

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

ELSEVIER

Contents lists available at ScienceDirect

Health & Place

journal homepage: www.elsevier.com/locate/healthplace



Airports, localities and disease: Representations of global travel during the H1N1 pandemic

Adam Warren a,*, Morag Bell a, Lucy Budd b

- ^a Department of Geography, Loughborough University, Loughborough, Leicestershire LE11 3TU, UK
- b Transport Studies Group, Department of Civil and Building Engineering, Loughborough University, Loughborough, Leicestershire LE11 3TU, UK

ARTICLE INFO

Article history: Received 28 September 2009 Received in revised form 21 January 2010 Accepted 9 March 2010

Keywords: Airport Locality Biosecurity Pandemic Media

ABSTRACT

During summer 2009, the UK experienced one of the highest incidences of H1N1 infection outside of the Americas and Australia. Building on existing research into biosecurity and the spread of infectious disease via the global airline network, this paper explores the biopolitics of public health in the UK through an in-depth empirical analysis of the representation of H1N1 in UK national and regional newspapers. We uncover new discourses relating to the significance of the airport as a site for control and the ethics of the treatment of the traveller as a potential transmitter of disease. We conclude by highlighting how the global spread of infectious diseases is grounded in particular localities associated with distinctive notions of biosecurity and the traveller.

© 2010 Elsevier Ltd. All rights reserved.

1. Introduction

On 2 July 2009, four weeks after the official declaration of the first global pandemic for 41 years, the WHO Director-General, Margaret Chan, addressed a high-level meeting to consider some of the lessons learned from the spread of the H1N1 pandemic influenza virus. Drawing attention to the fact that she was speaking from Cancún, Mexico – from where the virus was transmitted by air travel to the UK – Chan declared that: 'Recommendations to avoid travel to Mexico, or to any other country or area with confirmed cases, serve no purpose' (WHO, 2009a). Building on the WHO's previous, controversial, decisions to impose travel advisories during the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak (WHO, 2003a; Ali and Keil, 2006), Chan continued:

They do not protect the public. They do not contain the outbreak. And they do not prevent further international spread (WHO, 2009a).

Indeed, she likened the transmission of influenza pandemics to a 'tidal wave' – something that cannot be realistically contained by travel restrictions. This natural disaster metaphor, frequently employed in sections of the media to conceptualise immigration (Charteris-Black, 2006, p. 570), was used in this context to illustrate how the virus can sweep through densely populated

areas, leading to a steep increase in cases ('with a sharp peak'), followed by a rapid decline (WHO, 2009a).

In this paper, we examine the first 'wave' of global transmission of the H1N1 virus by reference to new and existing discourses on travel and disease. A considerable literature exists on 'pathologies of travel', much of it historical, focusing on a number of themes including perceptions of European travellers in the colonies (Jennings, 2002; Livingstone, 1999, 2002; Kennedy, 1990), the significance of mobile bodies as a threat to the greater, Hobbesian, 'social body' (Kraut, 1995; Cresswell, 2000) and the role of certain, defined, 'others' in the spread of infectious disease (Joffe, 1999; Sontag, 1991). More recently, scholarly work has been conducted into the spread of infectious disease by air travel (Mangili and Gendreau, 2005; Tatem et al., 2006; Tatem and Hay, 2007; Budd et al., 2009). A number of these studies, particularly in the field of epidemiology, have tested hypotheses and analysed the results for statistically significant differences. In this paper, we adopt a more qualitative approach, considering the messages broadcast by the UK print media in relation to the H1N1 pandemic. Moreover, we identify the importance of place in the context of emerging infectious disease.

During summer 2009, the UK experienced one of the highest incidences of H1N1 transmission outside of the Americas and Australia (ECDC, 2009). The liberalisation of its aviation sector and

^{*} Corresponding author. Tel.: +44 1509 222798. E-mail address: a.p.warren@lboro.ac.uk (A. Warren).

¹ Joffe (1999) argued that the 'other' in the spread of disease comprises 'three interrelated phenomena: foreign nations, out-groups within a society, and practices which are constructed as alien within the prevailing norms of the culture' (Joffe, 1999, p. 26).

the associated growth in international services at UK regional airports opened up a number of places through which infectious disease could enter the country. It is widely believed that the H1N1 influenza virus arrived in the UK not via London Heathrow or Gatwick (the traditional entry points for all the UK's long-haul airline traffic) but on a direct charter flight from Cancún, Mexico to Birmingham International Airport (BIA) in the West Midlands. Whilst its spread has been well documented by 'official' bodies such as the WHO and the UK Health Protection Agency (HPA), there is scope also to focus on UK media discourses. An emphasis on messages given by national and, especially, regional newspapers, in the context of the spread of a specific emerging infectious disease. sets this investigation apart from earlier analyses of international sanitary initiatives aimed at the global traveller (Budd et al., 2009; Bashford, 2006; Zylberman, 2006) and from work on the challenges faced by UK regional airports in preventing the spread of global disease following the liberalisation of the European aviation sector (Budd et al., in preparation).

The broadcast media acts as an important 'validator' of scientific information, with reporters and editors making continual judgements on whose voice is heard and how that voice is represented (Gamson, 1999; see also Brown et al., forthcoming). Broadsheet titles perform a key agenda-setting function, often being 'preferred by politicians and other decision-makers' (Carvalho, 2005, p. 226). Yet, as Brown et al. suggest, 'regional newspapers are as important in helping to shape public understandings' (forthcoming). Consequently, we consider both national and regional reporting.

Our study concentrates on a period of some 4 months, beginning with the first UK press reporting of the H1N1 outbreak on 25 April 2009, charting the progress of the virus through the summer, to a sharp decline in rates of illness during August and early September 2009 (HPA, 2009a-e). This period effectively covers what Chan considered to be the 'first wave' of spread (WHO, 2009a). Our analysis commences with an overview of some existing literature on pathologies of travel, focusing on biosecurity practices in the UK and the international spread of disease. We then consider themes that emerge from the media discourse, notably the contrasting biosecurity practices being performed at airports overseas and within the UK, and their impact on the individual as a potential carrier of disease. In the discussion section, we locate our findings within existing debates on the airport as a site for the control of emerging infectious disease and on the representation of the travelling body. Finally, conclusions are drawn.

