reporting on the sudden death of a young girl:

The little girl would have turned 7 on Aug. 29. She asked her aunt in India to send her a blue salwar-kameez, a traditional Punjabi dress and matching bangles for her birthday. On the weekend, (her mother) brought a blue salwar-kameez and matching bangles for her daughter’s funeral. TS062409

The case of Evan Frustaglio, described in the exemplar article (see Figure 4), is a noteworthy example of how cautionary tales warn of H1N1 risk through dramatic and unusual cases. Dozens of cautionary tales reference the tragic demise of “the young hockey player” 48. One article claimed that Frustaglio, “captured the nation and had become the face of H1N1” (TS110309). The Frustaglio family, commenting on this phenomenon, despaired that H1N1 was a “disease ′wearing the face of our beautiful son′” (GM110309).

5.2.1.2 First hand accounts

Cautionary tales warn of H1N1 risk through detailed and emotional chronological reports of the progression of the disease and associated sickness behaviours—from the onset of symptoms, to sickness behaviours and seeking medical care, to the emotional aftermath. These dramatic descriptions heighten awareness of H1N1 risk, and hail audiences into a new storyline.

48 References to the Frustaglio death continue into precautionary tale articles, becoming a kind of shorthand for arguments in favour of vaccination. This will be discussed in the next section.
In the cautionary tale exemplar, the progression of Evan’s case is tracked over time, as are his symptoms and movements. It begins with his initial complaints of a sore back on Friday, to playing in several elite hockey tournaments, and multiple attempts to seek treatment for his symptoms on Saturday, to his sudden death on Sunday, and the grief-filled aftermath. These ‘play-by-play’ type accounts span from symptom onset, to sickness behaviours and seeking treatment, to the eventual recovery or demise and aftermath, as the excerpt below demonstrates:

**EVANS FINAL DAYS**

*Friday:* Evan had been complaining of a sore back, a classmate said. He travelled with his mother to a hockey tournament where he scored the opening goal and got two assists. He developed a sore throat that night.

*Saturday:* Evan complained of soreness and showed some mild flu symptoms. He still scored a goal and two assists. After dinner his condition worsened. He vomited several times.

*Sunday:* After Evan vomited through the night, he and his mother left London and visited an Etobicoke walk-in clinic around 2 p.m. The doctor said his lungs and breathing were fine and there was redness in his throat, Evan’s father said the doctor advised over-the-counter medication.

*Monday:* Evan’s fever and soreness seemed to improve, although he vomited several times overnight. Around 11 a.m., Evan curled up on the bathroom floor and went limp. He was rushed to hospital and never regained consciousness.

*GM102809*

As the excerpt above illustrates, cautionary tales recount the onset and observation of H1N1 symptoms. Where causal tales referenced swabs and laboratory tests to confirm H1N1, cautionary tales ‘see’ and understand H1N1 through symptoms, as described by the sick person and those close to them. In other words, cautionary tales reference symptoms as indicators of H1N1 as well as the experience of suffering from H1N1. The excerpts below demonstrate how cautionary tales invoke symptoms in the context of identifying and understanding H1N1. The
first quotation comes from a father who watched his son’s symptoms progress and the second from a person describing his own symptom experience:

“I just wasn’t happy with the way he took the bath. He went from him being reasonable in the morning to lethargic. He had some sort of a heat rash on his leg. I said I don’t like that. Father’s intuition.” GM102809

“The pain doubled. It crippled me...I didn’t eat. All I did was sleep for two days,” he said. One night his sheets were so drenched with sweat that they had to be changed three times. TS051609

Symptoms described within cautionary tales include stomach cramps, sore limbs, sore throat, flushed skin, lethargy, rashes, high fever, profuse sweating, rapid pulse, and body aches. Many are vivid, memorable, and at times visceral descriptions: “He started coughing and couldn’t stop” (TS052709), “it was torture” (TS102909), “he was beet red and burning up” (GM110209), “hit by a truck” (TS051609), “her skin yellowed...she continually vomited a fluid as black as tar” (GM071509), and, “his body just went limp” (GM102809). These horrific and palpable descriptions of H1N1 illness experiences pepper cautionary tale depictions, thereby serving as warnings of H1N1 risk.

Along with the description of symptoms, cautionary tales recount sickness behaviours and the experience of seeking clinical care. Instead of the clinical and epidemiological language seen within causal tales, cautionary tales represent clinical expertise and medical technology through eyes of those who sought and experienced treatment. Often the experiences are of parents who brought their children for treatment, such as the mother who described the emergency waiting room as a, “kaleidoscope of coughs and sneezes, masks and gloves” (GM110209). Many of these articles convey a sense of frustration, fear, or anger, and several describe in detail the unease felt watching a loved one endure medical treatment. The excerpt below illustrates such a first-hand account of seeking treatment:

He was running a high temperature, so they put him on a bed of ice and removed his gown, leaving a small towel across his front.

“Are you ready to see him now?” the doctor asked.
We put on gloves, masks and eye shields and the doctor slid open the heavy glass door. There was my son, stretched out on a bed, his head slightly elevated. In addition to the breathing apparatus covering his mouth, I counted nine tubes and lines attached to his body...The only sound in the room, after we closed the door...was the hissing of the ventilator. GM10041

Last, cautionary tales recount the emotional aftermath of H1N1, be it a recovery or demise. These death and aftermath descriptions, in particular, reflect the overwhelming emotions experienced by the bereaved. Several articles contain gripping quotations from surviving parents and partners that express anger, such as a man who, when doctors retracted their earlier, optimistic prognosis for his wife, says, "I got really mad then. They had been saying she was young so she'd pull through. This was the girl I fell in love with when we were 14" (GM071509). Other articles express regret and disbelief, such as the bereaved parent of a young girl who said, “If we had known it was so serious, we would have called 911...She just had a stomach ache - she wasn’t even crying” (TS062409).

The image of a child collapsing or dying in the arms of a parent is repeated in several cautionary tale articles. For instance, Evan’s father is described “holding his son’s limp body in his arms trying frantically to revive him”; the 12 year old girl, Sarah, is said to have taken “her last breath on Thursday in her mother’s arms” (TS103109); and 6 year old Ruby “died in the arms of her father...as she was being rushed to hospital” (TS062509).

Several articles describe the funerals of H1N1’s deceased, often in heartrending detail. In one noteworthy example, the funeral for a young mother is sparsely attended due to concerns that the virus might be still circulating among the remaining family. When the woman’s four young sons, unable to understand their mother’s death, ask when she will return from hospital, the heartbroken husband and father is quoted saying, “Mommy's not coming home. Mommy passed away' ”(GM071509). The moving excerpt below further illustrates how cautionary tales depict funerals:

Evan's friends, family and teammates - the latter group wearing jerseys over shirts and ties - filled the large church near Eglinton Ave. W. and Royal York Rd. for the funeral service Monday. White roses, carnations and lilies lined the altar, some arrangements in the shape of hockey sticks. The largest was addressed to
"Our big boy - Love Daddy, Mommy and your brother"... As the candles were extinguished, only balled up tissues remained on the church’s pews and floor. 
TS110309

In this section I have presented data to illustrate the use of experiential expertise of H1N1 in cautionary tales. The excerpts and quotations included above demonstrate how cautionary tales warn of H1N1 risk through detailed description of distressing H1N1 symptoms, dramatic, poignant first-hand accounts of people attempting to seek medical treatment and the shock, anger and sorrow felt afterward. In contrast with causal tales, cautionary tale victims are revealed as particular, named individuals rather than as statistics or as a cluster of H1N1 risk factors. It is their ‘voices’ and the ‘voices’ of those close to them that are heard through direct quotations and by retelling their experiences from their own points of view. The following section will illustrate how cautionary tales suggest a chaotic loss of control and the reversal of H1N1 expectations.

5.2.2 Unpredictability and uncertainty

In contrast with causal tales that explain H1N1 infection, cautionary tale articles convey unpredictability and a sense that the previous H1N1 rules, for some unknown reason, do not always seem to apply. Cautionary tales heighten awareness of H1N1 risk by describing surprising and unsettling H1N1 cases that defy the expertise that causal tales are rooted upon, thereby hailing the audience toward new understandings of H1N1 risk. In this section, I describe how cautionary tales demonstrate a reversal of expectation through the quick progression of illness and death in tragic, unexpected victims, and the perceived limits of medical treatment and knowledge.

5.2.2.1 Terrifying speed

Cautionary tales are characterized by a rapid onset of symptoms and quick progression of the disease. The exemplar article describes how quickly death came to the young, previously healthy, hockey-playing child, Evan Frustaglio, “just three days after he began complaining of symptoms” (GM102809). A picture accompanying the article of the smiling boy amid his fellow school athletes sits in stark contrast to the shock and grief expressed in quotations from the bereaved. This trend continues across the sample; in nearly all cautionary tales, there is talk of the virus that “hit hard and fast” (TS103109) and the “terrifying speed” (GM110309) at which
infection progressed. Most articles note that significant events “all happened so quickly”, in “less than a week”, “the next day”, “hours later”, “within days”, and “within minutes”. Below is an example of how cautionary tales depict the rapid progression of H1N1:

*Within minutes, 6-year-old Rubjit Thindal went from happily chatting in the backseat of the car to collapsing and dying in her father's arms... Rubjit was pronounced dead at hospital barely 24 hours after showing signs of a fever.*

(TS062409)

In many cautionary tale articles, there is a sense that those involved did not realise the significance of what was happening until it was too late, or were helpless to stop it. The sources giving first-hand accounts often describe fear, likening the experience to: “a horror movie” (GM110209), “our nightmare” (GM100410), and, “everything I had feared, and not what I had expected at all” (GM110209). The excerpt below is a particularly memorable example:

*My son had gone from no fever at all to a serious fever while I was scoping out the flu shot lineup. I freaked out. Henry and I burst into the emergency department of Sick Kids Hospital 10 minutes later. I discovered that 10 minutes in the car is more than enough time to imagine every horrible thing you never wanted to think about, and to recall every headline and replay every news clip about what was surely a death sentence: swine flu.*

GM110209

### 5.2.2.2 Unexpected victims

Cautionary tales warn of H1N1 risk by highlighting the tragic, unexpected victim. Along with the case of 13-year-old Evan Frustaglio, some notable examples of unexpected victims include the “healthy and active... Grade 1 student” (TS062509), and an “otherwise healthy young” hockey playing father (GM071309) who fell ill on Father’s Day (GM070709).

The unexpected victims of cautionary tales are not described as having links to any known source of infection, nor are they described as having any diagnosed pre-existing conditions (an exception is an early article that claimed Evan Frustaglio suffered from “a touch of asthma”, which was later retracted). The victims are commonly referred to as “healthy”, “otherwise healthy”, “young”, and sometimes as “athletic” and “energetic”. Several articles note when a health care professional lived with the victim, such as the deceased chemistry professor...
with an MD spouse. The article quotes a neighbor saying, “...you just think he's as lucky as you can be in the Canadian system of having a highly qualified and loving person right there. And still...” (GM111409). Another article notes that Evan Frustaglio’s mother is a registered nurse (GM102809).

Occasionally cautionary tales comment on the lack of explanation as to why those particular people became infected or developed into such serious cases. They speak of “baffled” public health officials (TS062509) who grapple with shocking and “disquieting” (GM110309) H1N1 cases, of tragedies that are “not normal...and deserving of public notice” (TS103009). These unusual cases with tragic, unexpected victims warn of the seeming unpredictability of H1N1.

5.2.2.3 Failures of the health care system

Cautionary tales also warn of H1N1 risk through descriptions of thwarted and disappointing attempts to seek medical treatment. The exemplar article demonstrates how several consultations with health care workers did not save the boy: “When Evan had a sore throat and dry cough at a hockey tournament in London on the weekend, he was told by doctors and pharmacists it was a simple seasonal cold. He was sent home from a Toronto walk-in clinic on Sunday and told to take Tylenol” (GM102809). Throughout cautionary tale articles, attempts to access medical treatment do not yield desired results. Instead of being admitted to hospital, patients are sent away with over the counter medication (TS062509, GM071509); instead of requested medical supplies and hand sanitizer, an isolated First Nations community is sent body bags (GM093009). The excerpt below is a vivid example of a frustrating attempt to access medical treatment:

When her 17-year-old son came down with the flu, Debbie Baillargeon did everything the city's health officials said to do. But nothing went right...After hours of being ‘jerked around’, she took her son to hospital. Baillargeon called her pediatrician’s office, where the receptionist advised her to take Adam to the emergency room. The advice went against what health officials were saying...Instead she called Telehealth Ontario. She was on hold for an hour. TS102909
Where causal tales had a sense of measured confidence in the efficacy of preventative and clinical treatment, cautionary tales depict them with much less certainty. Many articles imply or explicitly express frustration with the limits of medical knowledge concerning H1N1. Specific complaints include the following: a perceived lack of information provided to the public; uncertainty surrounding how and why particular people were infected; why particular people experienced severe cases and complications; prognosis unknowns; and, the perceived inability to quickly and/or definitively diagnose and determine H1N1 as cause of death. One article describes a patient’s frustrations over an eight-hour emergency room visit (with chest x-ray and blood testing), after which the doctor “scribbled a prescription” (TS102909), admitting that “there was no way to know” if H1N1 was involved. In another instance, a young man was subjected to “extensive testing” only to be sent home with cough syrup after results needed to confirm H1N1 were unavailable (TS051609). The excerpt below further illustrates how these frustrations are expressed:

The same medical experts who didn’t know exactly how to treat this virulent disease now don’t know exactly how long recovery takes or if victims will ever completely get well. All they can say is it may take up to two years to recover from H1N1 and some effects may be long-lasting or lifelong. GM104010

In contrast with causal tales, in which clinics and hospitals are depicted as places of treatment, several cautionary tales suggest that clinics and hospitals are places of potential transmission:

“They went to Scarborough Grace General Hospital and stood in line to see the nurse. But there were no masks for patients, she said. “He was hacking all over the place,” she said. “If he did have the flu, I was worried he would give it to someone else.” TS102909

Some of the most harrowing and tragic cautionary tales suggest feelings that treatment received was inadequate. In one article, a grieving family wonders why their loved one was not admitted to hospital, lamenting that the doctors, “should have taken her illness more seriously...Maybe if they had treated her that first night, she would still be here” (GM071309). Another article recounts the maddening story of a Saskatchewan woman who was twice turned away by paramedics and emergency room doctors, and sent home with inhalers, only to begin
seizing and die within a day of leaving the hospital. According to the deceased woman’s husband, “the doctors all told us she’d be fine” (GM071509). The excerpt below is another poignant example of the way cautionary tales describe thwarted attempts to access treatment for H1N1:

“On the evening of June 14, Ruby had a slight fever and complained her legs and arms hurt. Fever and achy muscles can be symptoms of the flu. The next morning, Thindal took her to a walk-in clinic where a doctor prescribed the pain reliever Advil. Thindal took Ruby back to the walk-in clinic that afternoon when the girl started complaining of stomach cramps - another flu symptom. This time she was given some pills... by the afternoon, the little girl’s fever was gone, but she was complaining of a stomach ache. Kuldip took her to the clinic again at about 2 p.m. The doctor gave her pills and told the Grade 1 student at Roberta Bondar School in Brampton to take it easy... Her parents drove her to the hospital that evening, but the child suddenly died en route.” TS062509

In this section I have presented data to demonstrate how cautionary tales function as warnings of H1N1 risk, which serve to heighten awareness of H1N1, and hail the audience into a new H1N1 risk narrative. They use first-hand accounts by lay experts, and express unpredictability and a reversal of expectations brought about by rapid progression, unexpected victims and perceived limits to medical knowledge and care. The following section describes a third, dramatically different, descriptive theme in the H1N1 media coverage, precautionary tales.

5.3 Precautionary tales and management of H1N1 risk

In this section, I present data to illustrate the last major theme, precautionary tales. Precautionary tales instruct audiences on the management of H1N1 risk in everyday life. They describe how everyday people and social groups respond to H1N1, and how they hope and plan to avert H1N1 disaster. They depict many new strategies from many new sources for avoiding infection and managing social disruption. These H1N1 management strategies usually align with, and often exceed, the infection control strategies recommended by the official pandemic experts. They provide instructions, both explicit and implicit, on how to do such things as parent in the midst of a pandemic, eat in public places during a pandemic, and play sports in a pandemic.
Precautionary tales are predominantly found in national or local news reports with a human-interest element, letters to the editor, advice columns, and ‘Life’ and ‘Style’ section columns. Examples of precautionary tale content include news articles reporting on attempts by small businesses to prevent the spread of infection among employees, advice columns on pandemic handshake etiquette, and letters to the editor expressing vaccine safety concerns. They appear throughout the course of the outbreak but are particularly common in the second half of 2009. See Figure 5 (below) for a description of the precautionary tale exemplar.
Three weeks after the death of Evan Frustaglio, the article, “In hand sanitizer we trust”, (GM111209) was published in *The Globe and Mail*. The accompanying image is of a woman using a hand sanitizer dispenser at the doorway of a cathedral. The picture caption lists some of the preventative measures being taken “as part of the attempt to keep the faithful safe”. The caption reads, in part, “Religious services across Canada are placing cleanliness next to godliness - with Purell at altars, elbow bumps in the pews and waves instead of handshakes in the house of worship’s door”. The article begins with an assurance that houses of worship across the country are modifying traditions and adopting novel approaches to prevent infection, “reshaping religious rituals as ministries struggle to spread the faith without spreading the flu”. A newly-invented, electric holy water dispenser is described, with a quip that parishioners may “worship without worry”. The Italian inventor of the holy-water dispenser is quoted as wanting to “preserve religious tradition in the face of flu pandemic”. Next, the article describes examples of preventive measures being put in place across Canada, ranging from communion bread served on toothpicks by surgical-gloved servers at Runnymede United Church in Toronto, to the Shaare Zion synagogue in Montreal where the traditional practice of touching or kissing the Torah had been suspended, to the Montreal priest who inadvertently ruined some parishioners clothing by putting bleach in the holy water in order to “kill germs”. The article mentions that many religious organizations have podcasts of their services so that people can participate “directly in the sanitized safety of their own homes”, in case the outbreak worsens. The article closes with a list of H1N1 prevention recommendations issued by the Roman Catholic Archdiocese of Toronto to be implemented at all masses, which include hand cleaning stations at church entrances, staying home when ill, suspending the practice of taking communion from a shared chalice, and bowing or nodding rather than shaking hands.
5.3.1 Everyday sources of information

Precautionary tales instruct audiences on the management of H1N1 risk in everyday life through local sources of expertise. Members of the lay-public describe their own preparations and preventative approaches, and make suggestions (both implicit and explicit) for managing influenza risk. These everyday sources of H1N1 information include parents, teachers, summer camp administrators, athletes, coaches, restaurateurs, clerics, chefs, caterers, tour operators, etiquette experts, advice columnists, fiction authors, celebrities, department store Santas, and television hosts. These new sources of H1N1 information do their own empirical observations and information gathering (sometimes make their own diagnoses of H1N1), draw their own conclusions as to how H1N1 circulates and is transmitted, and formulate their own H1N1 prevention approaches.

