Bioethical Inquiry (2009) 6:197–205
DOI 10.1007/s11673-009-9160-7

Should Persons Detained During Public Health Crises Receive Compensation?

Søren Holm

Received: 15 October 2008 / Accepted: 6 May 2009 / Published online: 26 May 2009

Abstract One of the ways in which public health officials control outbreaks of epidemic disease is by attempting to control the situations in which the infectious agent can spread. This may include isolation of infected persons, quarantine of persons who may be infected and detention of persons who are present in or have entered premises where infected persons are being treated. Most who have analysed such measures think that the restrictions in liberty they entail and the detriments in welfare they impose can be justified and this paper proceeds from the assumption that detention measures are justifiable in some circumstances. Such measures are often implemented without any compensation being given to the persons who are detained. This raises the question: What do we owe to those whose liberty is justifiably restricted (e.g. through isolation, quarantine or detention) as a public health measure during a public health emergency? More specifically, do we owe them compensation for any losses they experience? The paper falls in four main sections. The first section provides examples of the current regulatory state of affairs from the US, Canada and WHO. The second section lays out the liberal, welfarist and pragmatic arguments for providing compensation. The third section discusses the arguments against compensation and the fourth and final section provides the conclusion. It is argued that the arguments for providing compensation clearly outweigh the counterarguments and that the default public policy therefore should be that compensation is provided.

Keywords Compensation · Isolation · Justice · Public health · Quarantine

A preliminary version of this paper entitled "Justifiable detention and the question of compensation" was first presented at the *Limiting Liberty in Contexts of Contagion* workshop held at Oxford University, July 2007.

S. Holm (✉)
Cardiff Law School,
Museum Avenue,
Cardiff CF10 3XJ, UK
e-mail: holms@cardiff.ac.uk

S. Holm
Section for Medical Ethics, University of Oslo,
Fredrik Holsts Hus, Blindern, Postboks 1130, 0318 Oslo,
Norway

Introduction

One of the ways in which public health officials control outbreaks of epidemic disease is by attempting to control the situations in which the infectious agent can spread from one person to another in order to minimise the number of people exposed to the infectious agent. This may include isolation of infected persons, quarantine of persons who may be infected, the detention of persons who are present in or have entered premises where infected persons are

being treated, general closures of venues in which large number of people congregate and mix like schools, cinemas, churches, restaurants and shops or encouraging voluntary social distancing. In the following I will, unless differentiation is needed, use the term "detention in the public health context" or similar to cover isolation, quarantine and detention.

Most who have analysed such measures from an ethical point of view think that the restrictions in liberty they entail and the detriments in welfare they impose can be justified either 1) on purely consequentialist grounds because there are many situations where the benefits derived from curtailing the spread of infectious disease outweigh the costs (broadly conceived) created by the liberty infringing measures or 2) from considerations of the public interest outweighing the liberty claims of those who pose a potential threat (Upshur 2002; Cetron and Landwirth 2005; Coker et al. 2007). In this paper the analysis will proceed on the assumption that detention measures are justifiable in some circumstances and that public health officials can make reasonably reliable judgements about when detention is justifiable.

Currently such measures are often implemented without any compensation being given to the persons who are quarantined or have their liberty severely restricted in other ways. The question that the present paper seeks to answer is:

> What do we owe to those whose liberty is justifiably restricted (e.g. through isolation, quarantine or detention) as a public health measure during a public health emergency?

More specifically, do we owe them compensation for any losses they experience?

Throughout the analysis will focus on persons whose liberty is significantly curtailed or who experience serious losses. The paper will not discuss whether we owe something in cases involving minimal inconvenience (for example, having your temperature measured in the airport), or in cases where there is only a minor infringement of liberty but no other harm or loss. But in some situations there are significant economic and non-economic losses. The following is not an exhaustive list but persons who are detained may lose their income during the detention period, they may be fired from their work or their own business may fold, they may be separated from their family for a significant period or they may in the case of quarantine with others be put at increased risk of contracting the disease.

