Index

Note: Page numbers in **bold** type relate to tables; those in *italics* to figures; “n” after a page number refers to an endnote.

Aboriginals, Canadian 157
acrylamide, in food 125
actor-network theory (ANT) 22, 24–5, 236–7, 242, 292
actor-networks 105, 154, 166, 237, 242
adult respiratory distress syndrome 208
*Aedes* 173
Africa 169, 286
  health infrastructure in 194
  religious groups in 177
  sub-Saharan 173, 175–6, 181
African-Americans 197–8
  and TB 196
Africans
  bushmeat eating 161–2
  in Canada 158
Afro-Caribbeans, in Canada 158
Agamben, Giorgio 180
agriculture
  and biosecurity 216
  rooftop and backyard 221
AIDS 28, 43, 96, 188, 286
  Bangkok summit on 172, 181
  in cities 29, 38
  epidemic 41, 139
  gender inequality in 176–7
  global politics of 182
  health agencies for 42
  New York summit on 172, 176–7
  pandemic 173
  prevention strategies for 177, 181
  see also HIV/AIDS
air travel 20, 258
  and incubation 259–60
airports 94, 98
  as interchanges in disease transmission 15–16
alar 125
ammonium nitrate 153
animals
  and biosecurity 214–27
  and cities 257, 281–96
Index

disease-bearing 216
markets for see wet markets
Annan, Kofi 176
anthrax 28, 125, 184, 208, 268
antibiotics 174, 254
Apple Daily 79
apple juice, polluted 125
Archaeology of Knowledge 273
Asia 13, 21, 176
media coverage of SARS outbreaks in 108
South-East 182
Asian flu 153
Asimolar Conference 277
Association of Southeast Asian Nations (ASEAN) 95
Atlas, Ronald 207
austerity packages 175
authoritarian toleration in Hong Kong 138–51
paradoxes of 140–4
avian influenza 96, 151, 174, 188, 257, 264
in China 161, 163
and commodification of poultry 232
control networks for 220
in Egypt 170–1, 215, 219–21
genetics of 266n
global response to 182, 265
H5N1 strand 28, 173, 217–21, 266n, 285
and health governance 64–6
as a health scare 128
in Hong Kong 218, 220
human-to-human 304
and meat harvesting 161, 287, 290
ordering 218–19
pandemic 14, 24, 27, 42–3, 153
preparation for 64–6
reassortments of 219
subtypes of 218
and transportation networks 210
wild discourse and 285–6
see also influenza; Spanish influenza
avoidable hospital conditions (AHCs) 39, 39
avoidable mortality 38, 39
Bacon, Francis 211
bacteria 257, 268, 285
Ballard, J.G. 201–2, 211–12
Bangalore, India 176
Barss, Peter 206–7
Basrur, Sheela 68, 69n, 113–14
bats, horseshoe 251, 258
Bauman, Zygmunt 180
beef 127, 284
Beijing, China 3, 79, 83, 141
mayor of 80, 145
and SARS 145, 147, 299
Bentham, Jeremy 275–6
Big Cities Health Inventory 31
bio-insecurity 218
bio-materiality 292
bio-politics 276
bio-power 276
bio-threats, and characteristic responses 217
biological weapons 206
detection of 207
biopolitics 154, 164, 252, 264, 266n of modernity 177–80
and SARS 156–8, 260–4
biosecuring 224–5
biosecurity 170, 187, 216–18, 252, 303
and agriculture 216
and animals 214–27
and birds 170
and civet cats 289
global 167–227
and human populations 216
interferences 223–6
and national natures 216
overlaps 223–6
and people 214–27
politics of 216
in practice 222–3
and rural locations 215
in and through cities 214–27
biosurveillance 225
bioterrorism 125, 129, 184, 268, 303
and infection 164
response to 170
risk of 28, 41
use of pathogens in 216
bioweapons 216

bird flu see avian influenza

birds 257
  and biosecurity 170
  in cities 281–96
  exotic 217
  illegal importation of 204
  monitoring of flyways 285

Birth of the Clinic 269

Black, Conrad 115
Black Death 276
Blair, Bill 153
Blair, Tony 269
blame, in media 113–15, 116
blood, in cities 281–96
bodies 250–66
  as composite entities 256
  and consumption 291–2
  spatialities of 258
  urban 252–7
  vitality and public health 255
Bombay, India 179
border controls 268
  and health 127
borders
  control of 164, 168
  feverish 281–96
  permeable 170
Boston University, School of Public Health 203
Botswana 173
Bouchard, Lucien 114
bovine spongiform encephalopathy (BSE) 125, 127, 257, 284, 286
  see also Creutzfeldt–Jakob disease; mad cow disease
Brampton, Ontario 158
Brave New World 211
Brazil 181
breast implants 125
Bronx, New York 44
Brooklyn, New York 44
BSE see bovine spongiform encephalopathy (BSE)
bubonic plague 4, 42, 106
  in Bombay 179
  in San Francisco 160
budget restrictions, and health care 58–9
Bush, George W., US President 114, 181
Cairo, Egypt 170–1, 215, 221
  avian influenza in 219–21
Cairo Poultry Company 223
Cambodia 182, 197
Campbell Commission 119
Canada 15, 21, 94, 127
  civil liberties in 69n
  Downsview Park 284
  federal government of 114
Global Public Health Intelligence Network (GPHIN) 67
Health Canada 82, 146
Health Emergency Communications Network (HECN) 64
health governance in 16, 56–7, 61
Health Protection and Promotion Act (HPPA) 67
histories of racialization and disease in 158–9
index SARS patients in 56, 82
Integrated Public Health Information System (PHIS) 67
making Chinatown in 158–9
Muslims in 153
Reportable Disease Information System 67
SARS in 13, 56, 76–7, 82, 86, 117, 120
Canadian Integrated Public Health System (CIPHS) 59
Canadian Media Research Consortium 109
Canadian Pandemic Influenza Plan for the Health Sector, The 64
cancer 29, 255
  screening services 32
capitalism, and disease 232
Caribbean Canadians 153
Cathay Pacific airline 139
cats
  civet see civet cats
  feral 257
Index 341