5.3.1.1 Local experts

Precautionary tales feature new, lay sources providing information on managing H1N1 in daily life. The precautionary tale exemplar article, “In hand sanitizer we trust” (GM111209), illustrates this inclusion of local and lay sources, and details the steps taken by churches, mosques and synagogues in Montreal and Toronto to prevent the spread of H1N1. For example, the minister at Runnymede United Church explains the rationale behind their decision to place communion bread on toothpicks, “so people weren’t putting their fingers in the bowl.” The article closes with a list of infection prevention guidelines issued, not by PHAC or the CDC, but by the Roman Catholic Archdiocese of Toronto. Like cautionary tales, precautionary tales include plentiful quotations and information from lay sources.

For the most part, the risk management approaches of precautionary tales are described rather than prescribed. In other words, the lay sources usually discuss the approaches that they have developed and adopted, rather than actively promote or impose them on others. For example, parent’s responses to influenza concerns, and how those concerns translate into infection preventative practices in daily life, are almost always presented in a descriptive, informational manner. Parents (usually mothers) speak of urging their children to wash their hands, of keeping abreast of reports of illness in schools, and keeping their children away from
those who appear unwell. The quotation below demonstrates how one parent modified daily behaviours in response to H1N1:

> When Jane Langille sends her son off to school tomorrow, the Richmond Hill mother will be tucking a little something extra into his lunch bag - a small bottle of hand sanitizer to combat swine flu. TS090709

On the other hand, some articles do explicitly recommend particular preventative approaches, or show particular behaviours being recommended to others. The two examples below demonstrate lay sources advocating for particular H1N1 prevention practices. Note that in the second excerpt, the techniques are called “expert tips”:

> Coaches like Jeff Schneider of Calgary ...brought in tape and markers so his players could identify their water bottles, and encouraged the league's other coaches to follow the new recommendations from Hockey Canada. Sharing gear is out; extra hand sanitizer and fist bumps are in. GM102809

> Expert tips: Single servings

> “Instead of having crudites with a bowl of Hidden Valley Ranch in the middle,” food-show host Ted Allen says, “I think it is a great idea to make individual canapes. It’s a lot more work, but...it’s a smart way to approach it.” Debbie Gibson of Catering with Style Toronto often uses skewers to reduce finger contact. “Although it becomes a waste issue, you need something like that when you don’t want people touching and cross-contaminating the food,” she says. GM091209

Official sources of H1N1 information are rarely cited, although many of the strategies recommended within precautionary tales align with official pandemic recommendations (e.g. hand-washing). Only a few articles reference individual people consulting family physicians and nurses and one columnist mentioned checking the CDC website. Only two articles indicated that groups (the Archdiocese of Toronto and Ontario summer camps) developed preventative measures in consultation with health authorities (TS092109; TS071609).
More commonly, precautionary tales reference a range of informal sources that influenced decision making and informed the development of lay risk management practices. These sources include the media, internet research, past experiences with seasonal influenza, knowing someone infected with H1N1, and other people’s opinions and perceptions. For example, one article quotes a woman who decided to take her family to be vaccinated after hearing that people she knew were “all getting their kids immunized” (TS103009). In another article, a family with allergies scours the internet for egg-free alternatives to the vaccine (TS103009), while in another piece, a woman claims to have been prompted to action after receiving H1N1 update emails from her employers and seeing hand sanitizer bottles placed on all employees’ desks (TS050209). The death of Evan Frustaglio was repeatedly referenced as a catalyst for action (particularly vaccination) both by those who were in close contact with the boy, and by people who heard and read about his death. One columnist even named Frustaglio, the, “Every Son who weighs now on every parent’s conscience, their deepest fears of loss from the blue” (TS103009).

In contrast with causal tales, which exhibited a sense of confident authority and cautious optimism, precautionary tales suggest a lack of certainty concerning attempts to stymie the spread of H1N1. In many articles, people express confusion as to the right course of action. Other people are quoted as, “hoping for the best” (GM071709), “better safe than sorry” (TS050209), “if you can minimize it, why not” (TS090709), and “who knows what could happen” (TS090709). Sentiments such as, trying and doing the best one can (GM092409), doing what one can despite not having all the answers (GM071709), and the possible “inevitable” progression of the outbreak (GM092409), underscore many precautionary tale articles.

5.3.1.2 Local epidemiology

Lay-epidemiological accounts of H1N1 are embedded within precautionary tales. Members of the lay public make their own diagnoses of H1N1 by observing symptoms, like the restaurant manager who sent home a sniffling server. They make their own assessment of H1N1 risk by conducting their own empirical observations and information gathering in their daily lives, like the school superintendent whose tracking of school absences indicated to him that H1N1 tends to keep children home sick between 3 and 4 days (TS111009). They draw their own conclusions as to how H1N1 operates and who is at risk, like the columnist who asserted that students are at
greater risk than some others, given a propensity to engage in such “high-risk activities” as “gathering in tightly knit groups...hugging, kissing and touching each other's laptops” (GM112109).

Rather than using clinical and epidemiological methods for identifying and measuring H1N1 risk, precautionary tales use multiple, less-formal, less-technical means. The exemplar article, for instance, makes no mention of infection rates or laboratory confirmed cases but reminds parishioners that it is best to stay home if they feel ill. A number of precautionary tales reference school and work absences as a way to gauge H1N1:

One-third of students at a downtown Vancouver elementary school are absent with flu-like symptoms...signalling that the influenza season has arrived... GM092409

Appearing or feeling ill with “flu-like” symptoms is the most common way of identifying H1N1 across precautionary tales. Symptoms are occasionally described with metaphors such as “hacking up a lung” (GM091209), having a “killer cough” (GM092809), and with colourful descriptions like, “your sinuses throb, every muscle in your body aches and you're coughing like a 70-year-old smoker...” (TS111409).

The appearance of “flu-like” symptoms as a way to identify and measure H1N1 is usually couched in recommendations to monitor oneself and others. Some articles report that parents and teachers were asked by public school boards to watch for symptoms in students; that employers were monitoring their staff; and that the public in general was asked to monitor themselves and to stay home and avoid crowds if they feel symptomatic. The excerpt below illustrates how the appearance of influenza symptoms is invoked as a way of seeing H1N1, and as a basis for subsequent action:

Santa’s station will be disinfected every hour, and he will gently ask children who appear ill with the flu to return another time. TS111209

Precautionary tales also contain lay assertions about where and when H1N1 is active. In many instances, the lay person is presumably echoing information gleaned from official sources, such as the University of Toronto spokesperson who deemed Summer to be, “a bit of a latent
stage” for H1N1 (GM071709), and the Vancouver Catholic district superintendent who stated that cases were likely to spike in the Fall (GM092409). In other instances, however, assertions about H1N1 circulation are based on the observations and conclusions drawn by members of the public. Below is a quotation from a school superintendent speaking about how one school board undertook their own H1N1 surveillance:

*Mark Joel, a superintendent of education with the Durham District School Board, said absentee rates at this time of year are usually between 1 and 3 per cent. The Durham board has tracked the flu as it moved from northeast Oshawa, and the "wave is moving to Whitby and north" TS111109.

Many precautionary tales contain lay-epidemiological accounts about H1N1 transmission. Several articles quote restaurant managers, caterers, and special events coordinators asserting that infected food servers can spread the virus, and despairing over buffet patrons skipping the tongs and taking food with bare hands. In one article, a Toronto man claims that, “the biggest risk is getting on an airplane” (TS101609); in another, a lifestyle columnist deems mistletoe cheek-kissing amid H1N1, “probably okay” providing there is no other touching other than on the shoulder or upper arm (GM121709). The excerpt below illustrates such a lay-epidemiological perspective on how and where H1N1 spreads, and what practices are therefore more or less risky:

*Henry Paquet, head of the Santa Claus Association of Quebec, urges Santas to minimize physical contact. That means no kisses and no sick kids on Santa’s lap. He says sugar plum fairies and elves should help Santa by offering tissues to children with runny noses. The closer they get to the beard, the greater the possibility of transmission, says Paquet...Santas everywhere are being asked to change their white gloves several times a day and, if they use fake beards and wigs, to change them as often as possible. John Dixon, who will greet children at Eglinton Square in Scarborough this season, says he keeps a blanket on his knees for photo shoots and plans to change it often. TS111209 (emphasis added)*
The excerpt above illustrates a lay-epidemiological account of how H1N1 spreads, drawing from local knowledge—in this example, runny noses, beards, wigs, gloves, and lap blankets are associated with potential infection. The topic of vaccination, particularly, encapsulates how local knowledge and lay-epidemiology factors into H1N1 decision making, within precautionary tales (see Figure 6 below).
Figure 6. The great vaccine debate

Unlike in other studies of health in the media in which compelling metaphors are used to describe treatments (e.g. ‘magic bullet’ in Nelkin, 1995), precautionary tales usually refer to simply the “vaccine” or the “(flu)shot”. However, there are abundant turns of phrase and metaphors that suggest a large-scale tension amid a public “deeply divided” (GM261009) on whether to vaccinate. This discord concerns questions about the safety, efficacy, and necessity of the vaccine, and is called “a great debate” (GM103109), a “confused public debate” and (facetiously) “confusion”, and is exacerbated by a “flood of opposing views”, “competing claims”, and “opposing voices” (GM102709) (GM1027093).

The range of arguments and justifications for and against vaccination found within precautionary tales is dizzying. The excerpt below is from an informal survey by The Globe and Mail and is a particularly succinct example of the broad range of opinions, and the rationale behind them:

MARGARET ATWOOD UNDECIDED...I was told {by a talk-show host in New York} that as I am over 65, I may have some immunity, as my parents had the 1919 flu.

DAVID SUZUKI YES...I’m just astounded at people. Do they think doctors, scientists, and government are out to poison them or something?

RICK MERCER YES...Every doctor I know tells me I should get it. Plus, I do everything that my government tells me.

ALLAN FOTHERINGHAM...NO... I’ve never been so healthy since I was 18. Besides, I almost died two years ago because of a {screw-up} in hospital.

GM103109

On one hand, there are numerous reports of people being opposed to vaccination, and a plethora of theories about why people did not get vaccinated. One Toronto Star columnist mused that, “the biggest cohort of naysayers blame one or more of the following: The media...Government and public health...The medical establishment...Big Pharma…”
Several articles, including a few scientific surveys of public opinion, posit that the public sees no need for the vaccine because the risk of H1N1 has been overstated (GM102609), or because people feel they possess (some) immunity. Some articles report safety concerns due to the vaccine’s ingredients: “I have a real problem with getting something that has a known neurotoxin in it,” (TS091809), and its newness: "I don't want to be a guinea pig,” (TS1130092). Other articles describe alternative preventative techniques, such as through intentional exposure to the virus, gargling with salt water, eating particular foods and vitamins thought to have immune-enhancing properties, using saline nasal pots, and placing onions around the house to absorb the virus.

On the other hand, there are also many reports of the public desperately seeking vaccination. These include accounts of thousands of people lining up in the early hours outside of ‘flu-shot’ clinics (TS103109), a family with allergies determinedly researching egg-free versions of the vaccine (TS103009), and a letter to the editor in which a senior citizen questions priority access schedules, asking, “Where is the evidence?” (TS081509) behind priority access decisions. Within many articles, parents comment on how the death of Evan Frustaglio and others acted as a catalyst prompting whole families to line up for “the shot”. One article claims that Evan’s death “sparks (a) stampede” to flu-shot clinics (TS102809). Another quotes a mother claiming that Frustaglio’s death was a “game breaker” that “jolted” her into action (TS103009).

One of the most widely discussed vaccine-related topics concerned people accused of “jumping the queue” to access vaccines before the scheduled time. Allegations of “queue-jumping” received a heated response in letters to the editor and editorials, with “pampered athletes”, “self-centred elitists”, “arrogant, self-entitled CEOs” (TS1114092), the “suit and tie crowd” and “some of the wealthiest, most well-connected business executives, lawyers and former politicians in the country” (TS1114092) condemned for their “selfish”, “shameful”, “Darwinian” (TS1114092) acts, that are “contrary to the concept of public health” (TS110709). Below is an example of “queue-jumping” censure within letters to the editor:

Imagine the captain of the Titanic ushering panic-stricken passengers to the lifeboats with instructions to the crew, "Hockey players and basketball players first, followed by young children and pregnant women." TS110609
Interestingly, those accused of queue jumping sometimes responded and attempted to justify their actions as “ethically responsible” (TS111109) and the “right choice” (TS111009) in light of their interpretation of priority access guidelines and H1N1 risk assessments.

Several articles and columns argue that vaccination is a matter of “duty” and "everyone's responsibility” (GM071809). The excerpt below is a strongly worded example of this sentiment:

“The public, and health-care workers in particular, should act responsibly by being vaccinated against H1N1 as soon as the vaccine is available in Canada...ultimately being vaccinated is the most effective way to save lives. It is the right thing to do.” (GM101609)

Unfortunately, these few pieces did not explain to whom, or on what basis, the proposed duty to be vaccinated rests.

The data presented above illustrates how precautionary tales provide instructions for H1N1 risk management, through local, lay sources, and lay-epidemiological accounts. The following section describes how local, everyday sources of information are used to develop and take up a range of new, expanded risk management practices in everyday life.

5.3.2 Everyday approaches

Precautionary tales offer new approaches for the management of H1N1 risk in everyday life. Precautionary tales describe how individuals and social groups plan to avert H1N1 disaster, as well as the implications of H1N1 preventive practices for work, school, home, and social life. The precautionary tale exemplar article, for instance, describes the new approaches embraced by clergy and parishioners, including the newly-invented electronic holy-water dispenser, equipped with an infrared sensor similar to those in bathroom soap dispensers. Several synagogues and churches are reported to have sermons available on podcast to allow ill or H1N1-wary worshippers to remain “in the sanitized safety of their own homes”. Descriptions of other practices fill the exemplar article, including the suspension of using a shared chalice for communion, and forgoing handshakes and hugs in favour of bows, fist-bumps and shoulder-to-shoulder embraces.
Most precautionary tale approaches appear to have their roots in official recommendations (such as those recommendations found in causal tales). Hand hygiene, for instance, is an officially recommended practice and is among the most commonly discussed risk management practices within precautionary tales. In many precautionary tales, however, official recommendations are taken up and expanded in wide-ranging ways. The recommendation to avoid crowds, for instance, translates into such practices as ordering takeout instead of dining out at a restaurant, restricting and cancelling university football games and public events, and pulling healthy children out of school.

5.3.2.1 H1N1 at work and school

Precautionary tales discuss the implications of staying home from work and school while ill. Many articles address a tension between the recommendation to stay home and competing, pre-pandemic loyalties and values in the workplace. Several articles note that staying home may lead to loss of pay and job loss, and report on employee confusion around conflicting sick note policies. Other articles advocate in favour of staying home, and admonish readers not to be a “hero”. They depict a “changing climate” in which going to work while ill—once perceived as an act of “loyalty”—is now being reassessed as risky to others (GM1103092). A similar tension is shown in an advice column in which a post-secondary employee suspects that colleagues and students are using H1N1 attendance policies to “play hooky”. The advice columnist in that article calls the dilemma, “a question of competing values - promoting honesty on the one hand, health on the other” (GM211109).

Some precautionary tales discuss the negative social implications of showing influenza symptoms at work, regardless of whether one is truly infected with H1N1. In one article, NBA star LeBron James joked that after returning to practice after a suspected case of H1N1, his teammates avoided him, suggesting he had “the cooties” (GM102809). The excerpt below is another example of the social impact of exhibiting symptoms at work:

_Last week, when Catherine Kaloutsky, a spokeswoman for Via Rail, coughed at the office - just to clear her throat - it was enough to rattle her colleagues. "Quite literally, everybody around me said, 'Are you sick? Do you think you're sick, because you should go home. We don't want you here,' " she recounts. GM102809_
Several articles described approaches being implemented by workplaces and schools to keep employees and students from becoming infected. In one article, a Canadian health and productivity service firm recommended businesses revisit and increase the flexibility of sick day policies (TS072309), and in another article, the Canadian Restaurant and Food Servers Association does the same, suggesting that managers track illness among employees and the people they may have come into contact with (GM110409). Following the death of a pregnant woman in Montreal, two school boards in Quebec went a step further in a preemptive bid to keep pregnant teachers safe from H1N1 by requiring that pregnant women be kept home from work lest they become infected while on the job (TS081509), while officials at the University of Western Ontario discussed which buildings on campus were “best suited to quarantine the ill” (GM071709). The excerpt below illustrates more H1N1 management approaches in post-secondary schools:

*Post-secondary institutions are preparing for the return of students in two weeks with battle plans for swine flu that include room service in dorms, designated washroom stalls and ubiquitous hand-sanitizing stations. TS082209*

As the excerpts above demonstrates, precautionary tales show a range of preventative practices considered and/or implemented to manage H1N1 risk at work and in schools.