The paper falls in four main sections. The first section provides some illuminating examples of the current regulatory state of affairs from the US, Canada and WHO. The second section lays out the liberal, welfarist and pragmatic arguments for providing compensation. The third section discusses the arguments against compensation and the fourth and final section provides the conclusion. Not all of the arguments discussed here are new or original but at least some are (Rothstein and Talbott 2007; Ly et al. 2007).

When thinking through these arguments it is important to remember that detention in the public health context may not only occur in relation to large scale global epidemics like flu or SARS, but may also be the response to quite localised outbreaks of disease or even single potentially contagious individuals where there is no risk of spread outside a small area. The issues discussed therefore do not only arise in times of great crisis and even full compensation does not always require great expense. In industrialised countries detention is, for instance, sometimes used in cases of extensively drug-resistant tuberculosis but the number of cases in any particular jurisdiction is very small. If the arguments for compensation hold in the case of large scale public health emergencies, they are even more likely to hold in individual cases.

The Current Regulatory State of Affairs–Some Illuminating Examples

It is impossible to give a complete global overview of the public health detention powers and compensation arrangements worldwide and it is also unnecessary for the purposes of the present paper. It is, however, useful to give a few pertinent examples.

The US regulatory situation is complex because public health only becomes a Federal responsibility if the problem at hand involves international or interstate transport or commerce. Each state has its own legislation and these vary considerably (Rothstein and Talbott 2007). Here we will therefore use the provisions of "The Model State Emergency Health Powers Act, MSEHPA. 2008a, b" drafted by The Center for Law and The Public's Health for the Centers for Disease Control and Prevention in 2001

as an example of the general approach. By July 2006 parts of this Model Act had been incorporated into the legislation in 38 states in the USA (The Model State Emergency Health Powers Act (MSEHPA) 2008a, b).

The relevant sections in the Model Act are Sections 601–608 dealing with the protection of persons and Section 805 providing for compensation. Sections 601–608 provides wide ranging powers for compulsory testing, treatment, vaccination, isolation and quarantine. In Section 604, subsections b.6– 8 the conditions of isolation and quarantine are specified:

6. The needs of persons isolated and quarantined shall be addressed in a systematic and competent fashion, including, but not limited to, providing adequate food, clothing, shelter, means of communication with those in isolation or quarantine and outside these settings, medication and competent medical care.
7. Premises used for isolation and quarantine shall be maintained in a safe and hygienic manner and be designed to minimize the likelihood of further transmission of infection or other harms to persons isolated and quarantined.
8. To the extent possible, cultural and religious beliefs should be considered in addressing the needs of individuals, and establishing and maintaining isolation and quarantine premises (MSEHPA).

Section 805 on compensation is only concerned with "Compensation for property" (805.a) and specifies that "The amount of compensation shall be calculated in the same manner as compensation due for taking of property pursuant to non-emergency eminent domain procedures…" (805.c).

There is thus no compensation provided for individuals in the Model Act and although Rothstein and Talbott make the observation that this may be slowly changing the stance in the Model act is compatible with the current approach in US state laws (Rothstein and Talbott 2007).

In Canada the issue of public health regulation was brought to the fore during the 2003 Toronto SARS outbreak. The existing public health legislation in Ontario, the province in which Toronto is located, gave public health officials wide ranging powers to detain people and a large number of people were detained. Subsequently, it became obvious that there was no protection against economic losses for those who had been detained. This lead to the "SARS Assistance and Recovery Strategy Act 2003". The most important sections of this act are section 6 which defines absence from work due to a number of SARS related public health interventions as legally protected "leave of absence without pay" and section 8 which creates a legal right to reinstatement in the previously held position (SARS Assistance and Recovery Strategy Act 2003).

The Government of Ontario also established a specific economic assistance program to help those who had lost wages during the SARS outbreak. This was capped at CAD 500 per day or CAD 6000 in total per person (Canadian Press 2003).