2. Biosecurity and the airport

Our research builds on two literatures. Firstly, scholarly work on national government control and biosecurity. Recent papers in this field, in particular the analysis of newspaper reporting of emerging infectious disease, have emphasised the problems of control faced by national governments in particular (Wallis and Nerlich, 2005; Nerlich and Halliday, 2007).

Infectious disease has traditionally been represented as a threat from 'outside' (Kraut, 1995; Bell et al., 2006; Nerlich et al., 2009). Much of the rhetoric employed in this discourse has its origins in security policy research, where a distinction is drawn between the 'outside', deemed to be dangerous, and the 'inside', which is 'locked down tightly, secured and safe' (Nerlich et al., 2009, p. 2; see also, Wallis and Nerlich, 2005; Chilton, 1996). In this perspective, rooted in Cold War literature on 'containment', a 'unitary state actor' provides the interface between the inside and outside (Chilton, 1996: 408). The threat posed to a nation's health by global infectious disease has been 'problematized' as 'biosecurity' (Collier

and Lakoff, 2008). Problematization – often associated with the work of Foucault (Rabinow, 1984; Dillon, 2007) – refers to the addressing of events or situations 'not as a given but as a question' (Collier and Lakoff, 2008, p. 11). 'Biosecurity', the broad heading given to technical and political efforts to secure health, has become a prominent site of enquiry as scholars seek to understand various forms of expertise and practices through which disease threats are articulated and managed (Collier et al., 2004; Collier and Lakoff, 2008; Bingham et al., 2008).

Of particular relevance to this paper are the discourses surrounding the targeting of potential health risks (Braun, 2007; Bingham et al., 2008; Collier and Lakoff, 2008). Collier and Lakoff, in their analysis of 'biosecurity interventions' enacted in response to emerging pathogenic threats,² concluded that disputes surrounding the costs and benefits of such initiatives are in part about the 'politics of risk', requiring:

...new forms of political and ethical reasoning that take into account questions that are often only implicit in discussions of biosecurity interventions (Collier and Lakoff, 2008, p. 28).

Braun, in his discussion of 'emergent risks', has argued that practices of biosecurity have changed the geographies of health security, and with this, the whole notion of surveillance and control. Increasingly, in an attempt at containing existing and future pandemics, he suggests that states are taking the fight against disease 'over there' before it 'reaches here' (2007, p. 22).³

Secondly, a growing corpus of literature considers the spread of disease by global airline travel. Of particular interest is the increased movement of people across borders and the challenge this presents to national and regional practices of containment. The role of mass air travel in the recent worldwide spread of a number of diseases including tuberculosis, SARS and the present H1N1 influenza virus has been documented, analysed and discussed by transnational and governmental agencies (WHO, 2003b; Cooper et al., 2006; HPA, 2007), clinical practitioners (Morens and Fauci, 2007) and academic researchers (Colizza et al., 2006; Avila et al., 2008). At the time of the last influenza pandemic, in 1968, 261 million passengers worldwide travelled by air (ICAO, 1968). In 2008, passenger air traffic exceeded two billion (ICAO, 2008). Such high volumes of travel make containment more problematic. In a recent report, the WHO drew attention to the speed of spread of the current H1N1 outbreak virus:

During previous pandemics, influenza viruses took > 6 months to spread as widely as the new influenza A (H1N1) pandemic virus has taken to spread in < 6 weeks... (WHO, 2009b, p. 249).

In consequence, a general consensus is emerging that restrictions on air travel are likely to be of limited value in delaying epidemics (Cooper et al., 2006; WHO, 2009a). Instead, it has been suggested that the most appropriate solutions lie in a combination of national public health interventions to reduce local transmission of the virus⁴ and the international development and stockpiling of vaccines to compensate for

² For example, the authors refer to WHO protocols on the cull of domestic poultry in Cairo to safeguard against the spread of H5N1 – a measure that disproportionately affected the poor (refer also, Hinchliffe and Bingham, 2008).

³ Braun highlighted the increased attention being paid by public authorities to 'emerging infectious disease' such as avian influenza and the ebola virus, with 'molecular life' being 'recorded as inherently unpredictable' (2007, p. 17).

⁴ Examples include: influenza surveillance; prevention programmes featuring annual vaccination with up-to-date influenza and pneumococcal vaccines; and a national and international prevention infrastructure. The biggest challenge, according to the authors, would be to increase medical capacity and resource availability to the levels required (Morens and Fauci, 2007, pp. 1025–1026).

global inequalities in public health provision (Morens and Fauci, 2007).

In line with this strategic approach, recent scholarly work has focused not on the regulation of international travel but the regulation of the international traveller as he/she moves across the globe (Mangili and Gendreau, 2005; Tatem and Hay, 2007; Budd et al., 2009, in preparation). In this literature, the airport has been perceived as a site of control, where mobile bodies can be mapped (Adey, 2009; Amoore and Hall, 2009). It is an enclosed space:

...that represent[s] the policing power of the sovereign state, that contain[s] the dangerous or risky elements of the unknown (Salter, 2007, p. 53).

For the most part, this work has focused on screening against terrorism rather than disease (Adey, 2008, 2009; Amoore and Hall, 2009) and on the practices of major airports overseas (Salter, 2007; Bennett, 2008; Lahav, 2008). Yet, in the last two decades, its role as a place of control, has assumed greater importance, with the liberalisation of the UK aviation sector multiplying the points of entry for 'exotic' diseases and placing the regions at the borders. This has compounded the challenge faced by regional airports in particular in finding the resources to help provide effective public health safeguards.

When we merge the literatures on biosecurity and spread of disease, questions arise about 'containment' and the traveller's journey. These include the complexities of managing risk at various scales – international, national and regional – and the role of the airport as a site for controlling the threat of disease spread. In this setting, the traveller's journey assumes a particular importance, and the 'over there' and over 'here' described by Braun (2007) take on new meanings. Our study examines these concepts of containment and the journey in relation to the H1N1 pandemic. We focus on media representations of the outbreak, and the role of the press in raising public awareness by articulating concerns and shaping responses at both national and regional levels.