### 5.3.2.2 H1N1 at home

Precautionary tales also offer suggestions for how to manage the effects of illness on home life. Several articles address the impact on parents when sick children must stay home from school, and the tension between needing both to work and to care for children. In several articles, developmental psychologists and parenting experts offer “tips” for parents: to manage children’s pandemic fears, and on how to care for children while the parents are sick with H1N1. Some tips include playing “blanket fort” or “talent competition” games while resting on the living room couch, and serving a “snacky” dinner of sliced apples, crackers and cheese rather than attempting to cook (TS111409).

Many of these articles often contain quotations from mothers that indicate a sense of responsibility to keep one’s children healthy and to “minimize any risk, whether it’s flu or a cold” (TS100309) as the excerpt below illustrates:
Page knows some might call her alarmist. But the Toronto mother of three and CEO of fitness company FitMom stands by the old adage of better safe than sorry. "It's my job to protect my children." TS050209

Other articles explicitly raise questions about the gendered division of labour in the family as the excerpt below demonstrates:

Forget fevers and sniffles. For working parents across the country, the most stressful flu symptom this fall may be that tense breakfast-table negotiation: Who is going to stay home with the kids? Who is going to wait in line for the vaccine? Who spends the night in emergency? And that unspoken question potentially underlying every answer: Whose job is more important? GM111609

As the excerpts above illustrate, H1N1 risks in the home extend beyond infection prevention to include concerns about the effect of H1N1 on family life and relationships.

5.3.2.3 H1N1 etiquette

Precautionary tales discuss a constellation of practices done in the name of infection control, as well as “good swine-flu manners” and pandemic “H1N1 etiquette” (GM092809). Previous (often tacit) guidelines for coughing and sneezing, sharing personal items, eating in public places, and otherwise interacting with others are replaced with new, H1N1-appropriate guidelines. For instance, the old practice of covering a cough with one’s hand is replaced with coughing into a sleeve or elbow.

Coughing and sneezing in public is commonly discussed within the context of proper social etiquette. Called good or proper “cough etiquette”, the “sleeve sneeze”, and the “cough-and-cover”, precautionary tales describe the proper technique for covering a cough or sneeze as endorsed by etiquette experts. One article quotes Cindy Post Senning of the Emily Post institute, about the “onus on everyone” to do the “sleeve sneeze” (GM091209).

In a similar vein, precautionary tales discourage the use of communal items in the name of good manners. Items usually shared in shared or public places (e.g. work, school, gym etc.) such as communal yoga and exercise equipment, water bottles, pens, pencils, tissues, toothbrushes, toothpaste, face cloths, “or any other items that come into contact with the mouth
or nose” (TS071609), are identified. As one article states, “Sharing - another normally polite behaviour - is also out the window this coming flu season” (TS090709). Good manners for eating at buffet restaurants and dinner parties are also discussed. Several articles condemn acts of “double-dipping” and handling other people’s food at buffets and restaurants as “uncouth” (GM091209). Several “lifestyle experts” and restaurateurs suggest that infection control measures must take “hospitality” and sociability into account:

“As humans, we like to socialize,” he says. “What are we going to do, go hide under a rock?” GM091209

New conventions for greeting one another are similarly considered amid discussions of etiquette. These articles often discuss whether and how to substitute the more traditional handshakes, hugs, and kisses with fist bumps, waves, smiles, bows, and shoulder to shoulder hugs, while considering the potential for “offense” (TS101009), awkwardness and social discomfort. One columnist speaks in favour of fist-bumps, in part because he finds them “cool” (GM121709), while another denounces them as “weirdly hostile” and pledges to continue shaking hands while searching for “an alternative social greeting that is warm and works” (GM092809). In one advice column, a holiday party host writes to the columnist seeking guidance regarding his mandatory mistletoe tradition. The columnist’s response considers the importance of holiday tradition, the party guests’ comfort, the host’s conscience and social viability, as well as concerns about H1N1 transmission: “H1N1 is a potentially fatal disease. You don’t want anything like that on your conscience, do you?” (GM121709). In the excerpt below, another advice columnist responds to a question about dispensing with handshakes, and whether H1N1 fears give us “license to be rude”. The columnist answers that the trust signified by a handshake remains important amid H1N1 risks:

Listen, it has always been dangerous to shake hands with people. You have always had to wash your hands after a social event to avoid everything from colds to warts. But showing vulnerability is the whole point of the custom: It originated in showing that one had relinquished one’s weapon. Flesh-to-flesh contact is a sign of trust. It's probably even more important in a time of fear. If we all became cold and reserved in response to a disease, we would all, in a sense, have caught it... GM1031092
In many cases, like the example quotation above, the desire to stop the spread of contagion and to protect oneself from infection is weighed against the social values of politeness, tradition and custom. Several articles discuss a tension between addressing H1N1 infection concerns, while at the same time maintaining culture and social traditions. In one example, religious leaders speak of modifying worship services to incorporate H1N1 prevention without minimizing the “rich symbolism” of their traditions: “You don't want to see the breakdown of community because people are terrorized by the possibility they might come down with something,” (GM092509).

5.4 Conclusions

In this chapter I have presented the study results describing risk discourses within Canadian print news coverage of H1N1. The results were arranged under the following three descriptive themes: ‘causal tales’, ‘cautionary tales ’ and ‘precautionary tales’, each of which represent three distinct ways that news media coverage talks about H1N1 risk.

Causal tales explain H1N1 risk. They provide information and updates on H1N1 cases, calling upon clinical and epidemiological science and traditional pandemic expertise to explain how and why particular people came to be infected. They track the pathways of H1N1 infection through time and space, thereby linking specific cases back to a particular set of risk factors, including particular places, people, and behaviours. Causal tales promote and defend official pandemic preparation and response measures, primarily vaccination.

Cautionary tales warn of H1N1 risk. They describe compelling, unsettling and surprising H1N1 cases that confound the logic of official pandemic planning and preparation, and defy the expertise that causal tales are rooted upon. They draw upon the lived experiences of those affected by H1N1, chronologically and emotionally retelling the experience of H1N1 from symptom onset, to sickness behaviours and seeking medical treatment, to the eventual recovery or demise and aftermath. Cautionary tales feature unexpected victims, rapid timelines, and frustrations and complaints about medical treatment, thereby illustrating uncertainty and a reversal of previous expectations about how H1N1 operates, heightening awareness of H1N1 risk and hailing audiences into a new H1N1 narrative.

Precautionary tales instruct audiences on the management of H1N1 risk in everyday life. They depict members of the lay public doing their own empirical observations of H1N1, making
their own assessments of risk, and then developing their own risk management practices and strategies. Precautionary tales suggest ways to anticipate and manage H1N1 at work and school, in the home, and in social life more broadly. Vaccination is a hotly contested issue within precautionary tales, and the “great debate” about vaccination concerns questions of safety and efficacy, as well as notions of responsibility and duty to oneself and others.

In the next chapter I will interpret these results through the lens of the theoretical approach described in Chapter 3. I will make the following two arguments: firstly, that the three tales demonstrate a shifting discursive terrain around H1N1 and its management, in which there is an expansion of H1N1 risk discourses, as both a governmental rationality and a governmental strategy; and secondly, that precautionary tales make possible a particular kind of pandemic subject which functions as a contemporary, neoliberal bio-citizen.
Chapter 6
Discussion

6 Discussion

Stories animate human life; that is their work. Stories work with people, for people, and always stories work on people, affecting what people are able to see as real, as possible, and as worth doing or best avoided. (Frank, 2010, p. 3)

In this chapter I argue that the three tales described in the previous Results chapter demonstrate a shifting discursive terrain around H1N1 risk and its management. The advent of each new tale hails the audience into a new H1N1 storyline and a heightened awareness of H1N1 risk. Each new H1N1 storyline recalibrates the conditions of possibility for H1N1, thereby shaping, as Frank states in the quotation above, what can be seen as real and as possible. Here I return to the theoretical framework of governmentality, risk and biopedagogy to interpret and discuss the three tales. Along with the governmentality and risk literature, I also draw from some concepts from media studies and from empirical studies of health and the media to provide additional depth and context to the discussion.

The chapter is organized into two sections. In the first section, I argue that the results indicate a shifting discursive terrain surrounding H1N1 risk. The emergence of the three ‘tales’, I argue, herald major shifts in H1N1 risk discourse; each tale represents a shift in the loci of biopower. In particular, each shift demonstrates a further expansion of H1N1 expertise and a corresponding expansion of what I call H1N1 ‘risk space’, which is primarily discursive ‘space’49 with spatial, social, and moral elements. In the second section I argue that a particular kind of pandemic subject, which operates as a contemporary, neo-liberal bio-citizen, is made possible within the context precautionary tales.

49 I use the word ‘space’ with single quotation marks to refer to discursive ‘space’ and to distinguish it from space as spatial area (without quotation marks) such as the space under the mistletoe.
6.1 Shifting discursive terrain around H1N1 risk and its management

In this section, I explore the shifting discursive terrain that causal tales, cautionary tales and precautionary tales represent. The advent of each of the three tales signify moments of transition in the shifting discursive terrain of H1N1 risk. These shifts occur around the following three major discursive axes: who may speak with authority about H1N1; who is considered to be ‘at risk’ from H1N1; and, who has the managerial authority to provide particular instructions to manage H1N1 risk.

Shifts or reversals in news coverage, like those described in the Results chapter, are well documented within health and media studies, for example, Joye (2010) argues that SARS news coverage underwent four “discursive moments” during which content of coverage changed from a distant to an increasingly local threat (Joye, 2010, p. 591). In Chapter 2, I described previous studies which identified shifts in the content H1N1 news coverage over time (Mayor et al., 2012; Pang & Meng, 2006; Wagner-Egger et al., 2011). In this study, the shifts from casual to cautionary to precautionary tales could be an example of what some media scholars refer to as ‘twitches’ (Langer, 1998) or “reversal of story form” (Seale, 2003, p. 36)50. However, I argue that each shift marks, not chronological or linear shifts in news content, but rather, moments of discursive transition in a struggle over expertise and authority with respect to managing H1N1 risk. With the advent of each tale, H1N1 risk discourse becomes even more far-reaching as a governmental rationality, and consequently, even more far-reaching as a governmental strategy.

This shifting discursive terrain suggests that H1N1 operates as a “dense transfer point” (Foucault, 1990, p. 103), in a Foucauldian sense, for relations of power. In his work on the history of sexuality, Foucault argued that multiple discourses intersect around ‘sexuality’, and that multiple relations of power converge around ‘sexuality’ and are correspondingly enacted and resisted (Foucault, 1990). In a similar sense, H1N1 can be said to be a dense transfer point at which multiple discourses intersect—discourses on biomedicine and medical authority, on

50Explanations for this reversal of expectation in news coverage (for instance, that producers of the news intentionally depict reversals in order to retain audience attention as Seale (2003) and Langer (1998) have argued regarding other news topics), that the media will switch from ‘alarming’ to ‘reassuring’ coverage amid the potential for public panic (Ungar, 1998), or that the media actors (journalists, editors etc.) are attracted to disputes and the controversial (Nelkin, 1996) is beyond the scope of this paper.
pharmaceutical science, on civic responsibility, on corporate culture and workplace expectations, on the family, on gender relations, on social etiquette, and on religious tradition, to name but a few. Multiple relations of power also converge around H1N1, between medical practitioners and their patients, between public health authorities and the population, between individuals and families, and the various institutions and domains that people navigate throughout the course of daily life.

Although I have laid out my description of the shifting discursive terrain as an expansion, and discuss the shifts sequentially in the sections below, it is important to note that the tales themselves are not mutually exclusive, nor is there a chronology or a linearity in their emergence or in their operation. Each of the three tales was more prominent within the news coverage for a particular period, however, they coexist messily as three narrative strands, which together, discursively constitute risk within the news media coverage of H1N1.

6.1.1 Expansion of H1N1 risk space as a governmental rationality

There are multiple sites, domains, and public pedagogues that produce expert discourses on pandemic influenza, which include, as one might anticipate, medicine, virology, epidemiology, pandemic planning, and risk management. The three tales, however, demonstrate the expansion of H1N1 expertise beyond these sites and domains: first in the shift from primarily epidemiological, clinical and official government sources to first-hand experience and lay sources, and then again in the shift to further include expertise from other domains of daily life such as etiquette, sport and recreation, child development, psychology, parenting, work, and religion. In other words, rationalities of H1N1 risk expand beyond predominantly clinical risk, which is associated with individual screening and pathology, (Dean, 2010; Weir, 1996) and epidemiological risk, which is associated with population level morbidity and mortality rates (Dean, 2010); H1N1 risk rationality expands into risks that involve social and daily life. As expert discourses from other disciplines, domains, and regimes of practices are brought to bear on understandings of H1N1, H1N1 risk becomes more pervasive as a governmental rationality.

6.1.1.1 Shifting discourses, shifting relations of power

As described in Chapter 5, there are major shifts in who may speak with authority about H1N1, as well as shifts in the kinds of evidence and expertise that support claims about H1N1. I argue that these shifts indicate that each of the three tales operates under a somewhat different set of
unspoken, discursive ‘rules’. These rules govern the “enunciative modalities” and the limits of “legitimate knowledge” (Lopez and Robertson, 2007, p. 205) about H1N1—the rules about who may speak about H1N1 risk, with what authority, and on the basis of what methodological procedures—the rules regarding who has the managerial authority to provide instructions for the management of risk. In other words, there is a combination of different discourses, operating together, which bolster each of the three tales, and, in turn, make possible the different types of H1N1 expertise, and consequently, the different relations of power, to emerge. These different combinations of discourses provide the rules that produce, delimit, and create new ‘spaces’ for what is “sayable” (Kendall & Wickham, 1999, p. 42) about H1N1 risk, who may say it, who can say it, and on what basis.

Within the sociological literature there are many examples of multiple discourses operating together to constitute particular health issues, including discourses that may not normally be associated with health. Some examples include the following: cancer with discourses of hope, anxiety, and despair (Lupton, 1994), men’s fitness with food, diet and masculinity (Gough, 2007), natural health therapies with medical consumerism (Thompson, 2003), youth sexual health with self-esteem (Shoveller & Johnson, 2006), children’s fitness with active play (Alexander, Fusco & Frolich, 2015), and occupational health risks with organizational behaviours (Varje & Väänänen, 2016). Similarly, I argue that multiple discourses operate together to constitute H1N1 risk in particular ways, within each of the three tales.

**Causal tales** represent discourses of H1N1 risk that are aligned with and supported by discourses of epidemiology and clinical medicine. As shown in Chapter 5, causal tales observe and measure H1N1 through scientific and clinical diagnostics, represent H1N1 risk through statistics and numerical indicators, and centre on the definitions of H1N1 and the corresponding instructions for managing H1N1 that are provided by elite, “primary” sources (Hall et al., 2000); H1N1 risk is calculated, understood, and explained through the methodologies and techniques associated with epidemiology and clinical medicine. This predominantly biomedical and scientific perspective on H1N1 echoes the findings from other studies of H1N1 news coverage which claim that news media representations privilege biomedical understandings of H1N1. These studies include English language news coverage in Canada (Rachul et al., 2011); the UK (Hilton & Hunt, 2010; Hilton & Smith, 2010); Australia (Fogarty et al., 2011; Stephenson & Jamieson, 2009); and studies from the French, Swedish, and Swiss media respectively (Chanel et
al., 2011; Ghersetti & Oden, 2011; Wagner-Egger et al., 2011) that present particular clinical risks (infection, severe symptoms, prognosis), and particular epidemiological risks (morbidity and mortality rates in the population). Correspondingly, within causal tales, there are clinically and epidemiologically informed techniques presented to measure and manage those risks, some of which are performed directly under the direction of medical professionals (e.g. a vaccine administered by health-care worker or antiviral drugs prescribed by a physician). Discourses of epidemiology and clinical medicine confer legitimacy and authority onto those particular ways of seeing, calculating, and responding to H1N1 risk that align with those same discourses.

On the other hand, cautionary tales represent a discursive shift in which the dominance of clinical and epidemiology discourses abates. As described in Chapter 5, members of the lay public speak about their first-hand experiences with H1N1, while the ‘voices’ of elite primary sources are softened, and their ‘presence’ within the media texts grow dim. Central to this discursive shift is the move away from a specialized, scientifically informed and ostensibly objective understanding of H1N1, to a subjective, experiential understanding of H1N1. While causal tales are filled with the words and opinions of primary definers, and with statistics and other numerical indicators often used to demonstrate scientific objectivity (Bell, 1991), cautionary tales refocus on the sensation of H1N1 symptoms, on the action of seeking treatment, and on the emotions felt throughout the course of the infection and afterward. As the discursive terrain that constitutes H1N1 risk is expanded, subjective, first-hand experience with H1N1 becomes a legitimate source of H1N1 knowledge.