Centers for Disease Control and Prevention (CDC), USA 41, 81, 100, 115, 188–90, 259, 301

central place theory 35
Chan, Margaret 77, 143
channel blockers, side effects of 125
chemicals, contamination by 130
Chennai, India 176
Chicago, USA
slums in 189
stockyards in 294
chickens 170, 221–5, 288–90, 292
see also birds; ducks; poultry
Chile 181
China 73–4, 94–5, 243, 264, 286
Communist Party 144–5
decentralization of administration in 74
government of 241, 246, 283
health insurance 240
and Hong Kong administration 53, 71
increased Western knowledge of 161
index SARS patients in 74
medical system of 79
Minister of Health 80
mistrust of 163
National People’s Congress of 141
Open Door Policy of 74
post-SARS feeding frenzy in 290
Qinghai Lake 285
rioting in 100
southern 2–3
spread of SARS in 74, 163, 240, 286
and Westphalian state system 144–7
Chinatown, Toronto 158
the making of 158–9
Chinese students, in Singapore 94
Chinese workers, in Singapore 90
Chinese-Canadians 153, 155, 299
chloroquine 182
cholera 41–2, 146, 178, 296
Christian Science Monitor 153
cities
a-modern 214–15
and animals/birds 257, 281–96
bacteriological 4, 68, 174, 254, 265m, 294, 300
biological 253
biopolitical 252, 260–4
biosecurity in and through 214–27
biosocial 257–60
and bodies-in-formation 255–7
and disease 3–5
dripping commodities in 295–6
and epidemics 15
global see global cities
and global flows 5, 19
healthy 31–3
hygienist 294
inner 2, 4
internal changes in 298
intimate commodities in 281–96
invisible 254
as machine assemblages 255
ontological understanding of 231
polyrhythmic 251, 257–60
second-tier 20–1
sick 29–31
social 253–5
unbounded 251, 257–60
use of space in 299
see also world cities
city-state, globalizing 86–101
civet cats 3, 106, 161–2, 232, 251, 258
and biosecurity 289
in cities 281–96
palm 239, 243, 283
civil liberties 69n, 262
and disease control 66
civil rights 51
Clement, Tony, health minister 114
climate change 28
cliques 21–2, 57
defined 21
Clostridium difficile 128
cold, common 2, 70
Collège de France 279
commodities 292
in the city 295–6
intimate 281–96
meat as 287–90
network around 282
communication
inadequate/poor 51, 53, 85
inadequate/poor infrastructure 52
networks 135–6
of risk 56–61
commuters 35
complexity 236–9
and SARS 242–5
complexity theory 236, 238–9
Congo, Democratic Republic of the 203
consumption, and bodies 291–2
contact tracing 89, 238
containment
anxieties of 186–200
of TB 192–5
contraceptives, oral 126–7
control 92
of borders 164, 168
social 302
Cook, Robin 128
Cormex Media Research 109
coronavirus 2, 70, 261, 283
SARS (SARS-CoV) 139, 231, 236–7, 240, 242–4, 250, 258, 260
coughing 150
cranberries 127
Creutzfeldt–Jakob disease 284
see also bovine spongiform encephalopathy; mad cow disease
Cryptosporidium 125
Cyclospora 210
cyclosporiasis 204
D'Cunha, Colin 67, 69n, 113–14
death 172–85
politics of 180–2
in a time of SARS 124, 139–40
Deleuze, G. 256
dengue fever 173
development, and TB 192–5
diarrhea 120, 150, 204
dioxins 125–6
disaster incubation approach 237
Discipline and Punish 269, 273–4
discrimination, in Singapore 94
disease(s) 172–85
animal-borne 216
brute physicality of 282
Canadian history of 158–9
and capitalism 232
and cities 3–5, 26–48
and class factors 169
control, and civil liberties 66
cultural construction of 103–66
destructive potential of 24
dialectic process in 230
food-borne 257, 282, 291
infectious 9–48, 266n, 297–8
media framing of outbreaks 104–5
networks 1–7, 13–26, 229–304
of emergence 203–5
of response 206–9
topology of 225
nosocomial 87, 247
and the poultry industry 289
racialization of 154–6, 302–3
renewed potential for 14–15
scare, pandemics as 128–30
shift in governmentality 301
social lineaments around 87
surveillance networks (DSNs) 225–6
transmission and airports 15–16
urban infectious 235–49
urbanization and racism 156
and the Utopian impulse 201–13
zoonotic 3, 215–16, 251, 256–7, 260, 264–5n, 286, 289
dissent, exclusion of 134–5
diversity 153
DNA
fingerprinting 190, 196
recombinant 277
Doha Declaration 181
Dongguan, China 79
Donghai Yixiao 144
drinking and driving 124
drugs
affordable 181
retroviral 181
ducks 170, 221–2
  see also birds; chickens; poultry
dystopia 212–13n
earthquakes 43, 216
Ebola 120, 125, 128, 161, 172, 203–4,
  264, 286
Eden-Olympia 201–3, 211–12
efface work 150
  in Hong Kong 138–51
Egypt 177
  Poultry Union 223
  see also Cairo
Electronic Surveillance System for the
  Early Notification of
  Community-based Epidemics
  (ESSENCE) 209
Elementary Forms of Religious Life, The 148
emergence 235–49, 264
  networks of 203–5
emergency planning, localization of 64–5
Emerging Infectious Disease (EID) 13,
  26, 51, 167–227, 304
  defined 26n
  SARS as 2, 299
  and urban health governance 61, 300
  worldview 202
emotional energy 148–9
employee networks 136
employment centers 35
entertainment 127
epidemics 267
  AIDS as 41, 139
  cities and 15
  curbing at the local level 85
  of fear 123–4
  SARS as 73, 75
epidemiology
  classical triad of 235
  of SARS 87–90
erasure 266n
  genealogies of 253–5
Escherichia coli 126, 204
ethnic minorities 28, 42
ethnicity see race
ethnoburbs, in Toronto 158
Europe 29, 145, 178–9, 300
events, unexpected, disproportionate
  and emergent effects of 23–6
Eves, Ernie, Ontario Premier 114
face work 149
favelas 180
fear 291
  classification of 126
  epidemics of 123–4
  of large-scale destruction 125
fever 150
Fidler, David 145–6
fixity 17–18
flesh eating disease 125
flooding 114
flows 231, 237, 242, 248, 297–8
  barriers to 284
  global cultural 109, 119–20
  linked 11, 25, 109, 119–20
  sociology of 245
  space of 245–7, 249
flu see avian influenza; influenza
fluoride 125
food
  brute physicality of 282
  consumption 281
  disease-bearing 257, 282, 291
  genetically modified 125
  irradiation 125
  poisoning 42, 127
  polar understanding of 282
  production 281
  safety 42
Foshan, China 239, 283
Foucault, Michel 177, 233
  trace of infection in the work of
  267–80
foxes 257
France 127, 181
  Institut de Veille Sanitaire 42
  Ministère de la Défense 43
Galen 274
Gambia 197
Gao Qiang 145