Media analyses have been employed by scholars to examine interpretative inventories (for example, metaphors, symbolic dates, scare statistics) in the reporting of earlier, and in some cases ongoing, disease outbreaks such as SARS, avian influenza and foot and mouth disease (Larson et al., 2005; Nerlich and Halliday, 2007; Nerlich et al., 2009). In her wide-ranging study of risk and the 'other', Joffe highlighted the role of the mass media in, firstly, 'relaying' scientific interpretations of new phenomena and, secondly, facilitating dialogues between individual members of the public 'in pubs, on buses and around dinner tables' (1999, p. 10). It is in such settings that existing images and metaphors – often projected by the mass media – have been used to absorb the new threat 'in a way that reduces the fear that surrounds it' (Joffe, 1999, p. 10).

In our investigation, we argue that media discourses associated with the H1N1 pandemic highlight the importance of 'place', and the airport in particular, as a focus for intense public debate on the exercise of biosecurity practices. Two key themes emerge. Firstly, we observe that the discourse describing international disease spread and biosecurity practices employed at overseas airports became increasingly critical in relation to measures taken against UK travellers. Secondly, we draw attention to contrasts between national and regional press reporting of biosecurity practices within UK borders. The latter theme is grounded in literature on 'securitisation' and the impact of the global economy on regional disease management.

3. Methods

Our analysis of newspaper reports utilised the online newspaper archive, Nexis UK, to identify all articles referring either to 'H1N1' or its earlier appellation – 'swine flu' – anywhere in the text.⁵ The period searched was from 25 April 2009, when the UK press first reported this story, to 4 September 2009, when the first purported pandemic 'wave' had subsided. Due to the high volume of the material available, it was not possible to perform a single analysis covering the entire timeframe. Consequently, individual searches – using the same terms – were conducted for whole months (i.e. April, May, June, etc.), with the exception of July where, due to the size of the dataset, two searches were undertaken (for periods 1–15 July and 16–31 July).

The timeframe incorporated reporting on: the emergence of an influenza-like illness in Mexico and California (25 April 2009), its arrival in the UK (28 April 2009⁶) and its subsequent spread to various UK regions, the WHO declaration of the pandemic phase 6⁷ (11 June 2009), the first reported UK death from the disease (14 June 2009), the peak of the ostensible first 'wave' of the pandemic (week ending 23 July 2009 (HPA, 2009f)) and its subsequent decline (August 2009). All articles, from main features to editorials and opinions, were included in the study. Duplicates were removed. Accompanying descriptive data, such as title, author (and affiliation, where relevant), recurring themes and use of expert opinion were collected and recorded. Fig. 1 gives an indication of frequency of reporting on the virus during this period, whilst Fig. 2 details the rates of influenza-like illness (ILI)⁸ in (i) England and Wales and (ii) Scotland⁹ during this timeframe.

Following a single mention in the *Northern Echo* on 25 April, interest in the H1N1 virus surged, in both the national and regional press. Indeed, newspaper reporting during first 2 weeks accounted for over 20% of the total coverage on the disease throughout the timeframe. Following the initial surge in press coverage, the curves for UK newspaper reporting and ILI in England and Wales (by July experiencing significant higher rates than Scotland) are closely matched, indicating that the newspapers wish to both shape the agenda and foster public understanding during periods of increased influenza activity.

Fig. 3 depicts the curve of reporting published during the first 14 days of UK newspaper coverage of the virus.

As can be seen, the initial 'surge' in press interest, evocative of Chan's 'tidal wave' metaphor, peaked at 368 articles on

⁵ Our approach contrasts with methodologies being used by public health authorities, particularly in the United States, which make increasing use of webmining tools that monitor 'hits' on infectious diseases, for example, Google Flu Trends (Google Flu Trends, WWW). Moreover, mobile phone technology is being developed to allow for further patient input into public health surveillance through global positioning systems, text messaging and 'micro-blogging' applications such as Twitter (Brownstein et al., 2009).

⁶ The UK's first confirmed cases, Iain and Dawn Askham, in fact arrived in Birmingham on Thomson First Choice flight 578 from Cancún on 21 April 2009 (*The Guardian*, 1 May 2009).

⁷ Pandemic Phase 6 is reached once there is an 'increased and sustained transmission [of an influenza virus] in the general population' (WHO, 2005, p. 7). By this point, an influenza virus will have resulted in sustained community level outbreaks in counties in at least two WHO regions (WHO, 2009c).

⁸ The estimated weekly GP consultation rate is the measure used by the HPA to quantify influenza activity throughout this period. This matters as on 2 July 2009, following a UK government announcement on the pandemic, the HPA stated that it would change its approach to monitoring the outbreak, from issuing daily reports of cases confirmed through laboratory tests to publishing weekly reports informed by 'a variety of indicators of *overall flu activity* in the population' (HPA, 2009g, italics added). Although other indicators (such as QSurveillance³⁰) are utilised by the HPA, the GP consultation rate is arguably the most comprehensive measure of ILI activity across the UK.

⁹ Scotland is displayed separately in Fig. 2 due to the differing methodologies used to compile the consultation rates (HPA, 2009h).

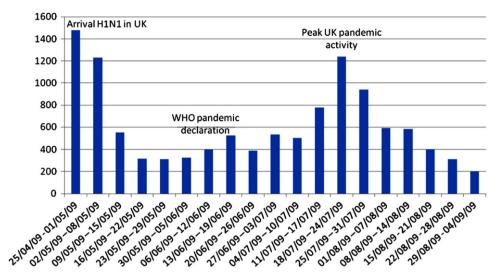


Fig. 1. Number of UK newspaper reports relating to either 'H1N1' or 'Swine Flu' during period 25 April-4 September 2009: weekly breakdown.

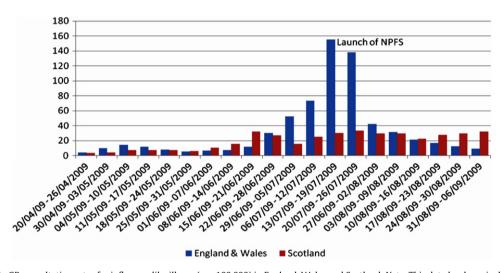


Fig. 2. Estimated weekly GP consultation rates for influenza-like illness (per 100,000) in England, Wales and Scotland. *Note*: This data has been included in a separate chart to our newspaper analysis (Fig. 1) due the different week-ending date (Sunday as opposed to Friday in Fig. 1). The National Pandemic Flu Service (NPFS) was launched in England on Thursday, the 23 July 2009. Following its introduction, and the start of the school summer holidays, the GP consultation rate in England dropped sharply. *Source*: HPA (WWW).