This experiential knowledge appears to refute some of the clinical and epidemiological knowledge of H1N1, thereby challenging the dominance of the biomedical and scientific discourses that heretofore primarily constituted H1N1 risk. This challenge to biomedical expertise surrounding H1N1 centres on three points: one, that the people who fell ill in cautionary tales did not always appear to match the criteria for being ‘at risk’ which had been previously put forth by the causal tale expert sources; two, that clinical treatment was often represented as inadequate or inappropriate; and three, hospitals and clinics became associated with the risk of H1N1 transmission. For example, cautionary tales are in part discerned by the featuring of previously healthy, young victims with no known risk factors to make them susceptible to H1N1. These people were shown to behave in a reasonable manner (i.e. seeking medical advice and attempting to access treatment). However, the health care workers are often
represented less favourably, for instance, as “baffled”, (TS062509), with less than ideal bedside manner (e.g. the doctor “scribbled a prescription” - TS102909), and as making claims and choices about treatment that ultimately proved to be wrong (e.g. “The doctors all told us she'd be fine” (GM071509). Evocative language is used to describe the fear and frustration felt in hospitals and clinics, which are portrayed as places where infection may lurk. This ‘messy’, experiential knowledge appears to contradict the previous representations of H1N1, thereby expanding understandings of H1N1 risk and allowing additional discursive ‘spaces’ of H1N1 risk to emerge: risks associated with seeking clinical treatment, and risks associated with the limits to clinical knowledge about who is at risk and why. I argue that cautionary tales represent a type of discursive ‘flashpoint’—a moment of open controversy that challenged the heretofore dominant clinical, epidemiological, and medical discourses of causal tales, thus opening up new discursive ‘space’ around H1N1 risk.

Precautionary tales are a response to the expanded discursive ‘space’ opened up by cautionary tales, and themselves open up further discursive ‘space’ around H1N1 risk. As concerns about the impact of H1N1 began to seep into discussions of work, home, and daily life, precautionary tales offer instructions for anticipating, calculating, and managing H1N1 risk at work, in the home, and in daily interactions with family, friends and with strangers. They represent a continuation of the discursive shift away from primarily epidemiological and clinical discourses around H1N1 risk, and toward a larger, more diverse assortment of other discourses and regimes of practices\(^51\) that are associated with other agencies, institutions, and domains of daily life. Some of these other disciplines and domains include sport and recreation, parenting, social etiquette, business, and religion.

In her work on obesity discourses within reality television, Emma Rich has observed that ‘lifestyle experts’ (e.g. celebrity chef, Jamie Oliver) are commonly invoked as “public pedagogues” (Rich, 2011, p. 11). The role of these public pedagogues, Rich argues, is to provide

\(^{51}\) To my knowledge, Foucault did not define ‘regimes of practices’ although he did talk about the importance of analyzing them, saying, “To analyze ‘regimes of practices’ means to analyze programmes of conduct which have both prescriptive effects regarding what is to be done (effects of ‘jurisdiction’), and codifying effects regarding what is to be known (effects of ‘veridiction’) (Foucault, 1991b, p. 75). Mitchell Dean provides additional clarity, defining regimes of practices as, “fairly coherent sets of ways of going about doing things. They are the more or less organized ways, at any given time and place, we think about, reform and practice such things as caring, administering, counselling, curing, punishing, educating and so on” (Dean, 2010, p. 31).
instructions and rules to guide and motivate individuals and families to modify their behaviour in accordance with expert recommendations. Similarly, within precautionary tales of H1N1 risk, everyday experts like television hosts, teachers, chefs, athletes, and child development experts are pulled into H1N1 discourse and provide instructional guidance in the form of “expert tips” (GM091209) and practical advice.

Local knowledge from these everyday experts and other domains is subsequently applied toward the management of H1N1 risk, and is used to support a range of additional, expanded H1N1 risk management practices. For example, within the domain of sports, a coach possesses specialized knowledge of locker room practices, including that the athletes commonly share gear and water bottles. This knowledge is then applied toward the management of H1N1 risk, and the coach initiates the practice of the labelling of individual water bottles and mandates hand sanitizer use in the locker room (GM102809). In another example, within the domain of child development, a child psychologist has specialized knowledge about the impact of a parent’s psychological stress and worry upon children. Applying this knowledge toward H1N1, the psychologist makes recommendations on how parents ought to behave (e.g. “project confidence” regardless of personal feelings) and to talk about H1N1 with their children (GM110709), in order to minimize the risk associated with psychological stress caused by H1N1. These two examples demonstrate how the authority of other discourses becomes mobilized around H1N1 risk, and is used to support a range of expanded H1N1 risk management practices.

These multiple discourses and domains that inform the expanded H1N1 risk management practices of precautionary tales include many that are not formally associated with health. This is not a unique phenomenon; Nettleton has noted that there are a multitude of human actors, agencies and institutions, associated with health that are not formally devoted to healthcare, such as fitness clubs, supermarkets, community groups, as well as a proliferation of services and resources aimed at improving health (Nettleton, 1997). Similarly, Mitchell Dean claims that regimes of practices—the more or less organized ways of doing things, the “programs for the direction and reform of conduct (Dean, 2010, p. 27)—can link up with and involve other institutions, attempting to colonise or borrow from others. Dean uses the example of accounting and auditing as regimes of practices that have “subsumed other forms of accountability such as those drawn from professional and collegial norms” (Dean, 2010, p. 31-2). In other words, the
principles and values of accounting and auditing, for example, have ‘seeped into’ other domains and become applied to other arenas of life. With respect to precautionary tales, regimes of practices—the ways of *doing* things—surrounding H1N1 prevention begin to line up, intermesh with, and borrow from other regimes of practices, such as food preparation safety guidelines, religious ceremony, and party etiquette. Unlike Dean’s example of accounting and auditing, these other regimes of practices do not subsume or overtake H1N1 management, but they do begin to seep into the increasingly varied techniques for attempting to manage H1N1 risk. H1N1 preventative behaviours align with and borrow from the domains of religion and social tradition, for example, when handshakes among parishioners are replaced with bows and nods, but concerns about maintaining religious tradition and community do not wholly overtake or replace the concern with infection prevention. Instead, the interplay of these multiple, heterogeneous discourses discursively constitute H1N1 risk in diverse ways, as illustrated by the wide-ranging and sometimes contradictory statements and recommendations for managing H1N1 risk.

As more domains of daily life become associated with and understood in terms of H1N1 risk, more areas of life correspondingly are rendered into calculable forms with respect to H1N1. These are not only the risks directly resulting from H1N1 infection (i.e. disease, death), but the risks associated with the practices and behaviours put in place to prevent H1N1, for example, the risk to business relationships associated with favouring fist bumps over the traditional handshake; the risk to social life posed by forgoing a customary cheek kiss; the risk to religious community when longstanding traditions are altered or abandoned. By way of example, an advice columnist contemplating the risk of handshakes, takes into consideration tradition and the rules of etiquette, and cautions that the risk of infection ought to be weighed against the potential offense and damage to trust (GM1031092). This calculation of risk is less formulaic than the statistical correlations of risk used in Dean’s (2010) insurantial and epidemiological risk rationalities (as discussed in Chapter 3), but the ostensible accuracy of the calculations aside, it is still an attempt to anticipate and measure potential eventualities with the intent of managing the future. With the expansion of H1N1 risk as a governmental rationality, more areas of life are being rendered calculable, and therefore, governable, in terms of H1N1 risk.

### 6.1.2 Expansion of H1N1 risk ‘space’ as a governmental strategy

Further, I argue that along with expansion of H1N1 risk as a calculative *rationality*, there was a corresponding expansion of H1N1 risk as a governmental *strategy* over more domains of
everyday life. As seen in Chapter 5, techniques of self-surveillance and self-regulation around H1N1 have spread into multiple facets of life. These techniques include a proliferation of expanded H1N1 risk management practices, behaviours, and material effects. In other words, H1N1 risk became even more pervasive as a governmental strategy over more discursive ‘space’, and accordingly, over more areas of life. Consequently, there was a corresponding expansion of who is understood to be at risk from H1N1, and under what conditions, as well as in what practices and behaviours are understood to be risky. This expansion is marked by shifts that occur in the explicit and implicit instructions for managing H1N1 risk, and, to whom those instructions are directed.

On the one hand, risk of H1N1 remains associated with the risk of infection, illness, and death. Morbidity and mortality rates remain significant and are still subject to risk calculation within the expanded risky places (that is, places that have become associated with H1N1 risk such as sports arenas and churches). On the other hand, risk of H1N1 also becomes the risk of negative effects on social and everyday life which are associated with either effects or symptoms of infection (e.g. the etiquette of the ‘sleeve sneeze’), and/or by the potential or actual presence of the virus in a given community (e.g. having to negotiate childcare duties with a partner because of H1N1 related daycare/camp closures). These social and everyday risks of H1N1 pertain to the ways in which H1N1 could negatively impact daily life—with or without anyone ever having become ill—as well as with the risks to social life brought about by preventative practices, which were themselves put into place in order to stop the spread of H1N1, and thus manage H1N1 risk, in the first place.

David Armstrong’s work on the history of medical thought and the development of the dispensary system in the UK (Armstrong, 1983) is helpful for understanding the spread of H1N1 risk into social and everyday situations and interactions. Armstrong argued that the dispensary not only comprised a building dedicated to delivering health care, but also came to comprise a new way of “seeing illness” (Armstrong, 1983, p. 8) in the body, in the community, and in social interactions and relationships. According to Armstrong, with the development of the dispensary, the epidemiological gaze shifted focus from the environment as the mode of transmission, to the social body and the social spaces between people—to the “minutiae of social life” (Armstrong, 1983, p. 11). In a similar vein, there was a shift in the focus of H1N1 risk, from the outward environment of risky places, spaces, bodies and things to the social interactions and relationships
between people\textsuperscript{52}. Within precautionary tales, the surveillance of risk within the social body is taken a step further, as the risk of H1N1 comes to include the negative effects on social and everyday life of H1N1 prevention and response practices and techniques. These risks must then also be anticipated and managed through strategies and regimes of practices at the capillaries of power.

6.1.2.1 Shifting instructions

In this section, I discuss the expanding instructions for regulating H1N1 risk, which are provided both explicitly as ‘expert’ recommendations and implicitly through the depiction of particular practices within media texts. From causal tales to cautionary tales to precautionary tales, there are shifts in the instructions for managing risk. This expansion of H1N1 risk as a governmental strategy moves from a more limited and narrow set of instructions for H1N1 management, to an expansive and potentially endless number of behaviours, actions, situations and places in which H1N1 risk can and should be managed. This expansion is seen in the shifts surrounding what practices are represented to be ‘risky’, as well as in what places and spaces are represented as ‘risky’. Sociologists have observed that, as health promoters seek to responsibilize the public to take action on behalf of their health (Crawshaw, 2012; Jette et al., 2016), there has been a permeation of risk into new spaces, and a corresponding permeation of health promotion goals and concerns into other domains of life (Ashton, 1992; Skollbekken, 1995; Petersen, 1997).

Within causal tales, instructions for H1N1 risk are more limited. H1N1 infection is understood to be traceable, from source of infection to particular incidence, and predictable, based on a set of known risk factors; there is a comparatively narrow set of places (e.g. pig farms, Mexico), people (e.g. those exhibiting symptoms), and behaviours (e.g. going to work while sick, not getting the “flu shot”) associated with H1N1 risk. There is also a comparatively smaller set of recommended H1N1 preventative practices within causal tales. Public health authorities advocate for “good hygiene” and vaccination, promote the “sneeze sleeve” and exhort the public to avoid crowds, but not to “live in a bubble” (TS062509) and not to take any “special measures” (TS060209).

\footnote{52 I am not referring to Henri Lefebvre’s famous work on the social production of space (Lefebvre, 1974), but rather to the ways in which discourse shapes social and daily interactions.}
On the other hand, within cautionary tales, H1N1 risk appears to become unpredictable. During what I have called this discursive ‘flashpoint’, health authorities appear to be at a loss to explain how and why people with no known risk factors were becoming seriously ill, and dying. Under these conditions of apparent diagnostic uncertainty, the previous instructions for managing risk no longer seem to apply. Further, the act of seeking clinical treatment became associated with incorrect diagnosis, inadequate or unhelpful treatment. Hospitals and clinics, formerly portrayed as places of treatment, became associated with the spread of infection, anger, regret and death.

It has been claimed that infectious diseases, by their very nature, are characterized by indeterminacy (Holland & Blood, 2012), and that influenza pandemics particularly, are “radically uncertain” (Lohm et al., 2015, p. 116). The ways in which cautionary tales represent H1N1 as uncontrolled, uncontrollable, and unpredictable resonates other work on infectious disease and risk. For instance, in her work on SARS as a ‘health scare’, Hooker claims that divergent understandings of different health risks can result in sudden, strong social reactions and mass insecurities (Hooker, 2008; 2010). Much like H1N1 in cautionary tales, Hooker goes on to characterize the SARS outbreak as a health scare that demonstrated the following “strong risk signals” (Hooker, 2008, p, 133): it was a novel disease, there was uncertainty about how SARS behaved and was transmitted, and it appeared uncontrolled (Hooker, 2008). More recently, Sanford, Polzer & McDonough, (2016) explored WHO pandemic planning documents and found that influenza viruses were discursively constituted as inherently uncertain and unpredictable. Pandemic planning, they argue, in turn, emerged as a “technology of (in)security” (Sanford et al., 2016, p. 18), targeted at, and rendering governable, the very potentiality and uncertainty of the virus.

On the other hand, Mitchell Dean (1998) has argued that, from a governmentality perspective, risk is always calculable, and is a, “component of diverse forms of calculative rationality for governing the conduct of individuals, collectives or populations. It is thus not possible to speak of incalculable risks, or of risks that escape our modes of calculation” (Dean, 1998, p. 25). I agree with Dean and further argue that precautionary tales in this study illustrate the necessary calculability of H1N1 risk. That is, precautionary tales are not characterized by the inability to calculate risk, but rather by the development and application of new techniques for calculating and managing risk, when other, previous forms of calculation and management
appeared to fall short.

In this way, precautionary tales represent an expansion of strategies and instructions for managing expanded understandings of H1N1 risk. Writing about the theoretical relationship between risk and uncertainty, O’Malley (2004b) summarizes Peter Bernstein’s argument that uncertainty breeds creativity. O'Malley states that, “Uncertainty appears not as the imprecise fall-back technology for dealing with impending catastrophe, but as the technique of entrepreneurial creativity” (O’Malley, 2004b, p. 4). I argue that precautionary tales represent such a creative expression of entrepreneurial, active, self-protective H1N1 risk management in new places, spaces, interactions, and domains of life; H1N1 risk rationality expanded and seeped into more objects (e.g. buffet food, laptop keys, and shared office supplies); into more spaces (e.g. onto Santa’s lap, under the mistletoe, in a hug); and into more social spaces and interactions (e.g. in office and workplace interactions, in the relationship between friends and romantic partners). A similar trend has been observed in other health issues, for instance, infectious diseases such as AIDS, whose etiology is also found in virus, are increasingly conceptualized in terms of social activities and social interactions (Nettleton, 1997).

Within the H1N1 media data, H1N1 risk becomes theoretically and potentially ubiquitous, and precautionary tales represent a corresponding increase in the practices (e.g. fist bumps, putting bleach into holy water), behaviours (e.g. preemptive work and school absences, cancelling parties) and material effects (e.g. nasal ‘neti’ pots, hand sanitizer dispensers) associated with H1N1 management. As more physical and discursive ‘spaces’ come under the governance of H1N1 risk, the (perceived) necessity of taking preventative action in more and wider ways follows.

Moreover, within precautionary tales, H1N1 risk comes to mean not only the risk of infection, illness and death, but also the following: the risk of negative social effects brought about by H1N1; and, the risk of negative social effects associated with the practices of H1N1 prevention, for instance, modified greeting behaviours during a pandemic. The risks of H1N1 infection are weighed and discussed in the context of their impact on social custom, on trust, and on etiquette. For example, in one instance in the media texts, an advice columnist cited an etiquette expert and recommended that individuals conduct a case-by-case assessment of risk, weighing risk of infection against personal comfort. Risk ‘space’ expands to include the social customs and manners around day to day interactions, whether and how to adapt infection
prevention techniques to daily life, and whether there is an obligation to oneself and others (e.g. to be vaccinated), and when it is socially appropriate or inappropriate (e.g. queue-jumping) to do so.

Another significant domain shaped by H1N1 risk discourse is the home and family. Nicholas Rose has stated, “In the name of public citizenship and private welfare, the family has been configured as a matrix for organizing domestic...arrangements” (Rose, 2005, p. 37). Studies of media and health promotion discourses of HIV/AIDS have similarly found the family to be discursively configured as significant within disease prevention (Raimondo, 2003; Wilbraham, 2008). With respect to H1N1, the family is discursively constituted as a matrix for organizing H1N1 prevention, through vaccination, by teaching children hand hygiene, by providing psychological support, planning contingency childcare, meals and activities, and by monitoring for symptoms. H1N1 risk ‘space’ was also extended to the impact on parents’ relationships with each other, on their careers, and to the impact to children’s psychological wellbeing.

H1N1 risk ‘space’ also seeps into more physical places and spaces. For instance, in the precautionary exemplar article, “In hand sanitizer we trust” (GM111209), H1N1 risk resides (in a manner of speaking) in the holy water, in the communal cup used for Eucharist, and in the church cathedral. The church building, historically considered a place of sanctuary, became both a place where H1N1 virus may lurk, and also, where H1N1 brings social risks, such as risk to community, ritual and tradition.

