

8.4 Ethical Use of Quarantine & Isolation

Although physicians' primary ethical obligation is to their individual patients, they also have a long-recognized public health responsibility. In the context of infectious disease, this may include the use of quarantine and isolation to reduce the transmission of disease and protect the health of the public. In such situations, physicians have a further responsibility to protect their own health to ensure that they remain able to provide care. These responsibilities potentially conflict with patients' rights of self-determination and with physicians' duty to advocate for the best interests of individual patients and to provide care in emergencies.

With respect to the use of quarantine and isolation as public health interventions in situations of epidemic disease, individual physicians should:

- (a) Participate in implementing scientifically and ethically sound quarantine and isolation measures in keeping with the duty to provide care in epidemics.
- (b) Educate patients and the public about the nature of the public health threat, potential harm to others, and benefits of quarantine and isolation.
- (c) Encourage patients to adhere voluntarily to quarantine and isolation.
- (d) Support mandatory quarantine and isolation when a patient fails to adhere voluntarily.
- (e) Inform patients about and comply with mandatory public health reporting requirements.
- (f) Take appropriate protective and preventive measures to minimize transmission of infectious disease from physician to patient, including accepting immunization for vaccine-preventable disease, in keeping with ethics guidance.
- (g) Seek medical evaluation and treatment if they suspect themselves to be infected, including adhering to mandated public health measures.

The medical profession, in collaboration with public health colleagues and civil authorities, has an ethical responsibility to:

- (h) Ensure that quarantine measures are ethically and scientifically sound:
 - (i) use the least restrictive means available to control disease in the community while protecting individual rights;
 - (ii) without bias against any class or category of patients.
- (i) Advocate for the highest possible level of confidentiality when personal health information is transmitted in the context of public health reporting.
- (j) Advocate for access to public health services to ensure timely detection of risks and implementation of public health interventions, including quarantine and isolation.
- (k) Advocate for protective and preventive measures for physicians and others caring for patients with communicable disease.

- (1) Develop educational materials and programs about quarantine and isolation as public health interventions for patients and the public.

AMA Principle of Medical Ethics: I,III,VI,VII,VII

Background report(s):

CEJA Report 3-A-16 Modernized *Code of Medical Ethics*

CEJA Report 1-I-05 The use of quarantine and isolation as public health interventions

8.4 Ethical Use of Quarantine & Isolation

Although physicians' primary ethical obligation is to their individual patients, they also have a long-recognized public health responsibility. In the context of infectious disease, this may include the use of quarantine and isolation to reduce the transmission of disease and protect the health of the public. In such situations, physicians have a further responsibility to protect their own health to ensure that they remain able to provide care. These responsibilities potentially conflict with patients' rights of self-determination and with physicians' duty to advocate for the best interests of individual patients and to provide care in emergencies. [new content sets out key ethical values and concerns explicitly]

With respect to the use of quarantine and isolation as public health interventions in situations of epidemic disease, *individual physicians* should:

- (a) Participate in implementing scientifically and ethically sound quarantine and isolation measures in keeping with the duty to provide care in epidemics.
- (b) Educate patients and the public about the nature of the public health threat, potential harm to others, and benefits of quarantine and isolation.
- (c) Encourage patients to adhere voluntarily to quarantine and isolation.
- (d) Support mandatory quarantine and isolation when a patient fails to adhere voluntarily.
- (e) Inform patients about and comply with mandatory public health reporting requirements.
- (f) Take appropriate protective and preventive measures to minimize transmission of infectious disease from physician to patient, including accepting immunization for vaccine-preventable disease, in keeping with ethics guidance.
- (g) Seek medical evaluation and treatment if they suspect themselves to be infected, including adhering to mandated public health measures.