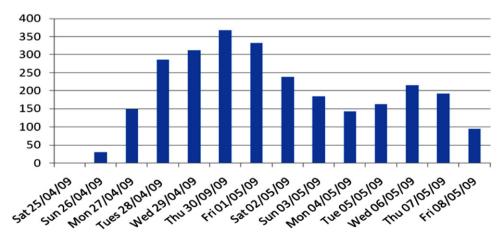


Fig. 3. Number of articles relating to either 'H1N1' or 'Swine Flu' during the first 14 days of UK newspaper reporting on the virus.

Thursday, the 30 April. Reporting during this early phase was fairly consistent across the national and regional press. National titles such as *The Guardian* and *The Times*, and

including tabloid publications such as the *Daily Mail* and *The Sun*, comprised just over 40% of the stories published. The regional press accounted for the remainder, with 35 titles

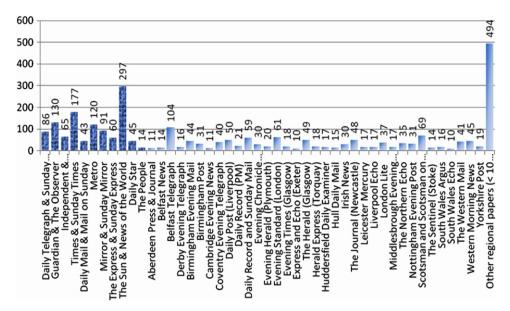


Fig. 4. Number of articles relating to either 'H1N1' or 'Swine Flu' during the first 14 days of UK newspaper reporting on the virus: breakdown by publication. *Note*: Only papers totalling 10 or more reports over the surveyed period named in this table. National titles are in dark shading; regional titles in light shading.

reporting on H1N1 at least 10 times during this 14-day period (see Fig. 4).

The virus was given particularly prominent coverage in the initial hotspots in and around Birmingham (Birmingham Evening Mail, Birmingham Post, Coventry Evening Telegraph) and in parts of Scotland (The Herald, Scotsman and Scotsman on Sunday). Other locations reporting widely included Belfast (Belfast Evening Telegraph), Newcastle (The Journal) and London (Evening Standard).

4. International disease spread and biosecurity practices overseas

On 26 April 2009, *The Independent on Sunday*, under the headline 'Pandemic fears as flu kills 68', reported on the outbreak in Mexico of a flu variant 'not previously seen in pigs or humans' against which seasonal flu vaccine was 'not believed' to afford any protection. This outbreak was 'particularly worrisome' according to one quoted expert because the deaths had happened in at least four different regions of Mexico and because 'the victims had not been vulnerable infants and the elderly'. Over the following week, a number of articles appeared in the national UK press detailing the rapidity of the international spread of the 'new' disease – a new strain of influenza – emphasising the challenges in attempting to contain it and drawing comparisons with previous influenza pandemics, which had also first struck in healthy young adults.

The Daily Telegraph illustrated 'speed' of virus spread by documenting just one day's developments (on 27 April 2009) when: official estimates of the number of H1N1 fatalities in Mexico almost doubled; evidence of the virus spread emerged in parts of Australasia; and the EU Health Commissioner issued advice against 'non-urgent' trips to Mexico and the US. Other outlets, including *The Times*, reported on the 'enormous speed' with which flu viruses could 'mutate' into something more pathogenic, potentially developing resistance to antiviral drugs (29 April 2009). ¹⁰ The Express, a day later, described the spread of

the virus across the UK. This was happening 'with frightening speed', with the UK Health Secretary 'admit[ting]' that further cases were "inevitable" (*The Express*, 30 April 2009). In this context, national newspapers were, as early as 26 April 2009, quoting expert opinion that it 'may be too late' to contain the outbreak (*The Independent on Sunday*). *The Mirror* reported that medical staff in Mexico had 'struggled to contain' the disease, resulting in fears that it could 'sweep rapidly across the globe' (27 April 2009), whilst *The Times* stated that public authorities 'from every corner of the world' were 'scrambling' to contain the virus (27 April 2009). *The Daily Telegraph*, relayed the WHO position on the futility of sovereign states issuing travel advisories, recounting that 'borders 'cannot halt swine flu" (29 April 2009). There was, therefore, a supplementary thread running through the early H1N1 narrative, implying that containment was impossible.

The press sought to situate the new outbreak into context by highlighting previous disease outbreaks and places likely to be affected by disease epidemics. For example, reference was made to the 2003 SARS epidemic, with the Daily Telegraph noting that many of the Asian countries affected had been quick to set up thermal scanners at airports 'to screen for feverish passengers' (29 April 2009). This led to initially complementary media reporting on a number of practices being adopted by other jurisdictions to slow or even halt the spread of disease (The Guardian, 30 April 2009). Many of the measures focussed on the airport, and included: 'reinforced checks' for visitors from affected countries (for example, by the authorities in France); provision of additional medical staff (Australia); use of thermal imaging scanners (for example, Bulgaria, Australia, Singapore, Philippines, and Indonesia); planned detention/quarantining of passengers suspected of carrying H1N1 (for example, Singapore, Vietnam, Australia, China, Russia, Taiwan, and Bolivia); and powers to 'disinfect' suspected passengers (Australia) (examples extracted from: The Times, 27 April 2009; The Mirror, 28 April 2009; The Guardian, 30 April 2009). Although the UK press did not explicitly lobby for any of these approaches, their reports allowed comparisons to be drawn with the less formal measures being employed across the country.

As the rates of transmission in the UK increased during the summer 2009, the newspaper discourse on technological measures of control employed overseas shifted from one of a sneaking admiration to condemnation. In part, journalists were documenting what they perceived to be the overzealous application of these

¹⁰ One of this paper's reviewers advised us to clarify that *all* influenza viruses, especially the H-antigen influenza viruses, have the ability to either mutate or to genetically reassert their antigens. This occurs, firstly, with zoonotic influenza A strains, and then, secondly, with human strains. At the latter stage, with human-to-human transmission a reality, culling birds and pigs is no longer effective.

measures as they began to impact on UK travellers. On 9 July 2009, the *Daily Mail* reported on the quarantine 'nightmare' of Britons being held in 'filthy' conditions by the Chinese, describing how 'masked officials' boarded a plane, 'subjecting' all passengers to a 'barrage of tests' (9 July 2009). The *Sunday Herald* reported on the quarantine of 52 UK schoolchildren and their teachers 'shortly after arrival at Beijing airport' as the 'flu crisis escalates' (19 July 2009), whilst the *Daily Telegraph* recounted the experience of a 6-year-old boy, kept in quarantine in Turkey with his family after thermal imaging cameras at Bodrum Airport showed he had 'a very high temperature' (25 July 2009). Subsequent tests revealed the child had contracted the virus.