gender
  equality and sexual health 172
  and the public health crisis 176–7

genealogy, impurity as a principle
  of 272–4

genetic engineering 277

genetics 187, 196–7
  misuse of 277

Geneva, and avian influenza control
  network 220

géopolitics 264

Germany 164

ghettoization 156, 165

Giddens, Anthony 210

Gilead 185n

Giuliani, Rudy 142

GlaxoSmithKline 185n

global biosecurity 167–227

global cities 14, 18–20, 215, 297
  city-states 53
  cultural construction of disease in
    103–66
  definition of 10–11
  and disease 5–6, 26
  emerging 10, 52, 57–8
  expanding networks of 22–3
  fixity of 18
  hard and soft 44
  health and disease in 27–48
  health governance in 49–101, 298
  hierarchy of 18–20
  hyper 52
  and infectious disease 26
  and linked flows 11, 25, 109, 119–20
  mobility and fixity 17–18
  the network of 20–2, 132
  networked disease in 13–26
  racialization of poverty and disease
    in 154–6
  role in TB 193
  SARS and health governance in
    49–101
  surveillance in 86–101
  Toronto as 57–66

  and vulnerability 15–20
  global citiness
    understanding of 22
    as vulnerability 15–17
  global city-states 53
  global economy 20–2
  global fluids 244
  global health response, to SARS 241–2
  global linkages, in times of crisis 90–1
  Global Organization for Animal Health (OIE) 220
  Global Outbreak Alert and Response Network (GOARN) 241–2
  Global Public Health Intelligence Network (GPHIN) 241–2
  global South 173, 179, 182, 184, 248, 303
  megacities of 28
  slums of 180
  Global Village, Earth as 3
  globalization 13
    and cities 215
    renewed potential for disease and
      14–15
      of SARS 70–85
      and TB 192–5
      and urbanization 10, 14–15, 18–20
    Globalization and World Cities (GaWC), research 19
    globalized urbanization, and infectious
      disease 9–48
    Globe and Mail 109–10, 110, 112,
      112–13, 114–16, 115, 116
    Goffman, Erving 149
    Goh Chok Tong, Prime Minister of
      Singapore 95
    Great Kanto Earthquake 43
    Greater London Authority 41
    Guangdong, China 86, 117, 241, 286,
      291, 295
      atypical pneumonia in 77–9
      bat populations in 258
      index patient from 2, 74, 77, 240
      Pearl River Delta 161
      wet markets of 232, 240, 243, 259, 283
Guangzhou, China 74–5, 239
Guatemala 204

halal 295
hand washing 93, 96
Hanoi, Vietnam 240–1
Harpers 281
Harlem, New York 44

health
  and border controls 127
  and global cities 27–48
  media coverage of issues 112

health care
  access to 36–40
  barriers in 17, 44
  and budget restrictions 58–9
  in Canada 16, 56–7, 61
  fragmented 58–61, 80–4
  governance
    issues highlighted by SARS 78–84
    restructuring in Toronto 55–69
  market hegemony in 302
  resources 35, 36
  workers, as sources and sustainers of infection 66

health governance
  absence of regional system 78–80
  compartmentalization of 71–3
  fragmented 80–4
  in the global city 49–101, 298
  in Hong Kong 70–85
  minimal regional integration in 71–3
  and preparation for avian influenza 64–6

health risks 28–33

health scares 105, 124–8
  concept of 125
  HIV/AIDS as 125
  SARS as 41, 123–37
  and social actors 131
  temporal aspects of 131
  and urbanicity 127
  West Nile virus as 41

health security 260–1, 264
  health status, of city populations 36–40
  healthy city, the 31–3
  heart disease 29, 255
  heat waves 28
  Hebei, China 78
  Helsinki, Finland 29
  hemorrhagic fever see Ebola
  hepatitis 120, 189
  Heymann, David 194
  Heyuan, China 79
  Hispanics 196, 198

