COMMENTARY

THE EXERCISE OF PUBLIC HEALTH POWERS IN CASES OF INFECTIOUS DISEASE: HUMAN RIGHTS IMPLICATIONS

Enhorn v. Sweden

European Court of Human Rights: [2005] E.C.H.R. 56529/00.

Introduction

While there has been considerable scrutiny by both domestic courts and the European Court of Human Rights (ECHR) of issues of contested medical treatment, little judicial attention has addressed the exercise of public health powers. Indeed, the role of law in public health has been much neglected at both judicial and academic level. This is on one level surprising, given the vulnerability of many statutory public health powers to challenge on human rights grounds. It is, however, perhaps less surprising when it is remembered that historically public health powers have been exercised over the most impoverished sectors of communities: the homeless, ethnic minority populations and the poor.

In *Enhorn* v. *Sweden* the ECHR recognised that 'the Court has only to a very limited extent decided cases where a person has been detained for the prevention of spreading infectious diseases'. Most European states have statutory powers² enabling a range of compulsory interventions, from compulsory vaccination to the compulsory medical examination, compulsory quarantine³ and compulsory isolation or detention of infected persons. The Court took the opportunity to determine in this case criteria for determining whether public health powers in cases of infectious disease complied with Convention rights. Such criteria will be of importance to the interpretation of public health powers in the United Kingdom, given that the Public Health Act 1984 and its equivalents in Northern Ireland and Scotland contain detention powers similar

¹ Enhorn v. Sweden [2005] E.C.H.R. 56529/00, para. 41.

² R. Coker and R. Martin 'Public Health Powers and Infectious Disease: A European Study', paper given at the Hart Workshop, Institute of Advanced Legal Studies, June 2005, forthcoming.

³ Quarantine involves the restriction of the activities of healthy persons who have been exposed to communicable disease, while isolation and detention involve the separation of an infected person to prevent spread of disease. See L. Gostin, *Public Health Law: Power, Duty and Restraint* (University of California Press 2000).

to, but with fewer protections than, the Swedish laws under examination in this case.

In the case of *Enhorn* v. *Sweden* the applicant was a homosexual man, aged 56, infected with the HIV virus. In 1990 he had transmitted the virus to a 19-year-old man. Subsequently, the county medical officer issued instructions to the applicant under the Infectious Diseases Act 1988 (Sweden), requiring the applicant to comply with a list of requirements, such as that he inform sexual partners of his HIV status; that he use a condom: that he limit his alcohol intake: that he inform healthcare staff of his status when he sought medical treatment; and that he consult his physician on a regular basis.⁴ The applicant failed to comply with these requirements. The county medical officer then successfully sought an order from the County Administrative Court that the applicant be compulsorily detained in isolation for up to three months. The applicant absconded, was arrested and detained under the Order. He frequently absconded thereafter with the result that a series of court orders were made against him for further periods of detention over the following seven years. Medical evidence⁵ suggested that because of a paranoid personality disorder, the applicant lacked some awareness of the risk of disease contagion resulting from his behaviour.

The applicant complained to the ECHR that the compulsory isolation orders and his involuntary detention in a hospital had been in breach of Article 5(1) of the European Convention for the Protection of Human Rights and Fundamental Freedoms, which states that 'Everyone has the right to liberty and security of the person. No one shall be deprived of his liberty save in the following cases and in accordance with a procedure prescribed by law'. The possible grounds for restrictions on liberty include 'the lawful detention of persons for the prevention of the spreading of infectious diseases'.

There were two strands to the applicant's argument. Firstly, he argued that the deprivation of liberty was not in accordance with the substantive and procedural requirements of domestic law. Secondly, he contended that the substantive provisions of Article 5 were not made out in his case, given that the detention did not constitute a proportionate response to the need to prevent the spread of infectious disease.

Swedish Public Health Legislation: A Procedure Prescribed by Law?

In order for a detention to be 'lawful' under Article 5 of the Convention, it must first comply with the requirements of domestic law. In this case,

⁴ Supra, n. 1, para. 9.

⁵ Supra, n. 1, para. 19.

the applicant argued that the procedures set out in the public health legislation were insufficiently precise to enable compliance. Section 38 of the 1988 Act empowers a detention order to be made 'if there is reasonable cause to suppose that the infected person is not complying with the practical instructions' and that the failure to comply entails a 'manifest risk of the infection being spread'. The applicant pleaded that the requirements of 'reasonable cause' and 'manifest risk' had not been determined and, in particular, that the county medical officer had not established that the applicant's behaviour amounted to a manifest risk of disease spread.