Ouestions also arose about the reliability of the technologies employed. Australia abandoned additional thermal screening at its borders for visitors, ostensibly due to its expense and stated ineffectiveness (Daily Mail, 25 July 2009; see also Roxon, 2009). A few days later, the Manchester Evening News reported on the detention of a UK-based traveller ('My hell locked up in Egypt swine flu ward') who was subsequently found not to have the virus (30 July 2009). The actions of China, criticised for attempting to conceal the 2003 SARS epidemic which began within its borders (WHO, 2007; Zong and Zeng, 2006), came under particular scrutiny. Its measures were reported in some detail by The Times (20 July 2009) and the Daily Mail (25 July 2009). The former used largely measured language to describe the procedures in place which, although 'stringent', needed to be placed into the context of mistakes made by the country during the SARS outbreak. The Daily Mail report, on the other hand, omitted to mention SARS and employed vivid language to describe how passengers had their temperatures checked 'up to three times before reaching the immigration desks':

Quarantine officers, dressed in surgical masks, gloves and medical suits, greet passengers once the plane has docked and file silently down the aisles, placing a temperature gun at the forehead of each passenger. Anyone with a temperature even slightly above normal is singled out, removed from the plane and taken to hospital by ambulance for further tests (*Daily Mail*, 25 July 2009).

This passage evokes a fearful image of 'the other' (Livingstone, 2002; Driver, 2004; Hulme, 2008). The practices of a country, which has not been seen to hold human rights in high regard, were both a source of fascination and a source of dread, with anonymous quarantine officers portrayed as stealthily checking the temperature of each passenger, 'singl[ing] out' and 'remov[-ing]' those that deviate from an expected norm. Whilst the article does express some approval for the albeit 'strict' measures, stating that they 'appear to be working' and citing the very low number of cases and no deaths among a population of 1.3 billion, its imagery forms part of a thread drawing attention to the strangeness of screening practices conducted 'over there' at the height of UK reporting on H1N1.

5. Biosecurity within the UK border: regional airports and the outward traveller

In the early stages of the outbreak, there appeared to be little clamour in the national press for the UK authorities to take similar preventative action. Indeed, in certain instances, publications sought to put the current disease spread into perspective, indicating that there was little need to panic. The *Daily Telegraph*, for example, noted that this outbreak represented the first occasion that possible pandemic influenza could be treated using antiviral drugs (30 April 2009). In the regional press, by contrast, there was a sense of urgency; a need for the UK public authorities

to do more to prevent further virus transmission. At this scale, the global processes and events outlined above were translated into locally relevant stories, and it is worth briefly considering the impact of the global political economy on localised disease management and biosecurity.

In their analysis of biosecurity practices deployed during two recent UK bird flu outbreaks, Nerlich et al. (2009) made reference to public policy discourse on 'securitisation'. Building on Bigo's work on the management of 'unease' (2002), whereby security measures are justified by threats from outside existing boundaries, they report Amoore and de Goede's observation that practices of border control have the additional effect of producing "our sense of the insiders and outsiders in the global political economy" (see Nerlich et al., 2009). Whilst much of this discourse is beyond the scope of this paper, we identify in this section instances where 'securitisation' had an impact on regional institutions and infrastructure, mostly notably through the closure of local schools and the increased presence of health practitioners at local airports.

Reform of the UK aviation sector has resulted in regional airports fulfilling new functions, in particular the hosting of long haul flights, resulting in greater risk of importation of global infectious diseases (Budd et al., in preparation). This has placed UK regional airport biosecurity practices under greater scrutiny. For example, BIA's provision of direct flights to Cancún resulted in intense local and national media interest in their practices of control. The Birmingham Evening Mail reported that the airport was on 'standby', with medical practitioners being 'briefed' ahead of the arrival of a Thomson flight from that resort (27 April 2009). The preparations of other cities across the UK also came under greater scrutiny as, in the words of a Bristol HPA official, 'airports and ports posed an increased risk to the spread of swine flu' (Bristol Evening Post, 28 April 2009), Indeed, other newspapers reported the cancellation of planned flights to Mexico from 'their' local airport, often quoting UK Foreign Office advice to avoid nonessential travel to that country (for example, Lancashire Telegraph, 28 April 2009; The Northern Echo, 28 April 2009; Daily Post (Liverpool), 29 April 2009).

An analysis of this discourse sheds light on local attempts to contain the spread of the virus. These efforts appeared to be marked by uncertainty, a lack of consistency and, in at least one case, disputes as to the best course of action. A mismatch was highlighted between regional airports increasingly hosting flights to more 'exotic' locations, and the capacity of regional cities to manage, and prevent the spread of, an infectious disease epidemic. During the early days of the H1N1 outbreak, BIA, and the Birmingham public authorities, had sought to reassure residents that they would be able to cope with such a public health emergency. Doctors and nurses at the airport had been briefed and would 'be available if anyone [was] feeling unwell' following the flight from Cancún (Birmingham Evening Mail, 27 April 2009). Similarly, airports in other UK regional cities used the local press to reiterate to residents that preparations were in place. Examples include: Glasgow (Evening Times (Glasgow), 27 April 2009); Bristol (Bristol Evening Post, 28 April 2009); Cardiff (Western Mail, 28 April 2009); and Newcastle (Morpeth Herald, 30 April 2009). Nevertheless, it became clear that practices at these airports differed from those in London, with a West Midlands based HPA consultant stating that there were no specific plans to approach the virus 'in the same way as London Heathrow' (Birmingham Evening Mail, 27 April 2009).

In reality, practices of control also varied among regional airports and were sometimes not employed at all. For example, travellers arriving in Manchester from Cancún on 27 April 2009 – when the presence of the virus in the UK had yet to be confirmed – did not face any screening or questioning about H1N1

symptoms. A spokeswoman for Manchester Airport, defending this approach, was reported as stating that travellers were only being screened at Heathrow because flights landed there from Mexico City, the then centre of the outbreak (*Belfast Telegraph*, 27 April 2009; see also *The Scotsman*, 28 April 2009). At Heathrow and Gatwick airports, health officials and clinicians were reported as being more pro-active, boarding aircraft arriving from Mexico, asking passengers questions and checking them for symptoms of the disease (*The Guardian*, 27 April 2009; *The Express*, 28 April 2009; *The Mirror*, 28 April 2009). *The Scotsman* reported that the discretionary approach adopted by UK regional airports was in line with HPA advice, with the government agency stating 'blanket screening' would not help fight the virus (28 April 2009).