History of Governmentality 277
History of Sexuality 269, 276
HIV 161–2, 176–7, 179, 182–3
  and India 176
HIV/AIDS 2, 4, 181, 189, 267
  death toll in 139
  gender inequality in 169
  as health scare 125
  WHO and 146–7, 182–3
  see also AIDS

home confinement 77
homeless persons, and TB 126

Hong Kong 1–2, 19–21, 49–101, 117, 120, 283
  active civil societies in 84
  advisories in 263
  Amoy Gardens 75, 76–7, 83–4, 134, 244
  authoritarian toleration of 138–51
  avian influenza in 218, 220
  Basic Law 141–2, 144
  Chief Executive’s Steering Committee (CESC) 77, 81–2
  Chinese University of 78
  Department of Health (DH) in 72, 79–80, 82–3
efface work 138–51
  Fear-buster movement 78
  as global city-state 53
  Health Bureau (HB) of 71–2, 80–2
  health governance in 70–85
  fragmented 80–4
  healthcare delivery system in 72
  Hospital Authority (HA) in 72–3, 77, 80, 83–4
Hong Kong (cont’d)
index SARS patients in 76–7
Kwong Wah Hospital in 75, 82
Legislative Council of 71
mask culture of 138–51
Metropole Hotel in 2, 56, 74, 75, 76–7, 82, 240, 244
mini-constitution of 141
Mongkok 74
“one country, two systems” formula for 70–85, 100
pariah status of 139
politics of 105, 140–1
Prince of Wales Hospital in 76–8, 81–3
Princess Margaret Hospital in 75–6, 84
Principal Officials Accountability System in 71
Project Shield 140, 148
Quarantine and Prevention of Disease Ordinance 82
recreational space in 299
and SARS 76–8, 138–51, 240, 252, 258
security in 302
as Special Administrative Region (SAR) 3, 71, 81, 141–2
surveillance in 80, 82, 85
We Are with You (WAY) Movement 78
We Care Foundation 78
hormone replacement therapy (HRT) 125
hormones, in milk 125
hospitals
autonomy of 59–60
as sources of infection 66
Hotel Association of Canada 113
Hu Jintao, President of China 145
Human Genome Project 197
human populations, and biosecurity 216
human rights 92
hurricanes 216, 266n
Katrina 114, 266n
Huxley, Aldous 211
Hyderabad, India 176
hyper global cities 52
hypochondria, generalized 150
ice storms 114
immigration 16, 210–11
and politics 191
and TB in USA 189–92
to Toronto 63, 154–6
immunity, to TB 195–8
impurity, as a genealogical principle 272–4
incubation periods, and travel 15–16, 244, 259–60
India 181
and HIV 176
Maharashtra 176
Tamil Nadu 176
Indonesia 265
inequality, networked 247–8
infant mortality 36–7, 37, 43
neighborhood distributions 45
infection 267–80
and bioterrorism 164
control practices 84
hospitals as sources of 66
metaphor of 233, 267–80
and migration 164	nosocomial 87, 247
urbanization and boundaries of 188–92
infectious disease 266n, 297–8
and global cities 5–6, 26
and globalized urbanization 9–48
influenza 120, 139, 163, 202, 208, 286, 293
haemaglutinin subtype 218
neuraminidase subtype 218
pandemic 4, 58, 64, 128–9, 188
transfer by pigs 219
vaccine for 124
see also avian influenza; Spanish influenza
information
digital exchange of 246–7
dissemination of 77
inadequate sharing of 51, 53, 59–60, 222
infrastructure 52
insanity 270–2
insects 257
Institute on Governance 61
Institute of Medicine 4
interconnectivities 230
International Health Regulations (IHR) 50
International Society for Infectious Diseases ProMED-mail listserv 210
Internet 121, 146, 241–2, 245–7
and terrorism 153
Islamic Conference 177
Japan 95, 164
Johns Hopkins University 209
Journal of the American Planning Association 299
Jungle, The 294
Kassebaum, Senator Nancy 203
Kaufman, Frederick 281
Kikwit, Zaire 203
Koch, Robert 182
labor, migration of 156
Lagos, Nigeria 179
language, military 147
Lastman, Mel 62
Latin America 177
Lazio, Italy 29
lead 125
Lederberg, Joshua, Nobel Laureate 203, 210
LeDuc, James 203
leprosy 233–4, 270, 272, 278
and exclusion 275
Lesotho 173
Li Kwok-cheung, Arthur, Secretary for Education and Manpower 143
liberalism, smallpox 278–80
life, in a time of SARS 139–40
life expectancy (LE) 30, 36–7, 37, 43
at birth (LEB) 36–7, 37, 43
Lisbon, Portugal 29
Little Italy, Toronto 158
Little Portugal, Toronto 158
Liu Jianlun 74–5, 75, 77, 82
live animal markets see wet markets
Livestock Revolution 288–9
London 12, 19, 28, 31–3, 34, 37, 38, 38–9, 175
Greater 36–7, 37
Authority 41
health action zones (HAZs) 46
health strategies in 41–2
high-risk areas in 46
hyper global 52
infant mortality rates in 45
Inner 35–6, 36, 39
mayor of 41
poor areas in 47
TB in 39
Los Angeles, USA 19
Love Canal 130
Low, Donald 113
Lyon, France 29
Macau 73
mad cow disease 96, 256, 264, 284, 286
see also bovine spongiform encephalopathy; Creutzfeldt–Jakob disease
madness, fevers of 270–2
Madness and Civilization 270, 272
Madrid, Spain 29
Maharashtra, India 176
malaria 120, 173, 175, 182, 303
falciparum strain 179
Malaysia, and border controls 94
Manhattan, New York 35–6, 36–7, 39, 39, 44
infant mortality rates in 45
poor areas in 47
Mannheim, Karl 211
Maocun Yu 144
Marburg virus 161
Markham, Toronto 158, 162
Marxism 289, 292–5
mask culture
  development of 106
  in Hong Kong 138–51
masks 252
  N95 59, 89
  use of 96
material–cultural dialectic 230
measles 204
meat 282, 291
  as a commodity 287–90
  harvesting of 283, 287, 290
  wild 285–6
media 260
  Asian 108
  blame apportioning by 113–15, 116
  competing functions of 111–13
  coverage of SARS outbreak by 108–22, 118, 251
  economic coverage 111, 116
  health coverage 111, 116, 117, 294
  news content by type 112, 116
  pack journalism in 121
  political spin in 113–15
  political coverage 111, 116
  risk signal amplification by 135–6
  saturation periods by 110
  stakeholders in 111, 113–15, 113, 115, 119
  strategies in public crisis 117–19
  tone of coverage 111
medical care 15
medicine
  Chinese 79
  Western 79
meningococcal disease 128
Mercier, Louis Sébastian 272
Mexico 191, 204, 211, 368
microbes 129–30
  and changes in urban development 19–20
  fluid mobility of 18
  and undercurrents of opportunity 11
migration 106, 175
  and infection 164
  of labor 156
North–South 187
Minneapolis, USA 204
Minnesota, USA 204
Mississauga, Ontario 158
mobility 17–18
monkeypox 128, 257, 286
More, Sir Thomas 211
Morse, Stephen 206–7
mortality
  avoidable 38, 39
  infant 30, 36–7, 37, 43, 45
mortality rates 38
  age-specific 32, 38
multiculturalism 16
  crisis of 156–8
  and the social fabric 152–66
  urban 152–66
Mumbai, India 176
Mycobacterium
  tuberculosis 196, 198
  see also tuberculosis
myths 291
Nairobi, Kenya 179
nation-state security 216
National Health Interview Survey (NHIS) 31
national health policy, neglected dimension of 27–48
national natures, and biosecurity 216
National Retail Data Monitor 209
nature, and society 2
Nazif, Ahmed, Prime Minister of Egypt 221
neoliberalism 168–9, 173, 183, 263, 292, 301–3
netwars 223–6
network amplifiers 130–3
network approach, to urban infectious disease 235–49
network society theory 132
network theory, scale-free 300
networked connections 231
networked disease 231
Index