These measures strictly speaking only apply to Ontario and only to the specific 2003 SARS outbreak, but it is difficult to see how any Canadian province could refuse to institute broadly similar measures if a comparable situation arose in the future. The compensation provided cannot under any description be deemed as excessive and the total payout created no fiscal problems for Ontario. In the future non-comparable situations may arise that would give policy makers pause before instituting compensation (for example, if SARS-like outbreaks become common), but this does nothing to show that there would not be a large political (and moral) problem in denying compensation in *comparable* cases.

International regulation is almost completely silent on the issue of compensation but the WHO International Health Regulations 2005 contains sections on isolation and quarantine of travellers and it does briefly mention how travellers ought to be treated when subject to public health procedures:

> **Article 32 Treatment of travellers**
> In implementing health measures under these Regulations, States Parties shall treat travellers with respect for their dignity, human rights and fundamental freedoms and minimize any discomfort or distress associated with such measures, including by:
>
> (a) treating all travellers with courtesy and respect;
> (b) taking into consideration the gender, sociocultural, ethnic or religious concerns of travellers; and
> (c) providing or arranging for adequate food and water, appropriate accommodation and clothing, protection for baggage and other possessions, appropriate medical treatment, means of necessary communication if possible in a language that they can understand and other appropriate

assistance for travellers who are quarantined, isolated or subject to medical examinations or other procedures for public health purposes.

This short set of examples reveal two interesting facts: 1) that although there is concern for the conditions under which people are detained there are in general no provisions for compensation and 2) there are at least some circumstances where property owners will be compensated for their losses when property is compulsorily taken during a public health emergency.

Why Should People Be Compensated?

It is in one way slightly strange to ask why persons should be compensated when their liberty is significantly infringed and they suffer harm or loss as a result of that infringement.

When the state takes or expropriates specific items of property for important or even not so important social purposes it usually provides compensation to the property owners, even if the property is taken in an emergency situation.

But it is equally plausible that the state should compensate when it takes away my ability to work or run my business, or when it significantly affects my welfare in a negative way.

There thus seems to be a good *prima facie* claim for compensation in a liberal state. Explicating the exact nature of the claim is complicated by the fact that not all liberty restrictions cause harm or loss to the person whose liberty is restricted. There is thus a question concerning whether a person should be compensated for a harmless liberty restriction imposed by the state. This is a question of great theoretical interest but one that can be bracketed here since most cases of public health detention involves harmful liberty restriction. This is the case even if a person's earning power is not diminished, but her welfare is as a result of the detention. Think for instance of a pensioner detained outside of her home in conditions just fulfilling the requirements of Article 32 of the WHO International Health Regulations 2005 (see above). She would have been harmed even if her income was not affected.

There is also a potentially troublesome threshold issue at play that was already alluded to in the introduction. At least some of the moral arguments for compensation are valid for a loss of any size and will therefore justify claims for compensation for even minimal losses and / or liberty infringements. But this seems intuitively and pragmatically problematic, partly because we all have to accept some uncompensated losses as part of normal life in modern, complex societies. Intuitively the claim for compensation has to reach a certain threshold before a policy maker has to take it seriously. Exploring exactly where this threshold should be is beyond the scope of this paper and it may well differ from society to society. It is, however, important to note that at the public policy level we have reasons to institute such a threshold that are not merely based on intuition and that are legitimately different from the argument an individual could make in relation to a compensation claim from another individual. The transaction costs in handling minimal claims through a publicly legitimate process may swamp the actual amount of compensation due and public support for a compensation scheme may depend on the scheme only giving compensation where compensation is clearly perceived to be due.