Nevertheless, conflict did arise within localities. In the West Midlands, for example, there was anger among parents at the reported failure of 'health bosses' (in this instance, the HPA) to close a primary school as soon as H1N1 virus struck, resulting in the spread of the virus to other schools in the locality (*Birmingham Evening Mail*, 11 June 2009). Moreover, in Birmingham, during the first week of the outbreak, GPs voiced concerns that the local Primary Care Trust had left them 'in the dark' on how to tackle a potential pandemic and had not been pro-active enough regarding 'equipment, swabs, drugs, support' (*Birmingham Evening Mail*, 1 May 2009). Global travel had thus become a local concern and, in relation to the global traveller, the regional press played an important part in publicising practices employed by airports and public authorities to mitigate the spread of infectious disease across borders.

Articles in both national and regional press indicated that practices employed at such sites were 'ad hoc' in comparison to those at major city nodes such as London Heathrow and London Gatwick. To finish our analysis, we turn to stories that focus on a more intimate scale—that of the individual traveller. In this instance, we demonstrate how the outward traveller – the passenger wishing to leave the UK – has come to be represented in sections of the press as 'responsible' for securing his/her own health and for behaving in an ethical fashion.

The first representation refers to the intention of certain airlines and airports to 'vet' passengers for possible H1N1 symptoms and request doctors' notes from those suspected of carrying the virus. On 19 July 2009, *The Sunday Times* was one among many newspapers to report that check-in staff at Heathrow and 'other main British airports' were 'vetting passengers' for possible H1N1 symptoms (19 July 2009. See also: *Daily Telegraph*, 20 July 2009; *The Times*, 20 July 2009). These reports told of airlines' intention to 'turn away' passengers suspected of having H1N1 if they were unable to provide doctors' notes certifying they were 'fit to fly'. ¹¹ These practices were condemned on medical grounds by the BMA (*The Times*, 20 July 2009) whilst *The Sunday Times* drew attention to an Oxford University study stating that such measures would be counter-productive:

... [the research] concluded that 'the most severe economic impact is due to the policies to contain the pandemic rather than the pandemic itself (19 July 2009).

Secondly, before being subjected to biosecurity procedures at the airport, the prospective traveller has been advised to reflect on and consider the moral implications of their journey, particularly if it is to the less developed countries of the global South. In early July 2009, it was reported that a group of Nottingham University medical students – having unknowingly contracted the virus in the UK – had unintentionally transferred H1N1 to Kenya, whilst

travelling with charity assisting Kenyan orphans (*Nottingham Evening Post*, 1 July 2009, 2 July 2009, 3 July 2009; *The Independent*, 2 July 2009; *The Guardian*, 3 July 2009). One month later, in a short article for *The Observer*, Professor Robert Dingwall of Nottingham University drew attention to the potential for the UK traveller, in particular gap year students working on developmental projects, to infect a population that may not be able to access antiviral medication and was more likely to suffer from severe underlying health conditions, such as tuberculosis (TB). He concluded that:

While travel bans may not be justifiable, UK travellers cannot avoid thinking about their personal ethical responsibilities to the people of the countries that they are visiting. Staying at home this year will often be the morally right thing to do (*The Observer*, 2 August 2009).

Although it is important to remember that this is just one article, Dingwall's opinion did nevertheless attract the attention of two national newspapers with differing political alignments (Daily Mail and Morning Star) and a number of geographically diverse regional publications (Belfast Telegraph, The Journal (Newcastle), South Wales Echo, The Western Mail, Yorkshire Post, Evening Chronicle (Newcastle).

In both the above representations, the outward traveller was being depicted as someone who ought to practice control over his/her body, managing the risk it posed to the less advantaged 'other'. As suggested above, this inverts much existing literature in this area with its more fearful evocation of the disease-carrying 'other' infecting the social body (Charteris-Black, 2006, p. 570; Joffe, 1999; Cresswell, 2000; Kraut, 1995). It also contrasts with earlier UK national media discourse surrounding the 2001 TB outbreak in Leicester, which had been dominated by the need to control 'diseased' bodies wishing to enter the country (Bell et al., 2006).

6. Discussion and conclusion

This paper develops the scholarly literature on pathologies of travel by considering UK media representations of the first 'wave' of spread of the 2009 H1N1 virus. The analysis has been conducted with reference to questions about containment and the traveller's journey. Particular attention has been paid to the geographies of health security that dominate the print media. We draw attention to two findings: the significance of the airport as a site for control and a centre for technical 'progress'; and the ethics of the treatment of the traveller as a potential transmitter of disease.

Firstly, representations of the airport as a bounded setting in which the mobile body is 'sorted' and 'securitised' have been given increased consideration by scholars in disciplines including geography, political science and sociology (Adey, 2009; Salter, 2007; Lyon, 2008). In our analysis, the airport assumes an important role as a site for the operation of various practices of control, ranging from completion of questionnaires to checking passenger body temperature using thermal imaging technology. It is a place where operations of containment were enacted and biosecurity interventions performed. In relation to press reporting, practices of control in overseas airports were frequently presented as being technologically advanced. By contrast, regional airports within the UK were represented somewhat differently. Whilst their hosting of long-haul flights opened up new opportunities for the international traveller, regional press reporting focussed on inconsistencies between airports and, more generally, reflected unease about the ability of these nodes to manage the spread of emerging infectious diseases. In this

¹¹ Reports named British Airways and Virgin Atlantic.

respect, by not having the technologies or the infrastructure to conduct biosecurity practice rigorously, regional airports were frequently depicted as being less advanced 'others' within the UK. We argue that greater attention needs to be paid to hitherto neglected regional discourses in this area. In their general coverage of the current H1N1 pandemic, we found regional publications to be more pro-active than the national press, urging containment measures from public authorities situated in their locality. Their approach may, in part, be explained by the commercial requirement of regional newspapers to address as great a proportion of the local population as possible, thus creating a 'community of readers' based on membership of a particular place (Aldridge, 2003, p. 498). In this role, the regional press also serve as a disseminator of key public health messages produced both by local health authorities and by airports to give advice and reassurance to the local population.