The Court held that where there was a deprivation of liberty, it is particularly important that the principle of legal certainty be satisfied. It was therefore essential that the conditions for deprivation of liberty under domestic law be clearly defined and that the law be foreseeable in its application. This would entail law of sufficient detail and precision to enable a person such as the applicant to understand and foresee the legal consequences of non-compliance.

At the same time, however, the Court stated that it is for domestic courts to interpret and apply domestic law. The 1998 Act gave to the physician considerable discretion as to the content of the instructions to patients suffering from a disease dangerous to society and power to the county medical officer to amend these instructions as he thought appropriate. The County Administrative Court and the Administrative Court of Appeal had carefully examined the instructions given to the applicant in this case and had concluded that the requirements of the 1988 Act were fulfilled. The Court was satisfied on that basis that the detention was in compliance with Swedish law.

The Substantive Requirements of Article 5

The Court made clear that any such detention must be in compliance with both the principle of proportionality and the requirement that there be an 'absence of arbitrariness' such that other less severe measures have been considered and found to be insufficient to safeguard the individual and the public. This would entail that the deprivation of liberty was necessary in all the circumstances.

The Court noted the paucity of case law on the detention of persons to prevent the spread of infectious disease, and turned to case law on detention on the basis of mental disorder⁷ and alcoholism⁸ for assistance. Such cases made clear that for detention to comply with principles of proportionality and freedom from arbitrariness, it must be established that the detained person is suffering from an infectious disease,

⁶ Chahal v. U.K. [1996] E.C.H.R. 22414/93.

⁷ See e.g. Winterwerp v. Netherlands [1979] E.C.H.R. 6301/73.

⁸ See e.g. Witold v. Poland [2000] E.C.H.R. 26629/95.

that the spread of disease is dangerous to public safety and that the detention of the infected person is the last resort measure in order to prevent disease spread. There must also be some relationship between the ground of permitted deprivation of liberty relied on and the place and conditions of detention. In other words, the institution of detention for infectious disease must be appropriate to the nature of the disease. The Court found that where these conditions are satisfied, deprivation of liberty is justified, both on grounds of public policy and in order to provide medical treatment. Thus, Article 5 has as its objective not only the protection of the public but also protection of the interests of the subject of the detention.

It was accepted that the HIV virus was sufficiently dangerous to public safety to justify detention, but the question remained whether detention was in the best interests of the applicant in this case. Detention would need to be a last resort, where less severe measures had been considered and tried and had been found to be insufficient to protect public safety. On the facts there was no evidence that less severe measures had been considered and found inadequate. The applicant had to some extent complied with instructions given to him previously (for example, informing healthcare staff of his HIV status) and his attitude was not one of intentional or even reckless transmission of disease to others. Despite Enhorn's prolonged absence from hospital, he had not infected any further sexual partners with HIV. The practical instructions issued to the applicant appeared to be sufficiently effective to satisfy the objective of containment of the disease. The Court found on the facts that the compulsory isolation of the applicant was not a last resort measure in order to prevent him from spreading disease. The continued extension of the isolation order over a period of seven years, with almost one and a half years detention in hospital, resulted in an unfair balance between the need to ensure that the virus did not spread and the applicant's right to liberty. The detention therefore breached Article 5.

The Relevance of *Enhorn* for the United Kingdom

The Infectious Diseases Act 1988 (Sweden) has considerably broader coverage than equivalent UK legislation, regulating both 'diseases dangerous to society' and 'other infectious diseases'. Public health powers in case of infectious disease in England and Wales⁹ are provided

⁹ Similar powers exist in Northern Ireland (the Public Health (Ireland) Act 1878, the Public Health (Northern Ireland) Act 1967 and the Health and Personal Social Services and Public Health (Northern Ireland) Act 1986) and Scotland (Public Health (Scotland) Act 1897, the Public Health (Infectious Diseases) (Scotland) Regulations 1975, the Infectious Diseases (Notification) Act 1889 and the Public Health (Notification of Infectious Disease) (Scotland) Act 1988).

primarily by the Public Health (Control of Disease) Act 1984 together with the Public Health (Infectious Disease) Regulations 1988.¹⁰ In England, Wales and Northern Ireland, powers of detention apply only to specified diseases, ¹¹ including cholera, plague, relapsing fever, small-pox, typhus, acquired immune deficiency syndrome, acute encephalitis, acute poliomyelitis, meningitis, anthrax, diphtheria, leprosy, rabies, scarlet fever and tuberculosis. ¹² Under sections 37 and 38 of the Public Health (Control of Disease) Act 1984, in relation to diseases to which these sections apply, ¹³ a local authority may apply to a justice of the peace for an order compulsorily to remove a person suffering from such a disease to hospital and to detain that person in hospital.