Because there are so many apparent unknowns about how and where H1N1 transmission occurs, and about who is vulnerable to infection and serious cases, the activity of rendering the unknown into calculable forms, and then taking subsequent preventative steps, across all of these domains, becomes a complex strategy of government of the self. In the media data, the public was encouraged, and expected, to navigate the unknown—to assess their own level of risk, and to make decisions about how to act with respect to H1N1 in the midst of unknowns. In this way, precautionary tales have moved beyond the incalculability of uncertainty, applying risk rationality, and governmental management strategies to a range of expanded places, spaces, interactions, and domains of life.
6.1.2.2 Shifting objects of intervention

From causal tales, to cautionary tales, to precautionary tales, there are shifts in who is understood to be ‘at risk’. As more and more people fall under the expanding banner of being ‘at risk’ for H1N1, more calculations, preventative techniques, and regimes of practices are developed, in order for those risks to be managed. These shifts occur in two main transitions: from anonymous H1N1 victims to high profile victims of H1N1, and again then to responsible pandemic subject.

Causal tales represent anonymous H1N1 victims who are described primarily in relation to a set of significant clinical and epidemiological risk factors. As Chapter 5 described, there is little or no other commentary or information provided about the people infected with and affected by H1N1. They are primarily talked about (often they are almost exclusively talked about) in the context of the degree to which they exhibit combinations of particular epidemiologically and clinically significant risk factors and behaviours (such as having a pre-existing medical condition or having recently travelled in Mexico); the presence or absence of these risk factors is the focus, rather than other identifying traits or personal characteristics. The causal tale victim is a nameless combination of risk factors.

In Robert Castel’s analysis of the shift from dangerousness to risk in psychiatric care, he argued that combinations of risk factors had replaced the previous subject of surveillance, which was the individual psychiatric patient (Castel, 1991, p. 288). Rather than being embodied within an individual or group, Castel claimed, risk within psychiatric care became the “combination of abstract factors which render more or less probable the occurrence of undesirable modes of behaviour” (Castel, 1991, p. 287). Within causal tales, to paraphrase Castel, H1N1 risk has become the combination of abstract factors which render more or less probable the occurrence of H1N1 infection. The anonymous victims of H1N1 news coverage can perhaps be understood as contemporary examples of Castellian constellations of risk factors, the individual subjects not disappearing as Castel claimed, but rather becoming less visible. What is made significant in these representations is not the individuals and patients themselves, but the epidemiological and clinical risk factors associated with them.

53 Presumably there are legal and privacy considerations that limit the amount of information that may be publicized about these cases, however this analysis focusses on the discursive representation of H1N1 risk, rather than on the factors that shape the production of news coverage.
In contrast, cautionary tales feature several highly visible, public faces of H1N1. In particular, Evan Frustaglio—possibly the most high-profile H1N1 case in Canada—became the unofficial poster child and the “face of H1N1” (TS110309). Frustaglio’s death became a major reference point for H1N1 reporting in the Autumn and Winter of 2009, with numerous articles continuing to reference and reflect on the death many months afterward. Lay sources in both cautionary and precautionary tales refer to the death of “Evan” and “the young boy” as a catalyst for behaviour change, particularly by spurring families of young children to seek vaccination.

Frustaglio’s untimely death was tragic all on its own, but it also served as a discursive reference point for H1N1 risk that carried other, broader meanings. Firstly, Frustaglio’s youth and previous good health make the story of acute illness and death particularly compelling. Dramatic human-interest stories, especially those regarding sick children (Seale, 2003) and the “sensational and unusual” (Lupton, 1994, p. 9) are not uncommon within popular media representations. Compelling and tragic human-interest stories have also been found in media coverage of HPV vaccination (Hilton et al., 2010), and vaccine preventable diseases (Leask & Chapman, 2002), the latter of which were often framed as lessons or “moral tales” (Leask & Chapman, 2002, p. 448). The concept of the young, innocent victim is well documented in studies of health and the media, particularly in reports of sick children in which “the innocence of the victim is contrasted with the evil of the disease” (Seale, 2003, p. 134). Secondly, Frustaglio was commonly described as a talented hockey player who became symptomatic while participating in an elite hockey tournament. Hockey has long been associated with Canadian culture and is considered a symbol of Canadian national identity and pride, and of masculinity (Whitson & Gruneau, 2006). News representations of Frustaglio’s death drew upon these other discourses of childhood innocence, discourses of masculinity, and of Canadian national identity, working upon (as Seale says about health and media more broadly), “emotions and feelings about community membership” (Seale, 2003, p. 24). In other words, the story of Evan’s death pulls on the authority of these other discourses, making this cautionary tale a particularly salient discursive reference point. By taking on wider discursive meanings and concerns, the “face of H1N1” became a powerful symbol that worked to expand understandings of who is at risk from H1N1—not only those with known risk factors, and those who had engaged in risky behaviours, but also the young, healthy, strong, and innocent.
After what I call the discursive ‘flashpoint’ seen in cautionary tales, during which previous understandings and working assumptions about the epidemiology of H1N1 were shattered, there was a second transition, from the visible victim of H1N1 to the responsible and active pandemic subject. This shift from ‘victim’ to ‘pandemic subject’ centres on two points: agency, and the conditions for being designated ‘at-risk’. Firstly, within both cautionary and causal tales, H1N1 is portrayed as an active force: it infects, it kills, it lurks in barns, airplanes, hospitals, and handshakes, taking the unsuspecting and unvigilant by surprise. Within precautionary tales, however, people have become active agents of prevention and risk management, not only to prevent infection, but also to mitigate and prevent the effects of H1N1 within the multitude of ‘spaces’ and domains of daily life into which H1N1 risk has seeped.

Secondly, the shift from victim to pandemic subject entails a shift in the understanding of the body, moving from a narrow set of risk factors, to there being such a multitude of potential risk factors, risky behaviours, and risky practices that everyone becomes a plausible potential victim. As discussed previously, causal tales represented infected people in connection with a set of known risk factors, which were derived from clinical and epidemiological understandings of H1N1. In contrast, within precautionary tales, the associations between H1N1 risk and different behaviours, places, and people became widespread and multiple. Rather than there being a comparatively small group of people who possess particular combinations of risk factors, anyone is potentially at risk. In Brown’s (2000) analysis of HIV coverage in the news, he described a somewhat similar shift in categories for different people and groups ‘at risk’ of HIV infection. Brown asserts that epidemiological knowledge was initially used to create ‘at risk’ groups, but that over time, the risk was extended to the larger population (Brown, 2000). A major difference between Brown’s expanded ‘at risk’ categorization and the pandemic subject made possible by precautionary tales, however, is that risk of H1N1 is not limited to infection but also to the negative social effects of infection, and of preventative behaviours, which will be discussed in the section below.

### 6.2 The pandemic subject as a contemporary, neoliberal bio-citizen

In the previous sections I explored the shifting discursive terrain around H1N1 risk and its management. In this section, I explore the governmental and biopedagogical function of precautionary tales—the informal instructions for understanding and governing the body and the
self with respect to H1N1 risk. I draw upon the concepts of governmentality, biopedagogy and bio-citizenship to argue that, in the context of this H1N1 news coverage, the pandemic subject operates as a contemporary, neoliberal bio-citizen.

I argue that the biopedagogies of H1N1 media coverage instruct and incite individuals to understand their bodies both as potentially at-risk for, and as potential vectors of, H1N1. Individuals are exhorted to observe and increase their knowledge of H1N1 symptoms within their own bodies, to watch for symptoms in the bodies of others, and to manage the risk of transmission through a variety of self-surveillance and self-regulatory practices. This understanding of the body, and corresponding practices to manage risk within the body and between bodies, is a fundamentally neoliberal bio-citizenship. It is a form of bio-citizenship because it necessitates particular understandings of the body with corresponding mandated actions, such as the expectation of self-care and self-surveillance. It is a neoliberal bio-citizenship because it is premised upon, and demonstrates neoliberal values of individual responsibility, entrepreneurialism, and volunteerism (Ayo, 2012)—the pandemic subject is expected and even required to act, both on behalf of oneself and in the interest of the health of the collective. As Halse explains, the notion of bio-citizenship is rooted upon understandings of individual personal life as a public concern, and is characterised by active contributions by citizens toward the well-being of the community: “The ‘good’ citizen was therefore an ‘active’ citizen, and active citizenship is the means by which one both commits to and becomes immersed in and part of the social world of a community” (Halse, 2009, p. 50). The pandemic subject, made possible within precautionary tales, is an active, entrepreneurial manager of risk, guarding health both for the sake of oneself and for the larger community.

6.2.1 Potential victim and potential vector

Precautionary tales instruct audiences that the burden of H1N1 prevention is primarily an individual responsibility, or a responsibility for small, local social groups (e.g. church groups expected to look after their own communities). As described in previous sections, there are a range of truth claims about H1N1 risk that support this conceptualization, pulled from other domains and disciplines, which position H1N1 risk within the daily lives of individuals, and ostensibly, as manageable through the actions of individuals and social groups.

Behind the mandate to self-protect in a seemingly endless number of circumstances,
interactions, and situations is the biopedagogical message that we are all potentially at risk of H1N1 infection and other effects. Moreover, not only are we all at risk, but we are all responsible for the prevention of H1N1 infection, and for managing risk concerning the effects of H1N1 on community functioning in the event of a pandemic. Like Castel’s (1991) epidemiological clinic, in which everyone is monitored for symptoms which may or may not present themselves in future, the pandemic citizen (even though they may be asymptomatic) must monitor themselves and behave as though they may become ill at some point in the future, because, as the associate Medical Officer of Health for Toronto warned, “You can spread it before you know you are unwell,” (TS050809). This mandate to act in anticipation of future infection is significant, because bio-citizenship is imbricated with notions of responsibility and duty to the community—it is a shift in understanding one’s body not just as potential victim, but also as potential vector. It is this shift in understanding of the body, tied up with notions of blame, culpability and transgression due to a failing to act preventatively, that elicits self-surveillance and self-regulation.

Previously, media and health researchers have written about notions of innocence and blame within media representations of infectious disease. For instance, studies of HIV/AIDS coverage have found that the media texts represented victims in terms of guilt or innocence (Jones, 1992; Juhasz, 1990; Nelkin, 1995; Sacks, 1996). In their respective overviews of studies on media coverage of HIV/AIDS, Clive Seale (2004) and Deborah Lupton (1994) both note that blame is assigned or pardoned on the basis of race, gender, social class as well as on behaviour. For instance, Lupton cites Jones’ (1992) and Juhasz (1990) studies in which people were portrayed as either “good gays” or “bad gays”, and as “dangerous” or “innocent” respectively, depending on whether they behaved in sanctioned ways like cooperating with authorities or in a manner deemed inappropriate such as working sex workers. Other studies of the discursive representations of infectious disease have also noted discourses of blame, shame, and culpability (Gagnon et al., 2010; Leask & Chapman, 2012). Additionally, a study of Swiss news coverage of H1N1, found changing patterns of blame in which particular groups and countries were considered to be villains, victims, or heroes Mayor et al., (2012) and condemn behaviours deemed to be irresponsible or risky, thereby regulating both physical and social bodies.

Embedded within expectations to guard health amid H1N1, are notions of culpability. In this study, some causal tale and cautionary tale news articles presented information about the
H1N1 victim's actions prior to infection and death, suggesting that they had done something wrong, such as ignoring safety protocols, removing face masks, or going to work while ill. In these instances, the victims are shown to have transgressed against H1N1 recommendations, either accidentally or knowingly, and then, consequently, fell ill or died. These—often implicit—messages mark the shift from victim to vector, and potential transgressor—a discursive boundary that acts as a disciplinary tactic, as a means of reducing particular behaviours while encouraging the care of the self. Pandemic subjects are expected to manage risks in order to avoid blame and culpability.

6.2.2 Self-surveillance and self-regulation in multiple domains of life.

Under the expansion of risk space, the pandemic subject is informally instructed to go above and beyond the officially recommended infection control behaviours, with the understanding that the recommended behaviours alone may not be sufficient to keep one safe. Because H1N1 has become more prevalent as a governmental rationality, the need to go above and beyond includes the need to render what is uncertain into calculable forms, such as through conducting one’s own empirical observations of disease in their own community, monitoring those around them for symptoms of influenza, and making their own assessments of the risks and benefits of various H1N1 preventative techniques, like the department store Santas who determined that, “the closer they [children] get to the beard, the greater the possibility of transmission” (TS111209).

These manifold little calculations and assessments of H1N1 risk must be done in any number of interactions and events in everyday life. Because H1N1 risk has become more prevalent as a governmental rationality, the pandemic subject must also seek out and pursue supplementary preventative strategies. Many of these supplemental strategies are consumer products, available for purchase and are thus associated with neoliberal notions of empowerment through the ‘freedom’ of consumer choice. As Jette et al., (2016) have observed about the role of consumerism within contemporary biopolitics, “...twenty-first-century subjectivity…is a condition characterized by an increasingly privatized, corporatized and criterion-referenced approach to health, rooted in conjoined discourses of empowerment and individual responsibility…” (Jette et al., 2016, p. 1110). Similar to that observation, H1N1 media coverage reflects tacit understandings about what responsible action entails, in that it becomes associated with notions of entrepreneurialism, empowerment, and individual responsibility, and are
operationalized, at least to some extent, through privatized and corporatized approaches (e.g. buying particular vitamins, stocking up on orange juice, and hand sanitizer).

As described in previous sections, precautionary tales instruct audiences that we are all at risk of H1N1, including social risks. These include not only the potential negative impact of H1N1 infection on social relationships, but also the negative impact of H1N1 preventative practices. These risks can be understood as those risks of David Armstrong’s surveillance medicine, that ‘reside’ in social spaces outside of corporeal bodies, the risks, “in the spaces between people, in the interstices of relationships...” (Armstrong, 1995, p. 8). I argue that a rhetoric of influenza prevention has been overlaid on these spaces between bodies: in the interactions and exchanges between partners, strangers, friends, colleagues, bosses and employees, parents and children, health care workers and patients. Within these social spaces and interactions, the pandemic subject is incited to adopt modified social practices like fist bumps instead of hugs or handshakes, and reassuring those in close proximity that a cough or sneeze is due to allergies, and not influenza (GM102809). Additionally, the pandemic subject must take steps to calculate and mitigate H1N1’s potential effects on work, finances, school, and home life.

The family plays a central role within this H1N1 biopedagogy. Several scholars have observed a similar emphasis on the role of the family within public health campaigns (e.g. Fullagar, 2009). For example, in her work on obesity prevention campaigns, Lisette Burrows notes that the family has been, “positioned centrally in the governmental gaze” (Burrows, 2007, p. 127). She notes that obesity prevention campaigns ‘pedagogize’ parents around family/lifestyle practices. In a similar way, the pandemic subject/family is ‘pedagogized’ to view themselves as a key site of H1N1 prevention: parents, particularly mothers, are informally ‘taught’ to watch for symptoms, to keep their children away from crowds and sick people and, above all, to have their families vaccinated. With respect to influenza pandemics, Godderis and Rossiter (2013) have observed a gendered construction of duty to care which placed greater risk on women. The pandemic subject/family is also taught to understand that they are at risk, both from infection and from the effects of H1N1 on the home, and are instructed to make alternate childcare plans if daycares and schools are closed, to consider the division of labour within a household when one parent must stay home with sick children, how to occupy children and plan easy meals, and to mitigate the psychological impacts of pandemic worries on children. In this way, the family serves as a significant site through which both H1N1 infection prevention and
social behaviours are governed, and ultimately, H1N1 risk is managed.

On the other hand, H1N1 is still strongly associated with clinical and epidemiological risks in the form of infection, disease and death. The pandemic subject is required to take up self-surveilling and self-regulatory practices within an expanded range of places, spaces, and domains in an effort to curtail the spread of infection and manage this risk. Fusco’s (2006; 2007) work on the “healthification of space” describes a somewhat similar process by which the new public health mandate of self-government and the rhetoric of hygiene becomes inscribed upon particular spaces. Healthified spaces, Fusco claims, may be reimagined in way so as to invite subjects to participate in various kinds of “civic citizenship” and “consumerist subjectivities” (Fusco, 2006, p. 44). In a similar vein, a rhetoric of influenza prevention and associated regimes of practices are overlaid on an expanded range of places, spaces, interactions and domains of daily life, inciting the pandemic subject to engage in self-surveilling and self-regulatory practices so as not to become infected, or infect others, such as following revised guidelines and rules of etiquette when dining at buffets and restaurants, and monitoring one’s body for symptoms before attending summer camp or participating in religious worship services.

6.2.3 The convergence of self-interest with the public good

Precautionary tales instruct audiences to advocate for their own health, both for their own sake and also for the well-being of the community. Not only are pandemic subjects expected to care for their health for their own benefit, but also in the interest of the larger social good. In this sense, there is a convergence between self-interest and the public good.

In her work on obesity discourses and bio-citizenship, Halse argues that the physical care of oneself to manage obesity is practiced in the interest of the well-being of society, reconfiguring “social responsibility as a personal responsibility” (Halse, 2009, p. 52). Similarly, Warren et al., (2010) found that travelling bodies were expected to guard their own health against influenza pandemic, not only for themselves, but out of duty to the countries they travelled to. With respect to H1N1, pandemic subjects are made responsible for their own health and for the well-being of the collective social group: they must attend to their own H1N1 prevention, both to minimize the burden on the health care system that their own illness may cause, and also to pose less of a risk to others, and thereby limit the spread of infection within the larger population. In more practical terms, the rhetoric of preventive action centres on infection control behaviours such as hand-washing and vaccination, the latter occasionally characterized as
an individual’s “duty” to the community. In this way, biopedagogies of H1N1 risk reconfigure relationships between individuals and the population in the context of influenza pandemics, rendering pandemic subjects responsible for the health of the larger community. Interestingly, precautionary tales are relatively silent in terms of advocating other, less biomedical approaches for managing in a pandemic, such as checking in on the elderly and bringing food to sick neighbours and friends.