The medical profession, in collaboration with public health colleagues and civil authorities, has an ethical responsibility to:

- (h) Ensure that quarantine measures are ethically and scientifically sound:
 - (i) use the least restrictive means available to control disease in the community while protecting individual rights;
 - (ii) without bias against any class or category of patients.
- (i) Advocate for the highest possible level of confidentiality when personal health information is transmitted in the context of public health reporting.
- (j) Advocate for access to public health services to ensure timely detection of risks and implementation of public health interventions, including quarantine and isolation.

- (k) Advocate for protective and preventive measures for physicians and others caring for patients with communicable disease.
- (l) Develop educational materials and programs about quarantine and isolation as public health interventions for patients and the public.

AMA Principle of Medical Ethics: I,III,VI,VII,VII

REPORT OF THE COUNCIL ON ETHICAL AND JUDICIAL AFFAIRS*

CEJA Report 1 - I-05

Subject: The Use of Quarantine and Isolation as Public Health Interventions

Presented by: Priscilla Ray, MD, Chair

Referred to: Reference Committee on Amendments to Constitution and Bylaws
(Charles J. Hickey, MD, Chair)

1 INTRODUCTION

2
3 Quarantine and isolation are public health interventions designed to protect a population's health
4 by separating from the general population individuals who are either affected by or have been
5 exposed to communicable diseases¹. Because these actions may conflict with the interests of
6 individual patients, the use of quarantine or isolation must be balanced against their potential to
7 compromise individuals' liberty and autonomy.² When treating individual patients, physicians are
8 obligated to hold the best interests of the patient as paramount (see E-10.015, "The Patient-
9 Physician Relationship," AMA Policy Database). However, these individually centered concerns
10 for personal liberties can undermine public efforts to protect the health of the population.³ Further
11 guidance is warranted to help physicians manage their dual responsibilities to their patients and to
12 their communities when dealing with outbreaks of communicable diseases.

13 14 MANAGING THE SPREAD OF COMMUNICABLE DISEASE

15
16 Quarantine has been used to manage the outbreaks of communicable disease since the 13th
17 Century.⁴ The purpose of quarantine is to separate from the general population those individuals
18 who have been exposed to and are suspected of carrying a communicable disease but have yet to
19 display symptoms.⁵ Quarantine measures do not generally entail forced detention of affected
20 individuals. Rather, the measures are usually voluntary. Persons subject to quarantine are closely
21 monitored for symptoms to detect disease at an early stage.⁵

22
23 In contrast to quarantine, isolation is applied to individuals known or suspected to be infected by
24 contagious agents. Isolation separates infected from uninfected individuals during the period of
25 communicability⁵ and restricts their movement in order to limit exposure of unaffected individuals.
26 Additionally, it allows for the focused delivery of specialized health care to the ill.⁶ While ill
27 persons subjected to isolation may be isolated and cared for within hospitals, public health isolation
28 policies may also call for infected individuals to be isolated at home or to stay at other appropriate
29 community-based facilities.⁶

* Reports of the Council on Ethical and Judicial Affairs are assigned to the reference committee on Constitution and Bylaws. They may be adopted, not adopted, or referred. A report may not be amended, except to clarify the meaning of the report and only with the concurrence of the Council.

**THIS DOCUMENT MAY NOT BE CITED, REPRODUCED, OR DISTRIBUTED
WITHOUT EXPRESS WRITTEN PERMISSION**

1 Quarantine and isolation may be either voluntary or mandatory. When mandatory, they may be
2 effective in limiting the spread of communicable diseases, but produce tension between the public
3 goal of disease containment and the protection of individuals' autonomy. Standards of medical
4 ethics place great emphasis upon respect for patients' self-determination.⁷ In contrast, public
5 health measures can incorporate mandatory interventions if necessary, and public health statutes
6 can authorize the restriction of individual liberties in times of public peril, thereby overriding
7 patient autonomy.