There has for some time been concern that public health powers under the 1984 Act are vulnerable to challenge on the grounds that they constitute a breach of human rights. ¹⁴ The provisions of the 1984 Act date back to nineteenth-century legislation and were drafted at a time of very different medical understandings of disease contagion, and very different social understandings of the balance between individual rights and the public good. There is no scientific evidence base for powers and offences¹⁵ under the Act in line with the requirements of evidence-based practice, making it difficult to argue that exercise of these powers is 'necessary' or even effective in disease control.

As with the Swedish legislation, there is concern that detention powers under the 1984 Act potentially breach Article 5 of the Convention. This warrants examination of the application of the two strands of the ECHR judgement in *Enhorn* to equivalent powers in the United Kingdom. In relation to the first strand of the Court's argument, the ECHR required in *Enhorn* that the general principle of legal certainty be satisfied, such that the conditions for deprivation of liberty be clearly defined and the domestic law be foreseeable in its application.

¹⁰ The Civil Contingencies Act 2004 enables regulations to be made to provide powers in 'emergencies' and an emergency is defined to include events that threaten harm to human health. No such regulations have been made at time of writing.

¹¹ Note, however, that under Scottish legislation such powers can apply to all infectious diseases.

¹² There are no detention powers in relation to emerging diseases such as SARS and avian flu, although there are powers under section 16 of the 1984 Act to direct that other diseases be notifiable and, thus, subject to specified public health powers.

¹³ The Schedule to the Infectious Disease Regulations 1988 lists which powers of the 1984 Act apply to which diseases.

¹⁴ See A. Harris and R. Martin, 'The Exercise of Public Health Powers in an Era of Human Rights: The Particular Problem of Tuberculosis' (2004) 118 *Public Health* 312.

¹⁵ For example, it is an offence under the Act if you are suffering from some notifiable diseases to return books to a library or to take washing to a laundry, although contemporary science does not support risk of disease contagion from such activities.

Under section 37 of the 1984 Act, a justice of the peace, on the application of the local authority, may make an order for compulsory removal to hospital of a person suffering from a disease to which section 37 applies where three requirements are satisfied: that the circumstances of the infected person are such that proper precautions cannot be taken or are not being taken; that serious risk of infection is thereby caused to other persons; and that accommodation is available in a suitable hospital. A detention order will then be made under section 38 if the justice of the peace is satisfied that an inmate of a hospital for infectious diseases who was suffering from such a disease would not on leaving hospital be provided with lodging or accommodation in which proper precautions could be taken to prevent the spread of disease.

As with 'manifest risk' in the Swedish legislation, the requirement of 'serious risk of infection' to other persons as required by sections 37 and 38 might be sufficiently clear, although in fact the wording of the 1984 Act has undergone little examination in the domestic courts. The requirement of 'lodging or accommodation in which proper precautions could be taken to prevent the spread of disease' is less clear. In the case of some diseases, isolation at home would be a sufficient measure to prevent the spread of disease, so that only in the case of a homeless person or a person in institutional accommodation could it be said that no appropriate accommodation was available. Indeed, it may well be that hospitals in the United Kingdom have limited suitable accommodation for persons with infectious disease.

The ground for detention in the Swedish legislation was non-compliance with practical instructions. It has been suggested that in reality the trigger factor for application for removal and detention orders under the 1984 Act is often the failure or refusal by the infected person to comply with a treatment regime rather than an absence of suitable accommodation. The CDR Weekly reports an example case where a patient with infectious tuberculosis was detained under the Act due to his infectious state and refusal to take reasonable precautions to prevent transmission to others. Under the modification of section 38 detention powers for persons with acquired immunity deficiency syndrome,

¹⁶ There is now little such specialist hospital accommodation in the United Kingdom.

¹⁷ See e.g. R. Coker, 'Tuberculosis, Non-compliance and Detention for the Public Health' (2000) 26 Journal of Medical Ethics 157. See also K. Sepkowitz 'How Contagious is Tuberculosis?' (1996) 23 Clinical Infectious Diseases 954.