Secondly, our analysis has informed a growing literature on representations of the travelling body. Central to the media reporting were ethical questions relating to the traveller and the airport. On the one hand, there was a key role played by the airport as 'censor' and a point at which the threat posed by the atrisk 'other' could be minimised. Within this context, elements of the UK press have depicted, sometimes through a nationalist lens, the stringent deployment of technologies against UK travellers, in a way that both restricted their freedom and purportedly damaged their human rights. Equally, our analysis has shown that, in certain instances, the outward traveller is expected to behave in a specific, 'responsible' way. In providing evidence of 'fitness to fly', the UK traveller was required to exercise governance over his/her body. Moreover, in electing not to travel to the countries of the South, the UK traveller would demonstrate their 'personal ethical responsibilit[y]' to the population of the country they had planned to visit (The Observer, 2 August 2009). These representations of the 'ethical' long-haul traveller, policing themselves and showing consideration to 'others', contrasts with long-established narratives in which the Western traveller sought to safeguard their own health against contamination from the 'degenerate' environment of the global South (Kennedy, 1990; Anderson, 1996, 2002; Livingstone, 2002). In this paper, therefore, our analysis of biosecurity amongst UK press reporting during the first 'wave' of the 2009 H1N1 pandemic highlights how the global spread of infectious diseases is grounded in particular localities associated with distinctive notions of biosecurity and the traveller.

References

- Adey, P., 2008. Mobilities and modulations: the airport as a difference machine. In: Salter, M. (Ed.), Politics at the Airport. University of Minnesota Press, Minneapolis, pp. 145–160.
- Adey, P., 2009. Facing airport security: affect, biopolitics, and the preemptive securitisation of the mobile body. Environment and Planning D: Society and Space 27, 274–295.
- Aldridge, M., 2003. The ties that divide: regional press campaigns, community and populism. Media, Culture & Society 25, 491–509.
- Ali, S., Keil, R., 2006. Global cities and the spread of infectious disease: the case of severe acute respiratory syndrome (SARS) in Toronto, Canada. Urban Studies 43 (3), 491–509.
- Amoore, L., Hall, A., 2009. Taking people apart: digitised dissection and the body at the border. Environment and Planning D: Society and Space 27, 444–464.
- Anderson, W., 1996. Immunities of empire: race, disease, and the new tropical medicine, 1900–1920. Bulletin of the History of Medicine 70 (1), 94–118.
- Anderson, W., 2002. Postcolonial technoscience. Social Studies of Science 32 (5-6), 643–658.
- Avila, M., Said, N., Ojcius, D., 2008. The book reopened on infectious disease. Microbes and Infection, 1–6.
- Bashford, A., 2006. 'The age of universal contagion': history, disease and globalization. In: Bashford, A. (Ed.), Medicine at the Border: Disease, Globalization and Security, 1850 to the Present. Palgrave Macmillan, Basingstoke, New York, pp. 1–17.

- Bell, M., Brown, T., Faire, L., 2006. Germs, genes and postcolonial geographies: reading the return of tuberculosis to Leicester, UK. Cultural Geographies 13, 577–500
- Bennett, C.J., 2008. Mobilities and modulations: the airport as a difference machine. In: Salter, M. (Ed.), Politics at the Airport. University of Minnesota Press, Minneapolis, pp. 51–76.
- Bigo, D., 2002. Security and immigration: toward a critique of the governmentality of unease. Alternatives 27, 63–92.
- Bingham, N., Enticott, G., Hinchliffe, S., 2008. Biosecurity: spaces, practices, and boundaries. Environment and Planning A 40 (7), 1528–1533.
- Braun, B., 2007. Biopolitics and the molecularization of life. Cultural Geographies 14, 6–28
- Brown, T., Budd, L., Bell, M., Rendell, H., forthcoming. The 'soft science' of global climate change: reporting on landscape transformation and threatened identity in the British newspaper press. Public Understanding of Science.
- Brownstein, J., Freifeld, C., Madoff, L., 2009. Digital Disease Detection harnessing the Web for public health surveillance. The New England Journal of Medicine 21 May, 2153–2157.
- Budd, L., Bell, M., Brown, T., 2009. Of plagues, planes and politics: controlling the global spread of infectious diseases by air. Political Geography 28, 426–435.
- Budd, L., Bell, M., Warren, A., in preparation. Global health governance in the UK: airport regulation and the mobile body.
- Carvalho, A., 2005. Representing the politics of the greenhouse effect: discursive strategies in the British media. Critical Discourse Studies 2, 1–29.
- Charteris-Black, J., 2006. Britain as a container: immigration metaphors in the 2005 election campaign. Discourse and Society 17 (5), 563–581.
- Chilton, P., 1996. Security Metaphors: Cold War Discourse from Containment to Common House. Peter Lang Publishing, Inc., New York.
- Colizza, V., Barrat, A., Barthelemy, M., Vespignani, A., 2006. The role of the airline transportation network in the prediction and predictability of global epidemics. Proceedings of the National Academy of Sciences 103, 2015–2020.
- Collier, S., Lakoff, A., Rabinow, P., 2004. Biosecurity: towards an anthropology of the contemporary. Antropology Today 20 (5), 3–7.
- Collier, S., Lakoff, A., 2008. The problem of securing health. In: Lakoff, A., Collier, S. (Eds.), Biosecurity Interventions. Columbia University Press, New York, pp. 7–32.
- Cooper, B., Pitman, R., Edmonds, W., Gray, N., 2006. Delaying the international spread of pandemic influenza. PLoS Medicine 3 (6), e212.
- Cresswell, T., 2000. Mobility, syphilis, and democracy: pathologizing the mobile body. In: Revill, G., Wrigley, R. (Eds.), Pathologies of Travel. Cliomedica/Wellcome Series in the History of Medicine, pp. 261–277.
- Dillon, M., 2007. Governing through contingency: the security of biopolitical governance. Political Geography 26, 41–47.
- Driver, F., 2004. Imagining the tropics: views and visions of the tropical world. Singapore Journal of Tropical Geography 25 (1), 1–17.
- European Centre for Disease Prevention and Control (ECDC), 2009. ECDC situation report on influenza A(H1N1) v. 6 August. ECDC. Stockholm.
- Gamson, W., 1999. Beyond the science-versus-advocacy distinction. Contemporary Sociology 28, 23–26.
- Google Flu Trends (WWW) Google Flu Trends homepage, $\langle \text{http://www.google.} \text{ org/flutrends/ last accessed } 06/01/10 \rangle$.
- Health Protection Agency (HPA), 2007. Foreign-travel associated illness England, Wales and Northern Ireland 2007 Report. HPA, London.
- HPA, 2009a. Weekly pandemic flu media update, 6 August.
- HPA, 2009b. Weekly pandemic flu media update, 13 August.
- HPA, 2009c. Weekly pandemic flu media update, 20 August.
- HPA, 2009d. Weekly pandemic flu media update, 27 August.
- HPA, 2009e. Weekly pandemic flu media update, 3 September. HPA, 2009f. Weekly pandemic flu media update, 23 July.
- HPA, 2009g. Changes to HPA pandemic flu media updates, 2 July.
- HPA, 2009h. Interpreting the HPA weekly National Influenza Report. Last updated 7 December 2009.
- HPA (WWW) Weekly epidemiological updates archive, https://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1244442494458?, p=1259151876580 (last accessed 21/01/10).
- Hinchliffe, S., Bingham, N., 2008. Securing life: the emerging practices of biosecurity. Environment and Planning A 40, 1534–1551.
- Hulme, M., 2008. The conquering of climate: discourses of fear and their dissolution. The Geographical Journal 174 (1), 5–16.
- International Civil Aviation Organization (ICAO), 1968. Statistics Section, News Release, Growth in civil aviation.
- ICAO, 2008. Annual Report of the Council. Doc 9916. ICAO, Montreal.
- Jennings, M., 2002. 'This mysterious and intangible enemy': health and disease amongst the early UMCA missionaries, 1860–1918. The Society for the Social History of Medicine 15, 65–87.
- Joffe, H., 1999. Risk and 'the Other'. Cambridge University Press, Cambridge.
- Kennedy, D., 1990. The perils of the midday sun: climatic anxieties in the colonial tropics. In: McKenzie, J. (Ed.), Imperialism and the Natural World. Manchester University Press, Manchester, pp. 118–140.
- Kraut, A., 1995. Silent Travelers: Germs, Genes and the Immigrant Menace. The Johns Hopkins University Press, Baltimore.
- Lahav, G., 2008. Mobility and border security: the US aviation system, the state and the rise of public-private partnerships. In: Salter, M. (Ed.), Politics at the Airport. University of Minnesota Press, Minneapolis, pp. 77–103.
- Larson, B., Nerlich, B., Wallis, P., 2005. Metaphors and biorisks: the war on infectious diseases and invasive species. Science Communication 26, 243–268.