This reconfiguration requires subjects to take preventative actions against perceived risks, even to the point of challenging medical/clinical authority. The H1N1 media coverage are filled with stories of people who accepted the diagnosis of medical experts, who followed all of the ‘rules’, and yet their stories ended in tragedy. In contrast, precautionary tales describe people who “grew tired of waiting around” for care, and took matters into their own hands (TS102909), for instance the mother who conducted her own observation of H1N1 symptoms in her son, then disregarded the recommendations of both TeleHealth and her pediatrician’s office by bringing him into the emergency room where it was confirmed that he was indeed battling a severe case of H1N1. Health scholars have observed similar changing attitudes toward health care workers and in the doctor-patient relationships, and the inclusion of notions of consumerism within health care (Fochsen et al., 2006; Lupton, 1997; Nørreslet, Bissell & Traulsen, 2010). As discussed in previous sections, discourses of healthism are bound up with notions of consumerism, entrepreneurial, rational actors and choice.

Further, the pandemic subject is expected to be self-reliant and to not depend upon government intervention. Perhaps the most vivid description of this implicit instruction is seen in the depiction of First Nations reserves who asked for federal help amidst a skyrocketing number of H1N1 cases, and were instead sent a shipment of body bags. In this example, members of the First Nations community were shown leaving town on their own initiative in order to collect their own supplies for distribution in their community, with no mention of the federal jurisdiction for health care on First Nations reserves. The pandemic subject harbours no expectations of government intervention, but rather, understands H1N1 prevention and management to be something that can be achieved through private enterprise, either individually or through the efforts of a small group.

Studies of media and health commonly find that health is portrayed as an individual responsibility and pursuit rather than as a responsibility of the government or a right of
citizenship (Crawshaw, 2007; Roy, 2008). For example, in their analysis of global pandemic planning documents, Garoon and Duggan (2008) found that pandemic plans reflect a particular regime of truths in which lives and interests of the disadvantaged are masked or discounted. Similarly, in the media data analyzed in this study, there is almost no discussion of the social and structural determinants of health and health care, nor of the structural, political, and economic precursors to influenza outbreaks (e.g. factory farming of pork in Mexico where H1N1 is believed to have developed).

The pandemic subject will not only practice self-surveillance, but will surveil others for signs of infection and risky behaviours. Pandemic subjects are encouraged, even expected, to assess their own level of risk and make decisions about how to act with respect to H1N1. They do their own empirical observation of H1N1 in the community, like the teachers who tracked cases within their school board district, and the employees who observed work absences as an indicator of infection rates. Those observations are then used to draw conclusions about the level of risk.

Additionally, the pandemic subject will challenge others who do not conform to recommended behaviours. For example, the H1N1 media data contained numerous letters to the editor from members of the public ‘calling out’ various people and groups for queue jumping. Many of these queue-jumping accusations made associations with people charging the lifeboats of the Titanic. In this way, the Titanic acted as a media ‘template’ (Kitzinger, 2000) for understanding the queue-jumping scenario, a form of ‘rhetorical shorthand’ that helps audiences make sense of events in a larger narrative, in this case, drawing from the powerful associations of the Titanic. Further, in response to these accusations, several people responded to defend their actions, claiming that they were simply actively guarding their own health.

Nikolas Rose’s concept of ethico-politics (Rose, 1999, p. 182) is useful here in understanding the moral aspect of these behavioural imperatives. Rose describes ethico-politics as the self-techniques by which human beings judge themselves and act upon themselves in the interest of self-improvement (Rose, 1999). Risk discourses on H1N1 can be understood to be ethico-political in that they specify ways of relating to oneself, and “the relations between ones obligation to oneself and others” (Rose, 1999, p. 188) in the both in the pursuit of individual health and in the interest of the larger population wellbeing, that are aligned with neoliberal political objectives. Halse has similarly argued that health promotion materials draw on “virtue
discourses” which present actions that align with neoliberal values as virtuous (Halse, 2009). These virtue discourses, Halse asserts, are open-ended in that individuals cannot ever be “too diligent” in the pursuit of health goals (Halse, 2009, p 48).

The rhetoric of worry, fear and blame also contribute toward the responsibilization of the pandemic subject. There is something significant about the ways in which people in precautionary tales not only consider and confess their own worry and fear, but assess and critique the level of worry and fear in others, both within their own social circles and in the larger population. Whether it represents a disciplinary tactic of self-assessment, or a normalizing judgement among entrepreneurial subjects to benchmark one’s own behaviour against the behaviours of others (Foucault, 1995), I would argue that the rhetoric of worry and fear serves a governmental function. Critical public health scholars have critiqued the use of strong emotions such as fear and shame within public health campaigns, claiming that the “emotion-risk assemblage” (Lupton, 2013) employed when associating risk and with strong emotions is a powerful motivation technique. For the pandemic subject, worry and fear incite subjects to curtail particular behaviours (e.g. greeting friends with a cheek-kiss) and to encourage others (e.g. vaccination). In particular, professed fear caused by the death of Evan Frustaglio spurred many toward vaccination. The biopedagogical message of H1N1 risk that underpins worry and fear ultimately serves to responsibilize the pandemic subject to act preventatively in the interest of self and in the interest of the larger community.

6.2.4 Social-interactive risk

Thus far I have described the pandemic subject as being characterized by responsible, preventative action, self-surveillance, and self-regulation, and an entrepreneurial guarding of health in self and others. What makes the pandemic subject unique, however, is that pandemic subjectivity requires moving beyond the biopedagogy of reading and understanding the physical body in particular ways, to reading and understanding the risks associated with H1N1 within social and everyday interactions. The pandemic subject must behave not only as a potential transmitter of viruses, a potential carrier of disease, but also as an observer, calculator, and manager of the social risks associated with a) H1N1 infection, as well as, b) the preventative and risk-management practices of H1N1 planning and response.

In Chapter 2 I discussed Mitchell Dean’s typology of risk rationalities: epidemiological
risk, case study or clinical risk, and insurantial risk. Based on my analysis of the media data in this study, I would suggest that there is an additional form of risk rationality operating in connection with H1N1. Unlike epidemiological and clinical risk, it is not directly connected to disease prevention, but it is distally connected to it. It pertains to the case-by-case assessment of risks located in the social interactions of daily life, in the context of pandemics, in assessing the appropriate balance of infection prevention and maintenance of social comfort. An example is the risk posed by forgoing handshakes in favour of fist bumps, or reporting to work while experiencing symptoms that may be interpreted as influenza symptoms. This type of risk rationality relies upon local, informal techniques for information gathering, measurement and assessment and a calculation that is not based on epidemiology or clinical techniques, but rather by appealing to social norms, and by attempting to predict likely outcomes and effects of infection prevention practices on social custom, tradition, community and relationships. It would be premature to claim that this is an entirely new or distinct type of risk rationality based solely upon this thesis, but I would suggest the possibility that a ‘social-interactional risk’ is an emerging risk rationality in the context of H1N1.

6.3 Conclusions

In this chapter I have interpreted the study results through a governmentality and risk theoretical perspective, and made two related arguments. Firstly, I argued that the three ‘tales’ indicate a shifting discursive terrain around H1N1 risk and its management, through which H1N1 risk became even more far-reaching as a governmental rationality, and consequently, even more far-reaching as a governmental strategy. Pursuant to that expansion of H1N1 risk, I argued that the discursive constitution of H1N1 risk within precautionary tales made possible a particular kind of pandemic subject which operates as a contemporary, neo-liberal bio-citizen. As a form of bio-citizenship, the pandemic subject understands their own body as both potential victim and vector, always at risk in a multitude of ways, and across a multitude of domains. There is a behavioural imperative for the pandemic subject to engage in H1N1 risk management practices across a range of activities and domains of everyday life. It is a distinctly neoliberal bio-citizenship in that the pandemic subject is required to behave in ways that align with neoliberal values, including responsible preventative action, self-surveillance, and self-regulation, and guarding health on behalf of oneself and the collective. I conclude the chapter by positing that another form of risk
rationality is developing in connection with H1N1 risk discourses, which I call social-interactive risk.

In the next chapter, I summarize the overall study and discuss major contributions (substantive, methodological and theoretical) and major implications. I then address several lines of inquiry for future research and provide final thoughts.
Chapter 7
Conclusions

7 Conclusions

But the reality of the potential threats remains, and so does the uncertainty. Whether or not to react to a particular constellation of raindrops as if it were the hundred-year flood is a question that worries most of those to whom the responsibility of intervention falls. (Hooker, 2008, p. 137)

My point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do. So my position leads not to apathy but to a hyper and pessimistic activism. I think that the ethico-political choice we have to make every day is to determine which is the main danger. (Foucault, 2003g, p. 104-5)

By way of conclusion, this chapter addresses the major contributions and implications of this thesis. First, I discuss how the research presented in this thesis made the following contributions:

- Substantive contributions toward sociological understandings of media representations of H1N1 risk, through the surfacing of the notion of a discursive struggle surrounding H1N1 in the Canadian media, and by providing rich qualitative description of three themes—causal tales, cautionary tales, and precautionary tales—that comprised the shifting and contested discursive terrain around H1N1 risk;
- Methodological contributions to the literature on media discourses on infectious disease through a detailed account of my methodological approach which mirrored the theoretical commitments of a governmentality and risk approach; and,
- Theoretical contributions to extend notions of bio-citizenship and biopedagogy, namely, the notions of ‘risk space’, and the ‘pandemic subject’.

Following a discussion of these contributions, I discuss the major implications of the study, as well as the lingering questions raised, and some avenues for future research identified through this research.

7.1 Overview of the study

In this thesis, I set out to explore the following research question:
How is risk talked about in the news media and what are the social and political implications of the ways in which risk is talked about?

In the furtherance of this aim, I focused on the following three objectives:

1) to document and analyze discursive representations of risk within English language, Canadian print news media stories of H1N1 in 2009 and 2010

2) to explore and articulate the interrelationship of underlying discursive themes

3) to explore their implications for subjectivities and notions of citizenship in the context of late neo-liberal political rationalities.

The preceding chapters detail how this study addressed the research question and objectives. Chapter 1 introduced the aims and scope of this thesis. In Chapter 2, I drew from the empirical literature on H1N1 and influenza pandemics, as well as empirical studies of the media and health, in order to situate this study within the body of scholarship that explores discursive representations of infectious disease within the media. This overview of existing literature demonstrated that empirical research on discursive representations of infectious disease in general, and of H1N1 in particular, are currently quite limited, thus underscoring the importance of this study. Next, Chapter 3 chapter laid out the theoretical logic underpinning this study, as well as the theoretical implications for studying media discourses on risk. I discussed how a governmentality and risk approach enables the media texts to be understood as discursively constituted, socially and historically contingent texts, in which health, risk, and other discourses are displayed, read, interpreted, negotiated, and resisted. I also discussed how the theoretical concepts of governmentality, biopower, and biopedagogy, when applied as an analytic lens, sensitized my analysis to the regulatory and biopedagogical effects of risk discourses within the media texts. Following this, Chapter 4 detailed the methodological framework and techniques used in meeting the research objectives. I described how a Foucauldian discourse analysis approach guided data generation, selection, and analysis at a more conceptual level, as well as the specific techniques used at each step of the study, paying particular attention to the ways in which the very object of analysis (i.e. what would count as risk discourse) was constituted through my analytic choices.

Chapter 5 presented the study results. Drawing from excerpts and quotations from across the study sample, as well as three exemplar news articles, I argued that media discourses on H1N1 risk can be understood as three discursive themes, or ‘tales’. These tales represent three
distinct ways in which news media coverage represents H1N1 risk, each employing distinct rhetorical devices, drawing on different sources of expertise, and with each having something different at stake. These three discursive themes described in the Results are as follows: ‘causal tales’ which align with epidemiological and clinical discourses to explain risk; ‘cautionary tales’ which serve as a discursive flashpoint to warn and heighten awareness of risk, and hail audiences into a new risk narrative; and ‘precautionary tales’ which draw from a diverse assortment of other discourses and regimes of practices that are associated with other agencies, institutions and domains, in order to calculate and manage risk in daily life. In Chapter 6, I addressed the interrelationship of these discursive themes, arguing that the three tales represent a shifting discursive terrain around H1N1 and its management, in which risk becomes even more pervasive as a governmental rationality, and consequently, even more pervasive as a governmental strategy. I then argued that this expanded ‘risk space’ has particular implications for subjectivity and citizenship, in that it makes possible a pandemic subject which operates as a contemporary, neo-liberal bio-citizen. In this chapter, the major contributions and implications of these results are discussed in the sections below.

7.1.1 Major contributions
This study makes several unique contributions toward sociological understandings of media representations of H1N1 risk, to the methodological literature on media studies of health discourses, as well as contributions to the theoretical literature to extend notions of bio-citizenship and biopedagogy.

7.1.1.1 Substantive contributions
This study contributes toward understandings of discursive representations of pandemic risk through the surfacing of the discursive struggle surrounding H1N1 in the Canadian media. By ‘discursive struggle’ I do not refer to a struggle between particular people, institutions, or groups, but rather, that H1N1 is a contested discursive terrain, in which multiple discourses support, interact with, or challenge each other. Media representations of H1N1 illustrate how this contested terrain enables various shifts: shifts in discourses (the expertise and methods used to talk about H1N1, and the processes by which knowledge about H1N1 was produced); shifts in objects of intervention (the material effects, spaces, and behaviours associated with H1N1, as well as the individuals deemed to be at-risk); shifts in instructions for managing H1N1; and,
shifts in relations of power (those defining and speaking with authority about H1N1).

The contested terrain can be seen as three narrative strands, which I call ‘causal tales’, ‘cautionary tales’ and ‘precautionary tales’. The tales are not a chronology of risk representations, nor is there a linearity in their operation. Rather, at any given point, all three tales operate together in the discursive constitution of H1N1 risk, to varying degrees. Causal tales represent ways of talking and thinking about H1N1 that align with and are supported by clinical and epidemiological discourses. Causal tales can be discerned when H1N1 risk is ‘seen’ and ‘read’ through clinical and epidemiological methods, and when medical and scientific experts define and determine H1N1 risk, posing solutions to manage risk that correspond with clinical and epidemiological expertise. Cautionary tales represent a discursive flashpoint that confounds the logic and expertise underpinning previous understandings of H1N1 risk. Cautionary tales can be discerned when H1N1 risk is determined through the lived experiences of those affected by the disease, and is marked by unpredictability, which heightens notions of risk and hails audiences into a new H1N1 storyline. Precautionary tales represent ways of talking and thinking about risk that are supported by a chorus of discourses and practices not normally associated with health or infectious disease prevention. Precautionary tales can be discerned when risk is ‘seen’ through the observations, calculations, and assessments of members of the lay public, as well as from a variety of public pedagogues who are pulled from other domains of everyday life. As H1N1 risk seeps into more areas of everyday life, expertise from various other domains are then applied toward H1N1 risk management, thereby enabling an expansion of instructions and techniques for managing H1N1, and its social effects—at work, at school, at home, and in daily life.

Although this is a study of discourse, and not of ‘the media’ institutions or media actors, it is important to acknowledge how the mediascape served as a key site of this discursive struggle. The news coverage of H1N1 reflected and (re)produced the dominant circulating discourses concerning H1N1 risk, and also provided a platform for those dominant discourses to be challenged and resisted. For example, cautionary tales shine a light on unexplained H1N1 deaths, and challenge the prevailing epidemiological and clinical understandings of H1N1, thereby opening up discursive space for alternative interpretations and counter-discourses to emerge. Another example is the columns, editorials and letters to the editor that question vaccine safety or the role of factory farming in the development influenza pandemics. Additionally, according to many individuals quoted within the data, it was these very media reports—
particularly reports on the death of Evan Frustaglio—that acted as a catalyst, prompting people to take increased, preventative actions\textsuperscript{54}. Several other studies on the Canadian public response to H1N1 coverage similarly found that reports of Frustaglio’s death became a turning point that spurred a rush to vaccine clinics (Quigley et al., 2016; Rousseau et al., 2015). In these ways, the media platforms participated in the discursive constitution of H1N1 risk and helped to facilitate the shifting terrain.

7.1.1.2 Methodological contributions
This study also contributes to the methodological literature on ‘how-to’ conduct a Foucauldian discourse analysis. The methodological approach I took in this study mirrored the theory of Foucauldian discourse analysis. The study sample, in particular, was generated on the basis of these theoretical commitments—that is, an understanding that ‘risk’ is constituted by the very discourses used to talk about it and represent it. I described in detail the ways in which the object of analysis was constituted through the analytic choices I made. By providing a detailed account of data generation, data organization, and analysis, as well as a "decision trail" (Koch, 1994), including discussion of the rationale behind each decision, this study expands the methodological toolkit for future empirical research on media discourses.

7.1.1.3 Theoretical contributions
This thesis makes two main theoretical contributions. The first is the notion of ‘risk space’, which is primarily a discursive space, bounded by the following: who may define and speak about a particular risk, and with what authority; who is considered to be at risk; and, who has the managerial authority to offer instructions for managing risk. In the case of H1N1, risk space is also a contested space, in which multiple discourses are at any given time circulated, negotiated, and resisted. I argued that as risk space surrounding H1N1 expands, it enables a corresponding expansion of expertise concerning H1N1; an expansion of physical spaces, people and behaviours associated with risk; and, an expansion of instructions for the management of risk in

\textsuperscript{54} Which raises the possibility that, but for this media coverage, the H1N1 vaccine campaign in Canada might have had much lower uptake rates.
more areas of everyday life, which becomes a moral enterprise. In this way, risk space is a discursive space that also has spatial and/or material, social, and moral elements.