¹⁸ PHLS Communicable Disease Surveillance Centre, 12 CDR Weekly No. 42, 17 October 2002.

¹⁹ Section 5 Public Health (Infectious Disease) Regulations 1988 states that detention may also take place where the justice of the peace is satisfied that on leaving hospital, proper precautions to prevent spread of disease would not be taken by the infected person in his lodgings or in any other place he might be expected to go.

the behaviour of the person subject to the detention application is relevant, but only in relation to precautions to be taken in lodgings and other places, and not in relation to treatment. In relation to other diseases, the behaviour of the infected person is not a ground for detention. While refusal to comply with treatment may well increase risk of disease contagion, public health legislation does not authorise detention on grounds of non-compliance and such detention would not be in accordance with procedures prescribed by law.

Unlike the Swedish legislation, the 1984 Act contains no time limits on detention²⁰ and an order may be renewed for as long as is considered necessary. This might well be until the subject of the order ceases to be infectious. There are no statutory or common law powers of compulsory treatment, so that where the patient refuses treatment the detention period could be significant. This absence of fixed time limits within the legislation restricts the 'foreseeability' of the application of detention powers and is likely to fall foul of the principle of clarity underlying Article 5. In addition, detention powers in England and Wales can be made ex parte, so the subject of the order may not have the opportunity to put a case in defence. Indeed, it is questionable whether such procedures are in accordance with national law. The Court of Appeal proposed in St George's Healthcare N.H.S. Trust v. S²¹ that 'Since a declaration ought not to be made on a interim basis, or without adequate investigation of the evidence put forward by either side, it follows that a declaration (especially one affecting an individual's personal autonomy) ought not to be made on an ex parte basis.'22

Nor does the Act provide review or appeal procedures in relation to some scheduled diseases. If one were to follow the approach of the ECHR and make comparisons with law governing persons of 'unsound' mind, then it is worth noting that the Mental Health Act 1983, for all that it has been criticised for failing to respect the human rights of persons with mental illness, provides limits on the initial detention of such persons and provides opportunities for review and appeal. Article 5(4) of the Convention requires that every detained person is entitled to take proceedings so that the lawfulness of the detention can be decided speedily by a court and his release ordered if the detention is not lawful. Article 6 of the Convention provides the right to a fair and public hearing within a reasonable time. While there is always the possibility of challenging detention by means of judicial

²⁰ Under section 38 the justice of the peace may 'direct detention for a period specified in the order' and 'any justice of the peace may extend a period so specified as often as it appears to him to be necessary to do so'.

²¹ [1998] 3 All E.R. 673.

²² Per Judge L.J.

review, the judicial review process may not in itself amount to an opportunity for review for the purposes of Articles 5 and 6.²³ Hence, although on the facts of *Enhorn* the exercise of powers under Swedish legislation was found not to have breached the requirement of compliance with procedures prescribed by law, exercise of powers under the 1984 Act may well do so.

The second limb of the Court's examination required that the public health authority justify detention by establishing that less severe measures had been considered and found insufficient in the light of public safety. In *Enhorn*, earlier measures, such as the issuing of detailed formal instructions and isolation within the community, had been attempted before the detention orders were sought. The Court noted that the applicant had acted in partial compliance with these measures, such that these less intrusive measures had to some extent been effective. Despite the fact that the applicant had absconded, the risk to others of disease contagion had not increased. The Court emphasised that detention should only be used as a last resort, in circumstances where lesser measures were not sufficient to reduce disease risk. On the facts of *Enhorn*, the lesser measures did appear to be sufficient, removing the need for detention.

Under the 1984 Act there are few opportunities to subject an infected person to less severe measures. There are no preliminary stage powers, such as powers of formal instructions, as are available under the Swedish Act. Nor are there powers of quarantine or isolation in the community. Where a person with an infectious disease recognised by public health legislation poses a risk of disease contagion to others, whether because the infectious person refuses to comply with treatment opportunities or because there is no suitable accommodation for that person within the community, public health agencies have few options in the pursuit of disease protection.