Prima facie claims are by their very nature defeasible and we therefore need to consider whether there are any obvious countervailing considerations to the claim for compensation. First we need to consider whether the persons are themselves responsible for their loss because they have full or partial causal and/or moral responsibility. In almost all cases this will not be the case. Although the risk of being infected depends on a person's action and although it is a fact that many would not be put at risk of infection unless they had performed certain actions (e.g. gone to work, taken public transport, sent their child to school etc.) it is implausible to claim that they were the causes of their own risk of infection in any morally interesting sense. Everything that happens to a person is to some degree an effect of their own prior actions. But causal contribution does not imply causal responsibility; and causal responsibility does not imply moral responsibility or blameworthiness (for further elaboration of this point see Holm 2008). It is, for instance, pretty obvious that a person who was on a bus with an infectious person and who is therefore quarantined has not nullified a claim to compensation. We also need to note that there are cases where people are undoubtedly causally responsible, but where this does not defeat their

claim. Health care professionals who go to work knowing that they will treat infected people and will be quarantined have not defeated their claim to compensation simply because they went voluntarily and in full knowledge of the consequences.

A second possible argument against compensation is that the vital interests of the community outweigh the claim, for instance because the costs of compensation will be very large and will undermine the continuation of the community. This will be discussed in more detail below in relation to arguments from analogy against compensation.

The Welfarist Answer

If detention in the public health context succeeds in limiting the spread of the disease it constitutes a potential Pareto optimal social change compared to the situation where the disease outbreak is allowed to run its course unchecked. Analysis of the Toronto SARS outbreak does for instance seem to indicate that despite the very large costs of quarantine the economic benefits outweigh the costs (Gupta et al. 2005). A potential Pareto optimal social change is by definition a change where some lose and some win but where there is a net social welfare gain such that the winners could compensate the losers for their loss. A potential Pareto optimal social change can therefore, again by definition, be converted into an actual Pareto optimal change, i.e. a change where some gain welfare but no one loses welfare, if the winners compensate the losers for their loss.

Let us assume 1) that the number of detained persons is small compared to the general population and 2) that the principle of diminishing marginal utility of resources holds (at least approximately). Then it follows straightforwardly that the social state after compensation has been provided will have higher aggregate welfare than the state before compensation. The former losers will gain more welfare from the redistribution inherent in compensation than the former winners will lose, and the net loss to each former winner will be small.

There is thus a strong welfarist argument for providing compensation. This argument is even stronger if we accept a form of prioritarianism because this will direct us to give special weight to welfare improvements for those who are worst off in welfare terms (Rabinowicz 2001).

There may be situations where the public health intervention is not potentially Pareto optimal, i.e. where the intervention has caused a net, aggregate welfare loss. In such cases the non-prioritarian welfarist may have no compelling reason to redistribute.

Pragmatic and Justice Considerations

There are also pragmatic considerations and issues of justice that support compensation for detention in the public health context. Some people who are detained fear for their livelihood (DiGiovanni et al. 2004; Blendon et al. 2006), and it is likely that the existence of a compensation system will improve adherence to the quarantine rules and will in general add to the perceived legitimacy and tolerability of detention.

It is furthermore likely that the burdens of detention will, at least sometimes, fall very unequally on different sectors of society. This may happen either because the rules are not applied completely impartially or because of the demographics of the disease outbreak (Jacobs 2007). If the burdens are very unequally distributed there is a justice argument for rectifying the resulting inequalities after the fact.

Compensation and Restitution

This paper assumes that the detention is justifiable and that the issue that arises is therefore an issue of compensation. If, however, the public health detention is unjustifiable the claim will not be a claim for compensation but a claim for restitution. An unjustifiable detention is not only a harm but also a wrong and the person who has been wronged will have a strong claim to restitution against the wrongdoer.

Arguments Against Compensation

If the arguments for compensation are so compelling why is compensation not the default regulatory option?