dialectical understanding of 13–26
introduction to 1–7
theoretical approaches to 229–304
networked inequality, and SARS 247–8
networked society 236, 249
and SARS 245–7
networks 236–9, 297–8
communication 135–6
of emergence 203–5
employee 136
expansion of 22–3
expert 133–5
fluidity of 20
of global cities 20–2, 132
as metaphor and reality, problem
and solution 209–12
relational patterns of 21–2
of response 206–9
surveillance 264
topology of terrorism 225
transportation 203, 206
and the Utopian impulse 201–13
New Atlantis 211
New Mexico 208
New Orleans, USA 114
New Public Management (NPM) 17
New York 12, 19, 28, 31–3, 34, 36–8,
37–9, 175, 254
and avian influenza control
network 220
City (NYC) 28, 30, 32, 34, 35–8,
37, 44, 203
Department of health and Mental
Hygiene (DHMH) 40–1, 44, 46
high-risk neighborhoods 44, 46
local role in health 40–1
Health and Hospitals Corporation
(HHC) 41
hyper global 52
Office of Emergency Management
(OEM) 41
slums in 189, 192
State 41
syndromic surveillance in 41, 44
TB in 38, 39, 40–1, 169, 190, 192
see also Manhattan

New York Times 109, 115–17, 118
Magazine 163
news media see media
Newsweek 203
Nietzsche, Friedrich Wilhelm 256,
273–4, 279
Nigeria 177
Nineteen Eighty-Four 211
Nipah virus 286
nodes, exclusion of 134–5, 137
non-linearity 238
North America 178–9, 254, 286, 300
Norwalk virus 128
nosocomial disease 87, 247
Noubaria, Egypt 223
nuclear power 130
nurses 284
amplification of risk signals by 136
effects of SARS on 59, 96

objects, epistemic 273
Odetoyinbo Nwagwu, Rolake 177
Ontario, Canada 3, 59–60, 67, 259
Campbell Commission 119
provincial government of 114
Ontario Nurses Association (ONA) 113
ontology, of urban life 255–7
Order of Things 272–3
Organization for Economic
Cooperation and Development
(OECD) 33, 43
Orwell, George 211
Osterholm, Michael T. 203–6, 210,
212–13n
ostracization 95–6
oysters 284

pandemics
AIDS as 173
avian influenza as 14, 24, 27, 42–3,
153
as disease scares 128–30
global 260–1
influenza as 4, 58, 64, 128–9, 188
speculative 1
and WHO 129
Index