- Livingstone, D., 1999. Tropical climate and moral hygiene: the anatomy of a Victorian debate. British Journal for the History of Science 32, 93–110.
- Livingstone, D., 2002. Race, space and moral climatology: notes towards a genealogy, Journal of Historical Geography 28 (2), 159–180.
- Lyon, D., 2008. Filtering flows, friends and foes. In: Salter, M. (Ed.), Politics at the Airport. University of Minnesota Press, Minneapolis, pp. 1–28.
- Mangili, A., Gendreau, M., 2005. Transmission of infectious diseases during commercial air travel. The Lancet 365 (12), 989–996.
- Morens, D., Fauci, A., 2007. The 1918 influenza pandemic: insights for the 21st century. The Journal of Infectious Diseases 195 (7), 1018–1028.
- Nerlich, B., Brown, B., Wright, N., 2009. The ins and outs of biosecurity: bird 'flu in East Anglia and the spatial representation of risk. Sociologia Ruralis 49 (4), 344–359.
- Nerlich, B., Halliday, C., 2007. Avian flu: the creation of expectations in the interplay between science and the media. Sociology of Health and Illness 29 (1), 46–65.
- Rabinow, P. (Ed.), 1984. The Foucault Reader. Penguin, London.
- Roxon, N., 2009. Minister for Health and Aging. Media Release. New Pandemic Phase 'Protect'.
- Salter, M., 2007. Governmentalities of an airport: heterotopia and confession. International Political Sociology 1, 49–66.
- Sontag, S., 1991. Illness as Metaphor and AIDS and its Metaphors. Penguin Books, London.
- Tatem, A., Hay, S., Rogers, D., 2006. Global traffic and disease vector dispersal. Proceedings of the National Academy of Sciences of the United States of America 103 (16), 6242–6247.

- Tatem, A., Hay, S., 2007. Climatic similarity and biological exchange in the worldwide airline transportation network. Proceedings of the Royal Society B: Biological Sciences 274 (1617), 1489–1496.
- Wallis, P., Nerlich, B., 2005. Disease metaphors in new epidemics: the UK media framing of the 2003 SARS epidemic. Social Science and Medicine 60, 2629–2639.
- WHO, 2003a. Update 37 WHO Extends its SARS-related Travel Advice to Beijing and Shanxi Province in China and to Toronto, Canada, 23 April. WHO, Geneva.
- WHO, 2003b. The World Health Report 2003: Shaping the Future. WHO, Geneva. WHO, 2005. WHO Global Influenza Preparedness Plan. The role of WHO and Recommendations for National Measures before and During Pandemics. WHO, Geneva.
- WHO, 2007. Health diplomacy in the 21st century. Dr. Margaret Chan, Director-General of the World Health Organization, Address to Directorate for Health and Social Affairs, Norway, 13 February.
- and Social Affairs, Norway, 13 February.
 WHO, 2009a. Influenza A(H1N1): lesson learned and preparedness. Dr. Margaret
 Chan, Director-General of the World Health Organisation, 2 July.
- WHO, 2009b. Weekly epidemiological record 84 (25), 249-260.
- WHO, 2009. WHO pandemic phase descriptions and main actions by phase. WHO, Geneva.
- Zong, N., Zeng, G., 2006. What we have learnt from SARS epidemics in China. British Medical Journal 333, 389–391.
- Zylberman, P., 2006. Civilising the state: borders, weak states and international health in modern Europe. In: Bashford, A. (Ed.), Medicine at the Border: Disease, Globalization and Security, 1850 to the Present. Palgrave Macmillan, Basingstoke, New York, pp. 21–40.