There is probably a historical reason in that the framing of public health regulations come from a time where governments were much more authoritarian and interventionist than they are now and where the freedom of citizens not as valued as it is now. There is little political incentive to change that stance. Public health detention without compensation is in many and

probably most situations cheaper than detention with compensation and given that the public health powers are very rarely invoked there has been no mass mobilisation against them. This might however change if during some future crisis a large number of citizens in North America or Europe are detained as indicated by the government response to the Toronto SARS outbreak.

But there are also some philosophical arguments against compensation that we need to attend to.

No Compensation for Doing Your Duty

Could it not be argued that people should not be compensated for doing their duty? Doing your duty is reward in itself. And there is plausibly a duty not to infect others with dangerous diseases (Harris and Holm 1995). There are at least three possible answers to this line of argument and these are not mutually exclusive. The first is that there are many situations where we praise people for doing their duty, but such praise becomes unintelligible in moral terms if doing your duty is sufficient reward in itself.

The second is that even if we accept a strong duty not to infect others, and some have questioned the strength of this duty (Verweij 2005), there is no direct deduction from this to a duty to be detained to reduce the risk of infection to others. You may, for instance not have a duty to accept detention if you can discharge your duty not to put others at risk effectively in a way that is less costly to you or leaves your liberty more intact.

The third answer is that individual duties do not occur in a moral vacuum. The duties of an individual living in society are always part of an intricate web of mutual obligations between individuals and between individuals and society. This aspect of morality can usefully be discussed under the rubric of "moral reciprocity" without thereby implying that reciprocity underlies all or even most of morality (Becker 1986). I should do my duty, but I have a legitimate expectation that this will be reciprocated by others, including my society doing their duty towards me (Harris and Holm 1993). What does reciprocity entail in the current context? There is probably no very specific answer to this, but it is implausible that society for instance fully discharges its duties by fulfilling the requirements of Article 32 of the WHO International Health Regulations quoted above by providing *inter alia* "adequate food and water".

Arguments from Analogy

Another class of arguments against providing compensation are arguments from analogy showing that there are other similar situations where we detain persons justifiably and do not pay them compensation for the detention. There are a large number of possible analogies and although the five that will be discussed here may not fully exhaust the total field of analogies they are fairly representative. The five analogies are:

- Imprisonment for criminal activity
- Justifiable arrest eventually not leading to a prosecution
- Compulsory detention of the mentally ill in cases where they are a danger to others
- Preventive detention of enemy citizens in time of war
- Compulsory military (and other) service in time of war

In all of these cases the liberty of the persons are infringed by the state for a worthwhile social purpose and the persons suffer harm or loss, but are not compensated. Should we be convinced by these analogies that compensation should not be offered for detention in the public health context or are there significant disanalogies? In attempting to answer this question we have to remember that argument from analogy is notoriously tricky, especially in bioethics because the rhetorical force of analogies plays a significant role in bioethical argument, and that any analogy may be partially apt even if it is not perfect (Hofmann et al. 2007).

Let us first analyse the two "criminal analogies". With regard to these there are a number of significant disanalogies. The first and most obvious in relation to imprisonment is that one of the main purposes of imprisonment is precisely to curtail liberty and impose a loss on the persons who are imprisoned. Prison is supposed to be a punishment for past wrongdoing. We may discuss whether prisons ought to be penal institutions if our criminal justice systems were based on the best possible philosophical account of the function of justice (Braithwaite and Pettit 1992), but this does not entail that we can dispute that their current function is penal and that it would therefore be paradoxical and incoherent for society to compensate the intended losses they impose. Detention in the public health context is clearly not

intended to be a punishment so the issue of compensation still arises.

If we had a criminal justice system that was purely based on deterrence, and this is clearly not our current system, then it would not be strictly incoherent for society to compensate those who were punished. As long as it was compatible with deterrence we could provide compensation for the liberty restrictions and losses imposed on those who where punished. This kind of reasoning might apply in the context of non-compliant patients with extensively drug-resistant tuberculosis (I owe this point to one of the anonymous reviewers).