The reality is that compulsory detention in the UK of patients with HIV/AIDS is rare. Support services for AIDS sufferers are well organised and HIV/AIDS spread is linked to identifiable risk behaviours. Compulsory detention under the 1984 Act does, however, take place of persons with infectious tuberculosis, which while significantly more common in our community than HIV/AIDS, has attracted less community support. Indeed, while there has been considerable education against stigma in relation to HIV/AIDS, it remains the case that tuberculosis is seen as a disease of the poor, the homeless and immigrant communities. Within the UK the implications of the decision in *Enhorn* will

²³ R (on the application of Beeson) v .Dorset C.C. [2002] H.R.L.R. 15. This decision was reversed in part at [2003] H.R.L.R. 11 without settling this point.

resound particularly in the context of the compulsory detention of persons with infectious tuberculosis.

Tuberculosis is problematic because failure to complete treatment, or intermittent treatment, can result in the patient developing the more serious multidrug-resistant tuberculosis, ²⁴ which is in itself contagious. The provision of uninterrupted treatment can be difficult in relation to vulnerable persons who may be unable or unwilling to comply with treatment. In the case of homeless persons, for example, where there is no adequate community placement, cessation of treatment poses serious risk to the patient and, potentially, to the public. Such risk is difficult to quantify, but the onus rests on the public health agency to show that compulsory detention is a measure proportionate to the risk of spread of disease.

One obstacle to establishing proportionality is that there is a paucity of evidence to suggest that detention is either effective or necessary as a measure in the control of disease spread. France, which has a similar socio-economic and geographic climate to the United Kingdom, has no detention powers and yet has a more stable tuberculosis rate.²⁵ There is also evidence to suggest that the compulsory detention of persons with disease has resulted in transmission of disease to other patients.²⁶ The burden on a public health authority to establish that detention in a hospital, possibly a hospital some considerable distance from the subject's home given the limited number of hospital isolation wards and for an unlimited amount of time, was 'necessary' for the prevention of the spread of disease, as required by the ECHR, would be significant.

Public Health Interventions and the Public/Private Balance

The containment of infectious disease is a continuing public health priority, made more urgent by the threat of newly emerging diseases such as SARS and avian influenza. It is generally accepted that states and communities have the right, if not a moral mandate, to protect its citizens against disease harms, and that such protection may well require some intrusion into individual rights and individual interests. Determination

²⁴ There have been several serious outbreaks of Isoniazid tuberculosis in recent years, including an outbreak of over 100 persons in North London: A. Davies, M. Ruddy and F. Neely, 'Outbreak of Isoniazid Resistant Tuberculosis in North London 1999–2002' Confidential Report for Incident Control Committee, December 2002.

²⁵ S. da Lomba and R. Martin, 'Public Health Powers in Relation to Tuberculosis in England and France: A Comparison of Approaches' (2004) 6 Medical Law International 117.

²⁶ In 2002, a patient at a hospital in Kent was found to have contracted multidrug-resistant tuberculosis from a patient compulsorily detained in the same hospital: 12 CDR Weekly No. 42, 17 October 2002.

of criteria for when such intrusion is appropriate is problematic, and is contingent on the identification and perception of risk.

The Swedish Infectious Diseases Act required determination of a 'manifest risk' of disease spread to justify invoking detention powers. Much of the examination in the judgement of the Court in *Enhorn* focused on evidence as to the extent to which Enhorn posed a risk to others. The Swedish government interpreted the applicant's personality and case history as indicating that he would continue to act in such a way as to risk disease spread. The Court understood the evidence to suggest that Enhorn was no longer a risk to the public. In the end the finding that the detention order had offended against Article 5 rights came down to the fact that the Court perceived the risk to others to be less serious. No criteria for measurement of risk were included in the Swedish Act. Nor is there direction as to determination of 'serious' risk in the equivalent English legislation.

Even where scientific calculation can be applied to the assessment of risk, there may be difficulty in determining relative risk. acceptable or justifiable risk²⁷ and responsibility for bearing risk. Decisions on risk are usually taken where the evidence is inconclusive, and where there are political and media pressures to act promptly. In other contexts of risk regulation, such as environmental risk, those responsible for the protection of the public are encouraged to apply the 'precautionary principle' such that where there is risk of serious or irreversible harm, absence of full scientific certainty should not be an obstacle to taking steps to reduce or prevent risk.²⁸ The preamble to the English Public Health Act 1984 states that its purpose includes 'to control disease'. The precautionary principle would suggest that to achieve this purpose, public health officials should err on the side of caution. Yet without assistance from the legislation in the assessment of risk, it is inevitable that exercise of public health powers in cases where manifest or serious risk cannot be scientifically proven will be struck down as offending Article 5. There was no reference to the precautionary principle in the judgement in Enhorn and the evidence on risk was considered on the assumption that in such cases risk to the public carries no greater weight than risk to the liberty of the individual where those risks are to be balanced.