Paris 12, 19, 28, 31–3, 34, 35–9, 36–9, 254
areas of greatest need 47
Assistance Publique 42
and avian influenza control
network 220
Bureau of Social Aid 42
Department of Health and Social
Action 42
Directorate for Sanitary Action 42
high-risk areas in 46
infant mortality rates in 45
insanity and confinement in 270–2
local health role in centralized
state 42–3
poor areas in 47
TB in 39
Pavlin, Julie 207
people, and biosecurity 214–27
pets 257
Pettenkofer, Max von 178
pharmaceutical industry, protection of
profits of 181–2
Philippines 3
phones, cellular 121
phthalates 125
Pickering, Toronto 162
pigs, and influenza transfer 219
Pinel, Philippe 270–2
places, space of 245–7, 249
plague 146–7, 270, 278
and the disciplines 274–6
model 279–80
Plasmodium falciparum 182
see also malaria
pneumonia
atypical 74, 77–9, 87, 139
Severe Community-Acquired
(SCAP) 83
politics 250–66
anti-immigration 191
of biosecurity 216
of death 180–2
of inclusion/exclusion 168–9, 180
ontological 265
physics of 252–7
of public health 172–85
Politics and the Life Sciences 206
population mobility 168
population security 216
potatoes 284
poultry 171, 217, 223, 232, 291, 294
and disease 289
and influenza transfer 219
see also birds; chickens; ducks
poverty
health risks of 28
and the public health crisis 176–7
racialization of 154–6
and sexual health 172
and TB 188–9
urban 187
power
expansion of 261
smallpox model of 276–80
power lines 127
print journalism see media
prion diseases 125, 284
see also bovine spongiform
diencephalopathy; Creutzfeldt–
Jakob disease; mad cow disease
privacy rights 51
Program for Monitoring Emerging
Diseases (ProMed) 146, 241–2
Project Megapoles 29
public health 260, 264–5
and finance cuts 53
global crisis in 176–7
global politics of 172–85
infrastructure
across four world cities 40–3
defined 48n
intervention, convergent trends
in 44–8
national policies in 50, 177
politics of 172–85
and religious fundamentalism 177
social responsibility in 95–7
subpopulations neglected in 303
surveillance 42
systems 5, 15
tropical thinking in 192
US policy on 188–9
and the vitality of bodies 255
public sphere, troubled 108–22

Qinghai Lake, China 285
quarantine 68, 129, 233, 262, 266n, 268, 299
home 89
imposition of 65
policing of 90, 97
for SARS 56, 78, 82–3, 90, 165
self- 97
in Singapore 302
in Toronto 134