Another disanalogy between the criminal and the public health context is that there is no actual or suspected wrongdoing involved in the public health context. There is very rarely any wrongdoing in the past, very few people set out to infect others deliberately; and there is little risk of wrongdoing in the future. Many people would be likely to adhere to quarantine voluntarily in their own home if they were made aware of the potential risk they posed to others and supported while maintaining social distancing. The last point is for instance evidenced by the classical Eyam village example (Wallis 2006).

A specific disanalogy also exists between quarantine and arrest since there is often a greater disproportion between those quarantined and those who are actual carriers than between the arrested and the convicted. And, given that quarantine often does not involve isolation it sometimes increases the risk of infection for those who were not infected when they were quarantined.

On further analysis the "criminal analogies" therefore provides very little support for denying compensation to those detained in the public health context.

There are also significant disanalogies between compulsory detention in the mental health and the public health context. In the mental health context there is an explicit assumption of irrationality and unreliability. We typically detain people who are dangerous to others and where this danger can clearly be linked to their mental illness. These assumptions are important because they can explain why the danger posed by the people we detain cannot be controlled by more standard means (because they are unreliable) and why there is an element of potentially acceptable paternalism (because they are irrational and do not really want to harm others). But the people detained for public health reasons during an infectious disease outbreak are rarely any more irrational or unreliable than other members of society and the harm they pose can therefore presumably be controlled in the same way as we control other people who pose potential harms to others, for example, by threat of punishment if they actually harm someone.

The "time of war" analogies are of limited use but need to be discussed, partly for completeness, partly because war-like metaphors abound in public discussions of communicable diseases (Sontag 1979; 1989). As noted above there are many public health emergencies where detention will be implemented that are localised and therefore not comparable to a time of war which is a much more generalised emergency situation. The time of war analogies are therefore only applicable to a limited range of detention situations even if we decide that they are valid analogies. But there are considerable problems with their validity. If we first consider compulsory military service it is often the case that we provide some compensation to those who are drafted for service, although we may call it "pay", and that we also sometimes provide specific services to them or their dependents after their service has ended in recognition of their special contributions to society (the services provided by the US Department of Veterans Affairs is a prime example). This analogy may therefore just as well be taken to support compensation for detention in the public health context.

The same cannot be said for the preventive detention of enemy citizens but it has other problems that weaken its force. There are many reasons for detaining enemy citizens (revenge, punishment of the enemy, use as bargaining chips, protection of them against vigilantes etc.) but let us accept 1) that there is a preventive element and that enemy citizens living amongst us are potentially dangerous because they may be spies, saboteurs or try to influence public opinion; 2) that general preventive detention is therefore justified, and 3) that we have traditionally not compensated them for the losses they experienced because of their detention. Does it follow from this that we should not compensate persons who are detained in the public health context? Not in any straightforward way. The danger that enemy citizens potentially pose is a danger that springs from their deliberate actions aimed at harming our society, but

this is very different from the danger a potentially infected person poses. There is rarely an intention to harm and there are probably not very many Typhoid Marys around who deliberately put others at risk.

Practicalities and the Argument from Limited Resources

A final set of counterarguments against compensation are related to considerations of practicalities and the drawing of boundaries in grey areas and to a worry about the resources necessary to provide the compensation.

We may worry about how we should set the level of compensation fairly. Should the person with a large salary get more per day than the person who is out of work? Should we take into account the conditions under which the person is detained? Should health care professionals who voluntarily take on infection risks get preferential compensation? All of these questions are relevant and have to be resolved when we design public policy, but the fact that they may not all have obvious principled answers and that any decision may be arbitrary does not show that compensation should not be provided. The compensation scheme that Ontario introduced in 2003 (see above) can be criticised in many ways, but it is better than nothing!

A related worry is that even though a government might accept the duty to compensate in the abstract constraints on available resources would mean that it could not discharge the duty. Or to put it more simply we ought to compensate but cannot do it because this is too expensive and would impinge on other vital interests of the community.