Because risk space is primarily a discursive space, it does not denote a particular geographic or physical space, place, or location. In this way, the notion of risk space differs from notions of risky spaces or risky places, such as landscapes, environments, or physical places or spaces associated with risk (e.g. Burns, Watson & Paterson, 2013; Hier, 2004; Leonard, 2007), as well as previous studies of infectious disease in the media which have described risky physical spaces (Raimondo, 2003; Reitmanova et al., 2015; Warren et al., 2010). Nor does risk space refer to the “healthification” of spaces (Fusco, 2004; 2006), nor to the ways in which geographic or physical spaces are constructed and regulated in relation to physical activity and health (e.g. Fusco, 2006; Sibley, 1995; Vertinsky & McKay, 2004). Although my notion of risk space refers primarily to discursive space rather than a physical location, it does make possible particular representations of physical and geographical spaces, but makes no ontological claims about the riskiness of those particular spaces.

Risk space also has moral and social elements and implications. The expanded instructions to anticipate, calculate and manage risk in multiple areas and domains of life are related to self-surveillance and self-regulation, and to the convergence of self-interest with the public good. Management of H1N1 risk, in this way, becomes a moral enterprise. Additionally, risk space enables particular social practices, behaviours and interactions in the name of risk management, which I have described as risk ‘seeping into’ the social spaces of customs, etiquette and day to day interactions. By “social space” I am not referring Henri Lefebvre’s work on the social production of space (Lefebvre, 1974), but something closer to David Armstrong’s description of how the epidemiological gaze shifted from the natural environment as a place of contagion to “people and their points of contact” (Armstrong, 1983, p. 10). My study takes this notion a step further, in that, the social element of risk space pertains to how risk shapes the interactions between people in everyday life, not just for the prevention of infection, but also for anticipating and mitigating the effects of H1N1 on social and everyday life. Based upon this analysis, I posit that Mitchell Dean’s (Dean, 2010) typology of risk rationalities may be expanded to include a heretofore untheorized risk rationality which I call, ‘social-interactive risk’.

The expansion of ‘risk space’ allows for the emergence of my main theoretical contribution: the concept of the ‘pandemic subject’. The pandemic subject operates as a
contemporary, neoliberal bio-citizen, distinguished by three characteristics. The first characteristic of the pandemic subject concerns understanding one’s own body as both potential victim and as potential vector (e.g. of H1N1). Consequently, there is a requirement to observe and increase knowledge of symptoms in one’s own body, as well as in the bodies of others, and to manage the risk of transmission through numerous self-surveillance and self-regulatory practices. Often these practices go above and beyond the officially recommended infection control behaviours, such as conducting one’s own empirical observations of infection rates in the community, and making one's own assessments of the risks and benefits of various preventative techniques.

The second characteristic of the pandemic subject concerns the requirement for self-surveillance and self-regulation in multiple domains of life. As risk space expands beyond the limits of clinical and epidemiological risks, it begins to permeate into the social risks that pertain to the potential negative impacts of infection upon various relationships and daily interactions, as well as to the negative impacts that preventative practices may have on relationships and social interactions. These social risks must also be anticipated, calculated, and managed, in multiple domains of life, such as work, school, and in the home.

The third characteristic of the pandemic subject concerns the convergence of self-interest with the public good, in which the management risk is accomplished by the individual subject/family both for the individual subject/family and in the interest of the larger population or social group. Notions of responsibility and culpability for infection render individual subjects and families responsible for the health and functioning of the larger community during a pandemic. This understanding of the body, and of the relationship between individuals/families and the larger population, as well as the corresponding practices for managing risk within the body, constitute a fundamentally neoliberal bio-citizenship which necessitates particular understandings of the body with corresponding actions, and conforms to neoliberal norms of individual responsibility, entrepreneurialism, and volunteerism.

My notion of the pandemic subject extends current understandings of bio-citizenship and biopedagogy. Previously, scholars have identified forms of (bio)citizenship made possible through discourses on non-infectious health issues (e.g. smoking and obesity), which similarly require self-knowledge, self-regulation, and self-surveillance, but primarily affect individuals (although in the case of smoking, second and third hand risks to others are discussed). Other researchers have discussed forms of (bio)citizenship associated with infectious diseases that
require surveillance of others (e.g. HIV/AIDS), but which are largely associated with particular population groups and behaviours.

The **pandemic subject** differs, firstly, because of the dual victim-vector subjectivity/subject position—that anyone is potentially at risk, and simultaneously, anyone is potentially a carrier of that same risk. The pandemic subject body is schooled to understand itself to be capable of infecting others, and of being infected, simply by expelling droplets into the air by sneezing or coughing, by touching a shared surface, or being in close contact with another person.

Secondly, the **pandemic subject** differs from these other conceptualizations because it is not only the **health** risks of a pandemic that must be managed, but also the risks to social and everyday life in the community which are brought about by infection, or by the preventative techniques put in place to manage that very risk. In other words, the pandemic subject position is an all-encompassing subjectivity.

### 7.2 Major Implications

The notions of expanded risk space and the pandemic subject pose a number of social, political and moral implications concerning what it means to be a subject and a citizen in a post-pandemic world. Following Foucault’s caution in the quotation at the beginning of this chapter, if everything is indeed “dangerous”, it is our “ethico-political responsibility” to consider what the main danger posed by these implications may be (Foucault, 2003g, p. 104-5).

On the one hand, from a public health perspective, the expansion of risk space and the entrepreneurial, preventative action of pandemic subjectivity may work to reduce the spread of future pandemics\(^5\). However, from a social and political perspective, there are dangers (in a Foucauldian sense) embedded within this ever-expanding risk-management way of life. The pandemic subject is entrepreneurial, not only in the sense of buying and consuming market goods, but in the sense of ‘buying into’ a way of life in which pandemic risk management becomes potentially all-encompassing. For example, as the H1N1 media data demonstrated, the expansion of risk space allows for increased reasons to be concerned about infection—more

\(^5\) Unfortunately, the difficulty in justifying preventive interventions is an age-old lamentation in public health: If a given intervention is unsuccessful, it is often assumed that public health authorities should have done ‘more’. On the other hand, if the intervention is successful, and widespread death and illness is prevented, the need for such interventions are then questioned.
spaces to avoid; more behaviours and practices (including longstanding traditions and rituals that have other social, psychological, or religious significance) to be modified or curbed; and more people to avoid or be wary of. The psychological stress of pandemic worries alone, as several public pedagogues noted within the media texts, can be particularly damaging, and provide yet an additional concern to be managed. In a slightly more pragmatic sense, if pandemic risk does indeed become all-encompassing, then it no longer holds any meaning. That is, if ‘everything’ is associated with pandemic risk, then pandemic risk ceases to demarcate anything.

Another area of concern is the implication for notions of community under the ‘new normal’ of the post-pandemic, and the effect on social relationships and trust. The surveillance of neighbours and co-workers, both for symptoms of infection and in order to encourage them to follow infection prevention techniques, is particularly troublesome. Historically the informal surveillance of others by the public has been socially problematic, for example, the concerns about stigma and loss of privacy associated with name-based reporting and contact tracing during the height of the HIV/AIDS epidemic (Brown, Chapman & Lupton, 1996; Levine, 1988) (the era of McCarthyism also comes to mind).

In the case of H1N1, the media data describes aggressive work colleagues asking their co-workers to go home following ‘innocent’ coughs and sneezes; department store Santas turning away children who (based upon their own observations) appear to be ill; and at least one school board refusing to let pregnant women come to work lest they become infected. Amid what is being deemed the “new normal”, in a post-9/11 world concerning threats of terrorism (Doherty et al., 2003), the surveillance of others should be considered for the ways in which it may shape broader understandings of citizen rights and responsibilities. Under the post-pandemic ‘new normal’, notions of community could look quite different, with less room for a “gemeinschaft” community (Tönnies, 1887) rooted by social tradition, trust, and close interpersonal relationships, and more expectation of entrepreneurial self-interest converging with the public good, all tied together with a rhetoric of duty and personal culpability. The role of the news media under the post-pandemic ‘new normal’ could also look different, shifting from earlier notions of the media as the 4th estate and watch dog of society—particularly considering how the media served as a key site of discursive struggle and facilitator of the shifting discursive terrain around H1N1.

Another area of danger, echoing concerns about the democratization of media platforms following the advent of Web 2.0, and “infodemiology” (Eysenbach, 2009; Nerlich & Koteyko,
is the potential democratization of surveillance and epidemiology stemming from the expectation that pandemic subjects practice some form of lay-epidemiology. The pandemic subject is encouraged not to trust in the assessment of risk by public health authorities, but rather to do their own empirical research, surveillance, and risk management. If everyone, regardless of special training or knowledge is encouraged to watch for symptoms in the community, and to make their own empirical observations and assessments of risk, what are the potential implications for public trust in public health authorities? So much of regional, national and even international pandemic response rests upon a foundation of public trust, particularly vaccination programs and restrictive measures like quarantine. Amid warnings that Western society is sliding into a post-truth era (Chadwick, 2017; Vernon, 2017) characterized by a loss of public confidence in experts (Chadwick, 2017), claims of conspiracies within the medical and scientific communities (Vernon, 2017), ‘fake news’ (Borden & Tew, 2007; Marchi, 2012; Reilly, 2012), ‘alternative facts’ (Doshi, 2017), and ‘muzzled’ scientists/experts (Turner, 2014), the potential for erosion of public trust in epidemiological science is particularly troubling.

7.3 Directions for future research

Concluding this, I am left with more questions than I had when I began. This isn’t surprising—as Morens et al., (2010) muse, “After 92 y[ea]rs of research, fundamental questions about influenza pandemics remain unanswered” (Morens et al., 2010, p. e10). Some potential avenues for future research are discussed below.

This study focused on the content of media representations, and did not explore how audiences respond to, resist, and/or internalise risk discourses in the media. As discussed in Chapter 2, there is already a large body of audience reception studies concerning H1N1 media coverage. What is still lacking, however, is analysis of audience reception incorporating a governmentality/risk/biopedagogy theoretical perspective. For health communications research, this research could be particularly important, given that media data did not seem to bear out fundamental working assumptions about public panic. This raises questions about whether the public possesses a wisdom that public health and risk communications experts may underestimate.

The “Great Vaccine Debate” featured in Figure 6 was a particularly salient illustration of the discursive struggle around vaccine expertise and authority, and contained some indications of how audiences may be taking up and interpreting risk discourses. What particularly captured my
attention about vaccination was the wildly varying ways in which vaccination was a concern to different groups: public health authorities worried that the public would not ‘take seriously’ H1N1 concerns and would not follow vaccination recommendations; however, the public, having gone above and beyond the recommended preventative measures, were expressing worry about not being able to access vaccines due to wait times and changing priority sequencing/changing recommendations. Some members of the public were even accused of jumping the queue in order to access vaccines. Because my focus in this study was the discursive representation of risk, I did not explore vaccination in depth, although I have begun work on a future paper that will address vaccination and expert knowledge.

Another group of questions raised by this study concerns the biopedagogy of lay epidemiology and local surveillance. In several instances in the media data, monitoring others became a job requirement (e.g. teachers and camp counsellors were instructed to monitor students and campers, respectively). From a social perspective (as well as from a medical and/or public health perspective), it is problematic to ask people with little or no clinical or health training to make observations of symptoms in others, and to make decisions based on their own assessment of those symptoms (e.g. the decision by a restaurant owner that ostensibly symptomatic servers are or are not fit to handle food or interact with customers). It is particularly problematic given the discourses of blame and culpability attached to staying home and not infecting others. Exploring this issue more extensively from a biopedagogy perspective—perhaps drawing from interviews and focus groups with diverse demographic groups—would provide deeper insights into how these groups are being instructed to understand their bodies, and the bodies of others, and how the regulation of bodies takes place in a post-pandemic world.

Along those same lines, further work is needed on how pandemic subjects are made responsible for the health of the larger population. The requirements asked of pandemic subjects to behave as neoliberal bio-citizens includes imperatives to act and behave in risk managing ways—not just on behalf of one’s own health, but in the interest of the larger population and of public health, more generally. If these are among the responsibilities of bio-citizenship, then are there corresponding rights or privileges? What does this pandemic subjectivity ‘look like’ and is there any resistance to this subjectivity? How does it speak to the media data? The media data explored in this thesis did not contain much in the way of resistance to the dominant discourses of individual, preventative action. The few letters to the editor that raised questions about factory farming and structural and unjust conditions on First Nations reserves are a few of the
exceptions. Interview data, or an analysis of letters to the editor or online reader comments, or even reports from other types of media data (different media platforms; alternative or online news sites) or even different newspapers (e.g. a politically conservative publication like the National Post) may yield very different results than what was found in this study, and is something I plan to explore in future research on the pandemic subject.

The notion of risk space has a spatial element, but based on the content of the media data, I was unable to explore if and how various spaces became “healthified” (Fusco, 2006) –that is, whether and to what extent the discourses of public health became inscribed upon particular places and spaces, and the ways in which subjects are then called upon to self-regulate within those places and spaces. Future work on the healthification of public spaces that may have become associated with pandemic risk under the expansion of risk space (such as churches or schools) would likely require observational analysis and document analysis (e.g. signs, posters, visual analysis) and would further contribute to understandings of both risk space and the healthification of space.

Additionally, there were indications in the data that suggested that an analysis using a sociology of emotions perspective would be interesting. Words like “fear” and “worry” peppered many of the quotations by both members of the public, and expert sources. There were also comments by columnists and journalists about who is or is not afraid, panicked, or worried. Due to the limitations of working with static texts, I couldn’t probe this further, but, my initial impression is that these words—fear, worry, and panic—are being used as catch-all phrases or glosses for several distinct and very complex concepts. On the one hand, the data in this thesis do not seem to reinforce common assumptions that the public is easily panicked (Davis et al., 2014), or that public panic must be controlled by public health officials (Barry, 2005). Rather, the media data suggests the public may be concerned or even worried about H1N1, but they are not necessarily panicked.

However, the media data does suggest that fear was, to some extent, a motivator, spurring people to action, and tipping the scales in favour of vaccination among those who were previously hesitant or ambivalent about ‘flu’ vaccines. There is a growing body of literature exploring the use of fear in public health and health promotion (Brookes & Harvey, 2015; Gagnon et al., 2010; Lupton, 2013), as well as empirical work on public fear and outbreaks. Cho and Salmon note that health communication campaigns can lead to psychological distress over an inability to achieve recommended health standards, and an unnecessarily high level of health
concern, which they call an, “epidemic of apprehension” (Cho & Salmon, 2007, p. 293). The notion of fear within public health needs to be further theorized, and possibly distinguished from worry, concern, and panic, and this growing body of literature is one possible place to start. I have begun early analysis on the pedagogies of anger, fear, and regret in H1N1 media coverage and presented some preliminary results at a conference. I plan to continue exploring how fear, anger, and regret become pedagogized within pandemic messaging.

7.4 Final thoughts
In undertaking this study, I did not set out with instrumental goals of improving risk communications or increasing scientific literacy in the public. As such, I have not offered practical or policy recommendations, either for pandemic planners or media producers. Instead I have offered a theoretical analysis and critique of the social and political implications arising from particular representations of H1N1 risk within Canadian print news media. In what could be termed ‘old-school’ Foucauldian fashion, I endeavoured to describe media discourses of risk, and to disturb dominant, common-sense, and taken-for-granted understandings of H1N1, in order to destabilize the subsequent ‘truths’ about how H1N1 risks ought to be managed. It is not my contention that official responses to H1N1 risk are necessarily wrong, ineffectual, or inefficient (these questions are outside of the scope of my analysis), but rather, that there are always some ‘costs’ associated with public health interventions (social, political, and ethical costs as well as monetary costs), and that those costs always pose some danger, making it important to consider the way of life that pandemic subjectivity asks us to ‘buy into’.

To understand risk as a discourse is to consider that messages about risk—including messages in the news media and those directly issued by public health authorities—do not move along a straightforward channel from producer to receiver. Rather, messages about risk operate in a highly contested discursive terrain. This study illustrates that there are many groups participating in this discursive terrain, including the public, the media producers and platforms, larger discourses, disciplines, and regimes of practices, as well as the primary definers and pandemic experts, all of which contribute to the making of meaning concerning H1N1 risk. This study illustrates how the public, in particular, contributes toward meaning-making with respect to H1N1 discourses: by interpreting and responding to media coverage of influenza deaths; by descending upon and overwhelming ‘flu-shot’ clinics across the country, the sudden demand
outstripping vaccine supplies; and by developing an astounding range of preventative techniques. Indeed, this public response itself became another news event, which fed back into the discourse around H1N1 risk.

While I am not interested in making operational or policy recommendations for pandemic planners or media producers, I would argue that the public must be understood not only as hosts who must be “protect[ed] from their own behaviours” (TS090709) as Ontario’s Chief Medical Officer of Health, Arlene King, directed, but also as active meaning makers who interpret and contribute toward risk discourses in a multitude of ways. As such, they are hailed into various risk narratives which make possible particular subjectivities, behaviours, and notions of citizenship, while, at the same time, constrain and disallow others. As Foucault argued, the “ethico-political choice” we must make is to determine: “which is the main danger?” (Foucault, 2003g, p. 104-5). The assumption that we live in risky times requires us to make choices about how to live with and how to navigate these risks in our everyday lives. In other words, how are we to live in a post-pandemic world?
References


Cheek, J. (2004). At the margins? discourse analysis and qualitative research. *Qualitative Health Research, 14*(8), 1140-1150.