race, and TB 106, 195–8
racialization
Canadian history of 158–9
complexity of anti-Chinese 160–3
and genetics of TB 196–7
and SARS in Toronto 154–6
racism
making of 160–3
and SARS 106–7, 152–66
urbanization and disease 156
as a weapon of mass
destruction 152–66
without race 164
raccoon dog 283
radiation, from mobile phones
and power lines 125
radio 121
radon 125–6
Rapid Syndrome Validation Project
(RSVP) 208–9
raspberries, contaminated 204, 210
Real-time Outbreak and Disease
Surveillance (RODS) 209
refugees 189–90
Ren Bumei 144
reporting, and surveillance 68
resistance 267–80
resources
availability 52
mobilization 52
response 80
improvised 246
to risk 131
restaurants, regulation of 41
Reynolds, Gretchen 163
Rift Valley fever 286
ripple effects 131
risk
communication of 56–61
response to 131
signals 130
about SARS 133
social amplification of 130–3
risk society thesis 237
RNA, viral 260
Robarts Center for Canadian Studies,
Toronto 109
rodents 257
rural–urban dialectic 230
San Francisco, USA
smallpox in 159–60
TB transmission in 160, 190
Sandia and Los Alamos National
Laboratories, New Mexico 208
sarín gas 28
SARS-stock 284, 295
Scarborough, Ontario 158, 162
schools, disruption to 97
screening 129
securing 224, 227
security 300, 302
self-regulation 92
Severe Acute Respiratory Syndrome
(SARS) 19–28, 172, 174,
187–8, 264, 267
and active civil society 84
American coverage of 115–17, 118
as an emergent complex 235–49
as an event 250–2
and animals (non-humans) 257, 286
antibodies 283, 293
Asian costs of 73, 83
and biopolitics 156–8, 260–4
in China 163, 286
and complexity 242–5
controlling measures for 87–90
Severe Acute Respiratory Syndrome (cont’d)
coronavirus (SARS-CoV) 139, 231, 236–7, 240, 242–4, 250, 258, 260
effect on nurses 59, 96
empirical case of 1
epidemic 73, 75
epidemiology 87–90
first case of 291
and fragmented health care 58–61, 80–4
framing the crisis 109–10
from butcher to barbeque 283–5
in the global city 49–101
global health response to 241–2
global interconnections during 93–5
global nexus 73–6
globalization of 70–85
as a health scare 41, 123–37
and healthcare governance 78–84
restructuring of 55–69
in Hong Kong 77–8, 138–51, 240, 252, 258
number of infections 76
three phases of 77
index patients
in Canada 56, 82
in China 74
in Hong Kong 76–7
in Singapore 87, 95
learning lessons from 64–6
life and death during 139–40
local nexus 73–6
and meat harvesting 283, 287, 290
media coverage of 108–22, 251
and networked inequality 247–8
and networked society 236, 245–7, 249
number of deaths from 124
outbreaks of 2–3, 50
in Hong Kong 76–8, 138–51, 240, 252, 258
profiles of cases in 88
quarantine for 56, 78, 82–3, 90, 165
and racialization in Toronto 154–6
and racism 106–7, 152–66
regional nexus 73–6
and risk communication 58–61, 133
scientific advisory committee (SSAC) 133–4
in Singapore 86–101
and the social fabric 152–66
and spatial barriers 98, 99
spread of 12–13, 202, 210, 239–41
thinking the city through 250–66
and Toronto 15–17, 55–69, 133–6, 240, 244, 250–2, 258, 284
and tourism 95
trajectory of 14
and urban multiculturalism 152–66
and wet markets see wet markets
and WHO 73, 77–8, 81, 83, 145, 241
sex education 176
sexual health, and gender equality 172, 176
shanty towns 180
Shunde, China 79
sick city, the 29–31
sickness, social lineaments around 87
sildenafil 173
silicone, breast implants 125
Sinclair, Upton 294
Singapore 1, 19–21, 49–101, 251
battle against SARS 86–101
Changi Airport 98
Chinese workers in 90
close control in 92
discrimination in 94
erection of spatial barriers in 98, 99
global city-state 53, 93
global linkages of 90–1
index SARS patients in 87, 95
Meeting, Incentive, Convention and
Exhibition (MICE) sector 95
Ministry of Health 82, 89
Novena Square Shopping Center 98
Pasir Panjang Wholesale Market 87, 98
People’s Action Party (PAP) 92, 96
quarantine in 302
SARS in 86–101, 240
  global interconnections during 93–5
security in 302
social responsibility in 92, 95–7
spaces in 92–3
surveillance in 92
Tan Tock Seng Hospital 87, 89, 98
taxi controls by 94
slums 180, 182
diseased 189
politics of 178
urban 173, 180
smallpox 106, 165, 233–4, 270
liberalism 278–80
model of power 276–80
in San Francisco 159–60
smoking 124
  regulation of 40
social actors, and health scares 131
social fabric, and SARS 152–66
social groups, inequalities in 28
social language 147
social responsibility 92
  in Singapore 92, 95–7
social ritual 148
  mask-wearing as 150–1
social stations 130
society
  and nature 2
  networked 236, 245–7, 249
Somalis 198
South Africa 176, 181
South China Morning Post 140, 148
South Korea 95
Soviet Union 175
spaces
  barriers between 98, 99
  infected 299
  of places 245–7, 249
  safe and unsafe 92–3
  in Singapore 92–3
  unbounded or polyrhythmic 251, 257–60
Spadina Avenue, Toronto 160
Spain 164
Spanish influenza 42
  pandemic 134
  see also avian influenza; influenza
Spinoza, Benedict de 256
stakeholders, in media 111, 113–15, 113, 115
Stanford University, California 277
Stares, Paul 269
state sovereignty, and World Health Organization (WHO) 145
stigmatization 131
structural adjustment programs 175
sulfadoxine-pyrimethamine 182
super-spreader phenomenon 244, 248, 283–4
Surat plague 179
surge capacity, lack of 59
surveillance 187, 233, 263
  and Bentham’s panopticon 275–7
  epidemiological 206
  in a globalizing city 86–101
  and the healthcare system 207, 302
  in Hong Kong 80, 82, 85
  imposition of 65
  networks 264
  and public health 42
  and reporting 68
  in Singapore 92
  syndromic 41, 44, 170, 208
  technologies of 168, 170, 208, 302
  in Toronto 68
susceptibility
  race-based 197–8
  to TB 169, 195–8
swine flu 125, 134
Switzerland, government of 139
syphilis 29
Taipei, and SARS 252
Taiwan 73, 78, 86, 94, 144
  ring fence concept in 100
Tamiflu vaccine 64, 182, 220, 222
Tamil Nadu, India 176
taxi 98
television 121
terrorism 28, 41, 64–5, 175, 183, 267–9, 279
biological 208
network topology of 225
subway 43
and Toronto 152–3
Thailand 181, 264
and border controls 94
Thebes 270
thermal scanners 89–90
thought, SARS as a problem for 250–66
Tianjin, China 78
Tibet 144
Tokyo 12, 19, 28, 31–3, 34, 35–9, 37–9
emerging problems of 43
health differences between wards 47–8
healthy city 43
infant mortality rates in 45
Inner 35, 36
Metropolitan Government (TMG) 43
poor areas in 47
TB in 39
Yamanote railway line 35
tolerance 153
see also authoritarian tolerance
topologies 250–66
Toronto 1–3, 20–1, 49–101, 117
anti-Chinese racialization in 160–3, 252, 285
Chinatown in 158–9, 299
consolidation of 62
emerging global city 52, 57–66
ethnoburbs in 158
Greater Toronto Area (GTA) 56–7, 155
immigration to 63, 154–6
Jamestown Crew 153
media coverage of SARS outbreak 108–22
Pacific Mall 162
Pandemic Flu Plan 65
post-Westphalian political pathology 61–3
quarantine in 134
racialization and SARS 154–6
restructuring of healthcare governance in 55–69
and SARS 15–17, 55–69, 133–6, 240, 244, 250–2, 258, 284
Scarborough Grace Hospital 160
security in 302
Spadina Avenue 259
suburbs of 158
surveillance in 68
and terrorism 152–3
visible minorities in 155, 158, 165
Yonge Street 259
tourism 127, 139
drops in 127
and SARS 95
trade embargoes 127
traffic, fleshy 281–96
transportation networks 203, 206
topologies 250–66
travel disruptions to 94–5
and incubation periods 15–16, 244, 259–60
trepidation, shared mood of 149
tuberculosis (TB) 175, 182, 184, 202, 267
among homeless 126
the anxieties of containment 186–200
extreme drug resistant (XDR-TB) 42, 174, 179
in global North 303
and globalization 192–5
and immigration 189–92
immunity from 195–8
in inner city areas 2, 4
IOM report on 188–9, 193–4
in London 39
in New York 38, 39, 40–1, 169, 190, 192
in Paris 39
and poverty 188–9
and race 106, 195–8
and racialization 196–7
re-emergence of 14, 28, 173
role of cities in 193
in San Francisco 160, 190
susceptibility to 169, 195–8
targeting populations at risk for 191
and transport 210
in the USA 29, 106, 186–7, 189–92, 204
Tuke, William 270, 272
Tung Chee-hua, Hong Kong Chief
Executive 140–3, 148
Tylenol tampering 125
typhoid 178