This argument comes in two versions, one focusing on the plight of poor countries and one focusing on a devastating epidemic with global spread.

Let us look at the second version first. This is a relevant objection and there may well be situations in which a given country would have to renege on a promise to compensate. If we had a global flu pandemic it might well be the case that it would have such a profound impact on the world economy that compensation to those who had been detained during the pandemic would have to be suspended or not paid at all. But this does nothing to show that people detained in the public health context should not be compensated in situations where compensation can be provided without imposing significant economic burdens on society. We may accept that ought implies can, and that cannot therefore implies ought not and thus extinguishes the obligation, but from this it only follows that the obligation is nullified when we really cannot honour it. In reality policy makers are likely to draw the line of the "cannot" in a different way than it would be drawn in moral theory, but this does nothing to show that society does not have a strong obligation to compensate in those cases where it is clearly possible.

With regard to the first version of the argument it is important to note that the cost of compensating one individual broadly tracks the economic resources and development of a particular country. Compensating for 10 days of average lost earnings does for instance not have the same price in Mali as it does in the UK. And we might also note, although a full exploration is far beyond the scope of this paper, that in the case of infectious diseases with potential transnational impact the agent(s) responsible for compensation may not be confined to the individual nation state. If country A implements effective infection control measures as soon as an outbreak is detected and thereby prevents or curtails the spread of the disease to countries B, C, D… these other countries have benefited greatly and may therefore have a plausible obligation to contribute to whatever costs country A has had to bear including the costs of compensation to those detained in country A. It is important to note that this obligation would not be derived from any claim that country B, C or D should have a cosmopolitan concern for the citizens of country A, but simply from the claim that these countries have benefited greatly from the actions of country A. And that they would, if asked *ex ante* have wanted country A to perform these actions. They may even have entered a mutual commitment to pursue disease control actions, for instance by signing up to the WHO International Health Regulations, and may therefore in a certain sense have relied on country A discharging its obligations under the mutual agreement.

Conclusion

This paper has argued that providing compensation for losses incurred by persons who are justifiably isolated, quarantined or otherwise detained in a public context is supported by strong ethical arguments

drawing on mutually supporting strands from liberal, welfarist, reciprocity and justice considerations. It has furthermore argued that the available ethical counterarguments against compensation in the individual case are weak, inapplicable on reflection or otherwise problematic and that the same is true of counterarguments against implementing compensation as a public policy.

The default public policy therefore ought to be that we will compensate those persons whom we detain during a public health crisis.

The presumption of compensation is defeasible but only in situations where in the aftermath of the public health crisis it is economically close to impossible to provide compensation.

There are significant practical problems in deciding on the level of compensation but these are both in principle and in practice no more difficult than deciding on levels of compensation for other compulsory or semi-compulsory services, such as jury service, citizens have to perform.

Acknowledgements The author is supported by the ESRC Centre for the Economic and Social Aspects of Genomics and the Cardiff Institute of Society, Health and Ethics.

I thank the participants at the *Limiting Liberty in Contexts of Contagion* workshop held at Oxford University, July 2007 for their helpful comments on a preliminary version of this paper. I also thank three anonymous referees for very helpful comments.

Competing interests None declared

References

Becker, L.C. 1986. *Reciprocity*. London: Routledge & Kegan Paul.

Blendon, R.J., C.M. DesRoches, M.S. Cetron, J.M. Benson, T. Meinhardt, and W. Pollard. 2006. Attitudes toward the use of quarantine in a public health emergency in four countries. *Health Affairs* 25: w15–w25. doi:10.1377/hlthaff.25.w15. http://content.healthaffairs.org/cgi/content/abstract/25/2/w15 (accessed October 15, 2008).

Braithwaite, J. and P. Pettit. 1992. *Not just deserts–A republican theory of criminal justice*. Oxford: Oxford University Press.