If there is to be reform of public health law, attempts in other jurisdictions to clarify the process of risk assessment could provide some

²⁷ See K. Calman and G. Royston, 'Risk Language and Dialects' (1997) 315 British Medical Journal 939.

²⁸ See e.g. World Health Organization 'Electromagnetic Fields and Public Health Cautionary Policies' at www.who.int/docstore/peh-emf/publications/facts_press/EMF-Precaution.htm.

assistance. For example, the Public Health Act 1997 in the Australian Capital Territory sets out criteria for determination of whether conditions are liable to become a public health risk, including regard to the number of persons affected or potentially affected by the conditions; the degree or potential degree of public health risk, damage or offensiveness to community health standards; any reasonable precautions that the person creating the risk might have or have not taken to avoid or minimise the adverse consequences; and any reasonable precautions that the person at risk might take or might not have taken to avoid or minimise the effect of the risk.²⁹ Without criteria for risk determination, in circumstances of uncertainty the assessment of risk is no more than guesswork. The public health body with responsibility for disease control is then charged with a statutory duty that cannot be fulfilled.

The question of the public/private balance in the context of infectious disease needs to be addressed and consideration given to incorporation of a precautionary approach into public health legislation. The emergence of a disease such as SARS serves to bring the debate to public attention, and at such times there is usually public and media support for strong public health powers to contain disease. It is arguable, however, that such a debate should not take place in the headlights of an oncoming threat, but rather we should be deciding now the balance we would wish to see between public benefit and private rights. The decision in *Enhorn* prioritised the private right of liberty over the public benefit of disease protection in a case of HIV/AIDS, despite the assessment of government public health officials that there was some risk to public health. The extent to which this decision can serve as a precedent where the risk is of large-scale, fast-spreading disease of unknown epidemiology is questionable.

Conclusion

Law has the potential to be a very useful tool for the attainment of public health. Bad law, however, can serve to create obstacles to public health. Public health consultants in England and Wales have been cautious in using detention powers, even in cases of serious risk of disease spread by a non-compliant patient, because of lack of clarity of the status of these powers in relation to human rights. *Enhorn* illustrates that similar concerns exist in relation to legislation elsewhere in Europe. There have been many calls for reform of public health legislation in the United Kingdom by academic commentators, ³⁰

²⁹ Section 69(2)(a)-(d). For discussion on the assessment of risk in Australian legislation, see C. Reynolds, *Public Health: Law and Regulation* (Federation Press 2004).

³⁰ See e.g. A. Harris and R. Martin, supra, n. 14, and R. Coker, supra, n. 17.

public health consultants³¹ and in government documents.³² Public health law has undergone a process of reform in other jurisdictions that had adopted their public health laws from English law,³³ following the SARS scare in 2003.³⁴ Any doubt as to the implications of the Human Rights Act 1998 for the Public Health Act 1984 must now have been settled by the decision in *Enhorn*. Once again we can only call upon the government to make reform of public health an issue of the highest priority and not to wait for the threat of a new or re-emerging disease in order to pass with haste emergency legislation.

Robyn Martin Centre for Research in Primary and Community Care University of Hertfordshire doi: 10.1093/medlaw/fwi038

³¹ In the *Mail on Sunday*, 15 May 2005, Dr Philip Monk, a communicable disease specialist in Leicestershire, commenting on a case in which 12 people were thought to have contracted tuberculosis from a person with infectious tuberculosis who had refused treatment, said, 'We cannot adequately protect people from infectious diseases..... This case illustrates the failures of the current public health laws to perfection. There is an urgent need to review them.' He made similar comments in the *New Scientist*, 14 May 2005.

³² The Acheson Report, Public Health in England: The Report of the Committee of Inquiry into the Future Development of the Public Health Function (HMSO 1988); The Department of Health, Review of Law on Infectious Disease Control: Consultation Document (1989); Chief Medical Officer, On the State of the Public Health: The Annual Report of the Chief Medical Officer for the Year 1997 (Department of Health 1998); Chief Medical Officer, Getting Ahead of the Curve: A Strategy for Combating Infectious Diseases (Department of Health 2002).

³³ Such as New Zealand and Australia.

³⁴ Note that after considerable debate, SARS was not made a notifiable disease under UK legislation, in part because without any quarantine powers, there was little point in bringing SARS under the provisions of the Act.