Uganda 177
United Kingdom (UK) 286
  Department of Health and Social
Security 41, 46
  National Health Service 41
United Nations
  Food and Agriculture Organization
(FAO) 220
  Global Fund for AIDS, Tuberculosis
and Malaria 182
United Nations Charter 146
United States (USA) 29, 175
  Agency for International
  Development (USAID) 204
  anti-immigration politics of 191
  Centers for Disease Control and
  Prevention (CDC) 40–2, 81,
  100, 115, 188, 190, 259, 301
Defense Advanced research Projects
Agency 209
Department of Defense 209
Food and Drug Administration 294
governmental attitude to cheaper
drug production 181
Institute of Medicine (IOM) 188–9,
193–4, 205
Institute of Peace 269
National Academy of Sciences 187
National Intelligence Council 189
National Science and Technology
Council (NSTC) 205
National Security Council 188
National Security Strategy 368
population health status 29
public health policy of 188–9
religious conservatives in 177
restraints on Hong Kong students 139
selected health characteristics 32
self-interest of 183
TB in 29, 106, 186–7, 189–92, 204
units of analysis, comparable 34–5
University of New Mexico 208
urban advantage 31–3
urban governance 299
and preparation for avian
influenza 64–6
urban health 167–227
  contrasting views of 28–33
  governance 300–1
  penalty 29, 31, 33
urban infectious disease, network
  approach to 235–49
urban life
  messiness of 22, 300
  ontology of 255–7
urban multiculturalism, and SARS
  152–66
urban planning, and preparation for
  avian influenza 64–6
urban populations, rising 15
urban poverty 187
urban–global dialectic 11, 230, 236
Urbani, Carlo 241
urbanicity, and health scares 127
urbanism, antibiotic 294
urbanization
  and the biopolitics of modernity
  177–80
  and boundaries of infection 188–92
  and globalization 10, 14–15
  and infectious disease 9–48
  opposition to nature 253–4
  racism and disease 156
  renewed potential for disease and
  14–15
USA Today 109, 116–17, 118
Utopian impulse, the 201–13n
vaccines 126, 174, 254
  for influenza 124
  side effects of 125
Vallat, Bernard 260
vampires 291
Vancouver, Canada 244
vapors 267–80
Viagra 173
victimization 95, 165
Vietnam 75, 77, 86, 94–5, 182
Vietnamese 198
vinyl chloride (PVCs) 125
   emerging 206
   reproductive speed of 246–7
   universally destructive 276–8
vital systems security 216
vulnerable populations
   in global cities 15–20
   health risks of 28
Walkerton, Ontario 126
Walter Reed Army Institute of Research 207
wastes, hazardous 125
water 284
We 211
Were, Beatrice 177
West Nile virus 120, 125, 128, 203
   as health scare 41
Westphalian state system 50, 54n, 61–3, 139, 299, 304n
   and mainland China 144–7
wet markets 161, 258–9, 264, 283, 292–5
   description of 294
   food handlers in 240, 243, 283
Wheelis, Mark 207
World Bank 264
   Roll Back Malaria campaign 182
world cities 14, 18–20
   access to health care in 36–40
   Cairo as 221
   first rings of 34, 37
   health status of 36–40
   inequalities in 31
   infant mortality in 30
   life expectancy in 30
   overview of health and health systems in 33–40
   poor areas in 47
public health infrastructure across 40–3
   urban cores of 34–5, 34, 36, 37, 38
see also global cities
World Cities Project (WCP) 34
World Health Assembly 147
World Health Organization (WHO) 2, 50, 67, 100, 259, 264, 301
   and avian influenza 219
   Epidemic and Pandemic Alert and Response network 210
   Global Outbreaks Alert and Response Network 146
   and healthy city status 41, 43
   and HIV/AIDS 146–7, 182–3
   hot zones of 283–4
   International Health Regulations (IHR) 146
   network enterprise of 135, 261
   and pandemics 129
   and SARS 73, 77–8, 81, 83, 145, 241
   and state sovereignty 145
   travel advisory of 56, 60, 77, 109–15, 119–20, 135, 236, 284, 301
World Organisation for Animal Health (OIE) 260
World Trade Organization, Trade Related Aspects of Intellectual Property agreement (TRIPS) 195
X-rays 125
Yacoubian, Mona 269
yellow fever 146
Yeoh Eng-kiong, Secretary for Health, Welfare and Food 143, 150
York University, Toronto 109, 259
   Robarts Center for Canadian Studies at 109
Young, James 113–14
Zamyatin, Yevgeny 211
Zheng Yichun 144
Zhongshan, China 79
Zimbabwe 173
zoonoses 3, 251, 256–7, 260, 264–5n, 286, 289