Miller, D. (1999). Risk, science and policy: definitional struggles, information management, the media and BSE. Social Science & Medicine, 49(9), 1239-1255.


Schabas, R. (2009, May 7). Don’t sweat the swine flu: Some public health experts have a vested interest in keeping fear alive. Gazette (Montreal).


Appendices

Appendix A: Key sampling decisions

2653: Includes: May 01/09 to Dec 31/10 Toronto Star, Globe and Mail. Search terms within headline or body of text OR reporting on closely related topic.

766: Excludes: blurbs, fleeting mention of H1N1, search terms not in reference to H1N1.


313: Includes: ‘Pandemic in society talk’ and ‘Personal talk’. Focus on individual and/or family and/or societal level H1N1 planning and response. Excludes: ‘Pandemic response talk’ and/or ‘Vaccine talk’. Focus on population level H1N1 planning and response.

157: Excludes: international (not Canadian) events/preparation.

141: Full sample subjected to close reading, layered reads and summary profiles.

44: Final sample subjected to qualitative coding.
Appendix B: Inclusion and exclusion criteria used to generate the study pool

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>May 01/09-Dec 31/1/10 ✔</em></td>
<td><em>Includes search terms but not in reference to H1N1 (e.g. HIV ‘virus’; gold ‘bug’) x</em></td>
</tr>
<tr>
<td><em>The Toronto Star, The Globe and Mail ✔</em></td>
<td><em>Blurb/only a fleeting mention of H1N1 x</em></td>
</tr>
<tr>
<td>Includes search terms within headline or body of text: ‘pandemic influenza, influenza pandemic, pandemic flu, flu pandemic, swine flu, H1N1, bug, virus’ ✔</td>
<td><em>Reader responses posted online x</em></td>
</tr>
<tr>
<td>Articles from any section of paper including news reports, columns, editorials and letters to the editor ✔</td>
<td></td>
</tr>
<tr>
<td>Search term not in headline or body of text but drawing on common knowledge of H1N1 and reporting on one of the following closely related topics: ✔</td>
<td></td>
</tr>
<tr>
<td>-H1N1 vaccines: vaccination/vaccine roll-out/ priority setting/queue-jumping</td>
<td></td>
</tr>
<tr>
<td>-Pandemic response: quarantine/social distancing/travel bans/infection control &amp; hand-washing/bodybags/government response</td>
<td></td>
</tr>
<tr>
<td>-H1N1 related industry: pork/health consumer goods/medical supplies/pharmaceutical and biotech</td>
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</tbody>
</table>

Study pool N#= 766 articles
Appendix C: Study pool ‘talk’ categories and the major topics each category contained

Clinical and epidemiological talk:

• antiviral dosage, vaccine dosage, hospitalisations, incidence and prevalence rates, outbreaks, H1N1 symptoms, immune response, virulence factors, transmission

Vaccine talk:

• vaccine roll-out, clinic wait times, public response to roll-out, public response to wait times, vaccine ingredients, vaccine efficacy, safety, “big-pharma” conspiracy, citizen duty to be vaccinated, health care worker duty to be vaccinated, priority setting, debate over priority access list, confusion over priority access list, queue-jumping

Industry talk:

• corporate pandemic plans, employee absences, sick-leave policies, pork industry, travel industry, orange juice sales, vitamin sales, other health consumer goods sales, pharmaceutical and biotechnology research and development, vaccine manufacturing and liability, biotechnology and pharmaceutical industry profits

Pandemic response talk:

• pandemic preparation and response at healthcare organization (hospital), provincial, municipal levels, healthcare worker pandemic preparation, hospital preparation, First Nations reserves, quarantine, travel restrictions, social distancing (closures, funerals), communication to and from public and effects

Personal talk:

• individual/personal accounts of illness and death, individual/rationale health behaviours, beliefs and rationale, individual/personal reactions to H1N1 preparation, celebrities and H1N1, jokes/humour, poetry, H1N1 etiquette (parties, hugs, handshakes/fist bumps, sharing food/utensils/waterbottles, gym equipment and locker rooms) use of health/H1N1 consumer goods (hand sanitizer, neti pots, vitamins, onions, rubber gloves, bleach, face masks, alternative health products)

Pandemic in society talk:

• how communities/organizations (other than business and health care) are responding /should respond to H1N1 (schools, summer camps, towns, churches, clubs, sports teams, Olympic preparation, Hajj pilgrimage, small business/restaurants interacting with public) how society should respond, reflecting on H1N1 in historical context, H1N1 in political context, comparing H1N1 to past or other issues (e.g. Spanish influenza)

Other:

WHO pandemic declared, debates in house of commons regarding H1N1, differences in H1N1 response by country
Appendix D: Inclusion and exclusion criteria used to generate the study sample

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include articles containing one or more of the following: ‘Pandemic in Society talk’, ‘Personal talk’, ‘Pandemic response talk’ and ‘Vaccine talk’ ☑</td>
<td>Exclude articles with ONLY ‘Industry talk’ and/or ‘Other talk’, and/or ‘Clinical and epidemiological talk’ N.B. This does not mean that articles retained did not include instances of these talk categories, but rather that these categories were not sufficient for them to be included in the sample x</td>
</tr>
<tr>
<td>Include articles containing one or more of the following: ‘Pandemic in society talk’ and ‘Personal talk’ ☑</td>
<td>Exclude articles with ONLY ‘Pandemic response talk’ and/or ‘Vaccine talk’ N.B. This does not mean that articles retained did not include instances of these talk categories, but rather that these categories were not sufficient for them to be included in the sample x</td>
</tr>
<tr>
<td>Include articles focussing on individual and/or family and/or societal level H1N1 planning and response: articles addressed to individuals/public providing explicit or implicit instructions and guidance on how to behave and act with respect to H1N1 (what you should do personally), articles reporting on how individuals or social groups were planning and responding to H1N1, articles reporting on sickness or death in individuals or among social groups ☑</td>
<td>Exclude articles focussing on population level H1N1 planning and response. x</td>
</tr>
<tr>
<td></td>
<td>Exclude articles reporting on international (not Canadian) events/preparation x</td>
</tr>
</tbody>
</table>

Study sample N#= 141 articles
## Appendix E: List of study sample articles

<table>
<thead>
<tr>
<th>Article Title</th>
<th>Source</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada sees 34 cases, all mild</td>
<td>Toronto Star</td>
<td>5/1/2009</td>
</tr>
<tr>
<td>Mom was right, wash your hands</td>
<td>Toronto Star</td>
<td>5/2/2009</td>
</tr>
<tr>
<td>In subway, offices, street; sings of fear</td>
<td>Toronto Star</td>
<td>5/2/2009</td>
</tr>
<tr>
<td>No soap to stop the flu</td>
<td>Toronto Star</td>
<td>5/2/2009</td>
</tr>
<tr>
<td>Alberta pigs quarantined after virus</td>
<td>Toronto Star</td>
<td>5/3/2009</td>
</tr>
<tr>
<td>Alberta girl is first severe case; As Canada's caseload rises to 140, health experts say more serious form of H1N1 is no surprise</td>
<td>Toronto Star</td>
<td>5/5/2009</td>
</tr>
<tr>
<td>It all comes down to the meat we eat</td>
<td>Toronto Star</td>
<td>5/5/2009</td>
</tr>
<tr>
<td>Thinking twice about turning the other cheek</td>
<td>Globe and Mail</td>
<td>5/8/2009</td>
</tr>
<tr>
<td>Worker at centre of pig-farm flu wont take blame</td>
<td>Globe and Mail</td>
<td>5/8/2009</td>
</tr>
<tr>
<td>Don’t do it, doctor advises</td>
<td>Toronto Star</td>
<td>5/8/2009</td>
</tr>
<tr>
<td>What you can do to avoid getting the flu</td>
<td>Toronto Star</td>
<td>5/8/2009</td>
</tr>
<tr>
<td>Masks to join jerseys, scarves in fans’ wardrobe</td>
<td>Globe and Mail</td>
<td>5/8/2009</td>
</tr>
<tr>
<td>Tests confirm first flu-related death in CaMAasks to jnada</td>
<td>Globe and Mail</td>
<td>5/9/2009</td>
</tr>
<tr>
<td>Pigs culled at Alberta farm</td>
<td>Globe and Mail</td>
<td>5/11/2009</td>
</tr>
<tr>
<td>I thought I would die'; Etobicoke man's 'mild' case</td>
<td>Toronto Star</td>
<td>5/16/2009</td>
</tr>
<tr>
<td>Toronto patient in critical care</td>
<td>Toronto Star</td>
<td>5/16/2009</td>
</tr>
<tr>
<td>Flu victim fights for life; But underlying health problems of man, 60, called much more serious than 'mild' case of swine flu</td>
<td>Toronto Star</td>
<td>5/20/2009</td>
</tr>
<tr>
<td>2 Ontarians with swine flu now in hospital; Toronto heart patient said to be on life support</td>
<td>Toronto Star</td>
<td>5/21/2009</td>
</tr>
<tr>
<td>Swine flu puts toddler in hospital; Like 2 other patients, child has pre-existing medical conditions worsened by H1N1 virus</td>
<td>Toronto Star</td>
<td>5/23/2009</td>
</tr>
<tr>
<td>Swine flu factor probed in death; Chronically ill man, 44, had virus but officials await autopsy results in 'atypical 'case</td>
<td>Toronto Star</td>
<td>5/26/2009</td>
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<tr>
<td>Title</td>
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<td>Date</td>
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<tr>
<td>Swine-flu death shocks family: 'Very healthy' Scarborough man, 44, was diabetic, but relat…'</td>
<td>Toronto Star</td>
<td>5/27/2009</td>
</tr>
<tr>
<td>Second swine flu victim dies in hospital</td>
<td>Toronto Star</td>
<td>6/2/2009</td>
</tr>
<tr>
<td>Swine flu on reserve a wake-up call</td>
<td>Toronto Star</td>
<td>6/5/2009</td>
</tr>
<tr>
<td>Reserves hit hard</td>
<td>Globe and Mail</td>
<td>6/10/2009</td>
</tr>
<tr>
<td>Four more die of swine flu</td>
<td>Globe and Mail</td>
<td>6/17/2009</td>
</tr>
<tr>
<td>Summer camps on lookout for H1N1 virus</td>
<td>Toronto Star</td>
<td>6/20/2009</td>
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<tr>
<td>Six year old Ontario girl dies of H1N1</td>
<td>Globe and Mail</td>
<td>6/23/2009</td>
</tr>
<tr>
<td>Swine flu toll hits 16 as Brampton girl dies, 6-year-old among latest</td>
<td>Toronto Star</td>
<td>6/23/2009</td>
</tr>
<tr>
<td>A girl's quick swine flu death</td>
<td>Toronto Star</td>
<td>6/24/2009</td>
</tr>
<tr>
<td>Parents urged not to panic, No need to keep kids home</td>
<td>Toronto Star</td>
<td>6/25/2009</td>
</tr>
<tr>
<td>Swine flu kills healthy 43-year old pastor</td>
<td>Globe and Mail</td>
<td>7/7/2009</td>
</tr>
<tr>
<td>A death in Alberta</td>
<td>Globe and Mail</td>
<td>7/10/2009</td>
</tr>
<tr>
<td>Mothers to be warned of H1N1 risks</td>
<td>Toronto Star</td>
<td>7/11/2009</td>
</tr>
<tr>
<td>25 year old mother dies from virus after seizures</td>
<td>Globe and Mail</td>
<td>7/13/2009</td>
</tr>
<tr>
<td>Flu forces a mother's loved ones to mourn from afar</td>
<td>Globe and Mail</td>
<td>7/15/2009</td>
</tr>
<tr>
<td>Flu virus spreads rapidly through summer camps</td>
<td>Globe and Mail</td>
<td>7/16/2009</td>
</tr>
<tr>
<td>Mom worries about sending teen up north</td>
<td>Toronto Star</td>
<td>7/16/2009</td>
</tr>
<tr>
<td>What campers and their parents need to know to stay safe</td>
<td>Toronto Star</td>
<td>7/16/2009</td>
</tr>
<tr>
<td>Universities abuzz with preparations for response to rapid spread of swine flu</td>
<td>Globe and Mail</td>
<td>7/17/2009</td>
</tr>
<tr>
<td>Let's wash our hands of H1N1 hysteria</td>
<td>Globe and Mail</td>
<td>7/18/2009</td>
</tr>
<tr>
<td>How to talk to your child about H1N1</td>
<td>Globe and Mail</td>
<td>7/20/2009</td>
</tr>
<tr>
<td>Inspectors caught swine flu;</td>
<td>Toronto Star</td>
<td>7/22/2009</td>
</tr>
<tr>
<td>Rash of workers booking off is leaving employers cold</td>
<td>Toronto Star</td>
<td>7/23/2009</td>
</tr>
<tr>
<td>Title</td>
<td>Source</td>
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<tr>
<td>Swine flu spooks local Hajj pilgrims;</td>
<td>Toronto Star</td>
<td>8/3/2009</td>
</tr>
<tr>
<td>Swine flu patient dies weeks after giving birth</td>
<td>Globe and Mail</td>
<td>8/15/2009</td>
</tr>
<tr>
<td>Pregnant teachers told to stay home to avoid flu;</td>
<td>Toronto Star</td>
<td>8/15/2009</td>
</tr>
<tr>
<td>It's time to help the world's truly poor</td>
<td>Toronto Star</td>
<td>8/22/2009</td>
</tr>
<tr>
<td>Colleges study how to beat swine flu; Post-secondary plans range from online lessons to hand sanitizers and profs prepared to pinch-hit</td>
<td>Toronto Star</td>
<td>8/22/2009</td>
</tr>
<tr>
<td>Parents, health workers hesitant to get vaccine shots study says</td>
<td>Globe and Mail</td>
<td>8/25/2009</td>
</tr>
<tr>
<td>Feds vaccine purchase a concern</td>
<td>Toronto Star</td>
<td>9/1/2009</td>
</tr>
<tr>
<td>H1N1 virus kills visitor to Calgary competition</td>
<td>Globe and Mail</td>
<td>9/5/2009</td>
</tr>
<tr>
<td>Classroom flu fight; Students will grapple with new lesson this fall curbing the spread of the H1N1 virus</td>
<td>Toronto Star</td>
<td>9/7/2009</td>
</tr>
<tr>
<td>Reserves bracing for next H1N1 wave</td>
<td>Toronto Star</td>
<td>9/7/2009</td>
</tr>
<tr>
<td>Boost your immunity with these flu fighters</td>
<td>Globe and Mail</td>
<td>9/9/2009</td>
</tr>
<tr>
<td>Flu season fetes</td>
<td>Globe and Mail</td>
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<td>Swine flu virus resistant to Tamiflu in Alberta case</td>
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<td>Sanitizers, masks and dozens of body bags</td>
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<td>B.C. reserve hit by first outbreak f the fall flu season</td>
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<td>Thimerosal in pandemic vaccine scares moms</td>
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<td>Parishioners advised to genuflect, then disinfect</td>
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<td>Hundreds stay home as flu hits B.C. schools before vaccine is ready</td>
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<td>Hand sanitizer at the high altar - a modern day precaution</td>
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<td>Confusion</td>
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<td>Don't worry Dalai Lama</td>
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<td>Canada's flu crisis starts here</td>
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<td>Toronto educator with H1N1 dies in Hong Kong</td>
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<td>Faster, higher, stronger, but no hugs</td>
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<td>Getting ready for the (flu) season</td>
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<td>Does swine flu mean the end of the handshake? no way to</td>
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<td>The duty to be vaccinated</td>
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<td>Expectant family grapples with decision</td>
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<td>Influenza killing Canadians handshakes</td>
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<td>Fewer Canadians interested in getting the H1N1 shot</td>
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<td>Hockey Canada shuns sharing of water bottles</td>
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<td>The flu bugs (1)</td>
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<td>The H1N1 vaccine: Six key questions</td>
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<td>Grieving father struggles with sons death</td>
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<td>No flu-rules: Smile, wave but no handshakes</td>
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<td>The H1N1 dilemma</td>
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<td>Son feared getting flu, father says</td>
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<td>Boy's death sparks stampede to clinics</td>
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<td>Athletes change their habits in the locker room</td>
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<td>Teenagers death hots Blake hard,</td>
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<td>Scared mom find flu advice</td>
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<td>Quebec hospitals warn against H1N1 psychosis</td>
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<td>Vaccinations provide relief for family with special needs</td>
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<td>Apathy, anxiety and acceptance</td>
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<td>If you cut out cheek kisses, flu season wins,</td>
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<td>Long line, long shot for vaccine</td>
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<td>Virus hit 'hard and fast' dead girl's parents</td>
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<td>Family and friends mourn H1N1 victims loss</td>
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<td>H1N1 impact most workplaces still taking part</td>
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<td>More emphasis on the origin of the flu</td>
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<td>A disease wearing the face of our beautiful son</td>
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<td>Ill this fall? Don't be an office hero</td>
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<td>Family grieves for Evan</td>
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<td>Saline solution</td>
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<td>H1N1 scare hits Marlies as Bozak misses 2 games</td>
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<td>Fighting the flu</td>
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<td>Only 28 per cent of Torontonians got H1N1 shot, study shows</td>
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<td>Low H1N1 vaccination rate alarms health experts</td>
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<td>Dissecting H1N1</td>
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<td>Wrong to exclude older adult</td>
<td>Toronto Star</td>
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<td>The scars from H1N1 remain</td>
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<td>The reason was incompetence: Most Canadians didn't get H1N1 flu jab,</td>
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<td>Canadians blasé about flu shots doctors fear</td>
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