Canadian Press. 2003. Ontario unveils SARS compensation package. http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20030613/sars_compensation_030613?s_name=&no_ads= (accessed October 15, 2008).

Cetron, M. and J. Landwirth. 2005. Public health and ethical considerations in planning for quarantine. *The Yale Journal of Biology and Medicine* 78: 325–330.

Coker, R., M. Thomas, K. Lock, and R. Martin. 2007. Detention and the evolving threat of tuberculosis: Evidence, ethics and law. *The Journal of Law, Medicine & Ethics* 35: 609–615.

DiGiovanni, C., J. Conley, D. Chiu, and J. Zaborski. 2004. Factors influencing compliance with quarantine in Toronto during the 2003 SARS outbreak. *Biosecurity and Bioterrorism* 2(4): 265–272. doi:10.1089/bsp.2004.2.265. http://www.liebertonline.com/doi/abs/10.1089%2Fbsp.2004.2.265 (accessed October 15, 2008).

Gupta, A.G., C.A. Mover, and D.T. Stern. 2005. The economic impact of quarantine: SARS in Toronto as a case study. *Journal of Infection* 50: 386–393. doi:10.1016/j.jinf.2004.08.006.

Harris, J. and S. Holm. 1993. If only AIDS was different!. *Hastings Center Report* 23: 6–11. doi:10.2307/3562917.

Harris, J. and S. Holm. 1995. Is there a moral obligation not to infect others? *BMJ (Clinical Research Ed.)* 311: 1215–1217.

Hofmann, B., J.H. Solbakk, and S. Holm. 2007. Analogical reasoning in handling emerging technologies: The case of umbilical cord blood biobanking. *The American Journal of Bioethics* 6: 49–57. doi:10.1080/15265160600938724.

Holm, S. 2008. Parental responsibility and obesity in children. *Public Health Ethics* 1: 21–29. doi:10.1093/phe/phn007.

Jacobs, L.A. 2007. Rights and quarantine during the SARS global health crisis: Differentiated legal consciousness in Hong Kong, Shanghai, and Toronto. *Law & Society Review* 41: 511–551. doi:10.1111/j.1540-5893.2007.00313.x.

Ly, T., M.J. Selgelid, and I. Kerridge. 2007. Pandemic and public health controls: Toward an equitable compensation system. *Journal of Law and Medicine* 15: 318–324.

The Model State Emergency Health Powers Act (MSEHPA). 2008a. *General page* http://www.publichealthlaw.net/ModelLaws/MSEHPA.php (accessed October 15).

The Model State Emergency Health Powers Act (MSEHPA). 2008b. *Text of Act* http://www.publichealthlaw.net/MSEHPA/MSEHPA2.pdf (accessed October 15).

Rabinowicz, W. 2001. Prioritarianism and uncertainty: On the interpersonal addition theorem and the priority view. http://mora.rente.nhh.no/projects/EqualityExchange/ressurser/articles/rabinowicz2.pdf (accessed October 15, 2008).

Rothstein, M.A. and M.K. Talbott. 2007. Job security and income replacement for individuals in quarantine: The need for legislation. *Health Care Law and Policy* 10: 239–257.

SARS Assistance and Recovery Strategy Act. 2003. http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_03s01_e.htm (accessed October 15, 2008).

Sontag, S. 1979. *Illness as metaphor*. New York: Farrar, Straus & Giroux.

Sontag, S. 1989. *Aids and its metaphors*. New York: Farrar, Straus & Giroux.

Upshur, R. 2002. Principles for the justification of public health intervention. *Canadian Journal of Public Health. Revue Canadienne de Sante Publique* 93: 101–103.

Verweij, M. 2005. Obligatory precautions against infection. 2005. *Bioethics* 19: 323–335.

Wallis, P. 2006. A dreadful heritage: Interpreting epidemic disease at Eyam, 1666–2000. *History Workshop Journal* 33: 31–56.

WHO. 2005. *WHO International Health Regulations 2005*. Geneva: WHO.