8
9 The justified use of quarantine and isolation requires balancing individual liberties with the social
10 goals of public health policies. To this end, the Supreme Court has declared that a states must
11 demonstrate a compelling interest that is substantially furthered by detention.⁸ Moreover, legal
12 precedents dictate that applicable public measures must contain proper protections for citizens'
13 rights.⁹

14
15 A review of relevant court decisions over the last few decades indicates that various legal tests
16 have been established to determine the acceptability of public health interventions. According to
17 this analysis, the restriction of individual rights and liberties in the interest of public health is
18 justifiable when the risks posed are subject to rigorous scientific assessment; restrictive measures
19 are targeted to avoid unnecessary or undue burdens; a safe and healthy environment is provided for
20 those placed under restriction; procedural due process is protected; and the least restrictive possible
21 means of achieving the desired public health outcomes are used.

22 23 RESPONSIBILITIES OF THE MEDICAL PROFESSION

24
25 By virtue of physicians' unique knowledge and qualifications, members of the medical profession
26 will be called upon to assist in the design of public health measures such as quarantine or isolation.
27 When serving in this capacity, physicians must uphold accepted standards of medical
28 professionalism by implementing policies that adequately balance the attendant benefits and risks
29 posed to the public. Physicians, in collaboration with public health officials, must first assess the
30 relative risks posed by a communicable disease as compared to the potential positive and negative
31 consequences resulting from public intervention.^{2,10} When intervention appears warranted, public
32 efforts must be applied fairly and undertaken in a manner that minimizes any potentially
33 deleterious consequences at the individual level.^{2,4,11} Finally, the undertaking of any intervention
34 must be sufficiently transparent in nature so as to enable the public to understand the need for
35 public health measures and to participate in the planning process.^{11,12} By adhering to these ethical
36 guidelines, members of the medical profession can help ensure that quarantine and isolation
37 measures achieve their public health goals and maximally promote the well-being of individuals.

38 39 *Assessing the Appropriateness of Public Intervention*

40
41 Public health officials are charged with protecting the general population against reasonably
42 foreseeable threats, such as those presented by contagious diseases, even when the magnitude and
43 scope of these threats are scientifically uncertain.¹² In considering the need for a public health
44 intervention, decision makers must first determine that a specific contagious disease poses a real

1 threat to the public’s well-being. They also must assess whether or not public health measures
2 present a reasonable chance of significantly curtailing the disease’s spread.¹³

3
4 Decisions about quarantine and isolation should always be subject to review by physicians who are
5 qualified to evaluate the rationale underlying public health interventions. Public health physicians
6 are trained to evaluate the need for public health interventions according to the severity and
7 communicability of a given threat to public health and should be involved in decision-making
8 regarding quarantine and isolation. Should physicians’ clinical judgment determine that the
9 presence of a communicable disease seriously threatens the health and well being of the public,
10 they should advocate for appropriate disease control measures.

11
12 *Balancing the Risks and Benefits of Public Health Measures*

13
14 To be ethically justifiable, public health measures must only be instituted if their prospective risks
15 are warranted in light of their probable social benefits.¹⁴ Accordingly, the anticipated health
16 benefits associated with a given policy must be weighed against potential societal consequences,
17 including encroachment upon personal liberty and social and economic harm to individuals.¹⁵
18 Because the implementation of quarantine and isolation requires substantial resources and logistical
19 support, decision-makers must also weigh the costs of these measures compared to alternative
20 strategies.¹³

21
22 Medical expertise is essential in considering the effectiveness of alternative interventions. If the
23 medical community does not believe that the benefits afforded by public health interventions are
24 warranted in light of societal consequences, the profession, working with appropriate public health
25 professionals, should publicly advocate for the adoption of alternate policies. When identifying
26 alternative interventions, physicians should advocate for those interventions that will achieve
27 desired public health goals with minimal infringement upon personal liberties.⁴

28
29 *Ensuring the Fair Implementation of Quarantine and Isolation*

30
31 To ensure fairness, public health measures must be implemented in a manner that ensures the
32 equitable distribution of associated benefits and burdens.¹⁵ Public programs are objectionable
33 when they burden a particular segment of the population without scientific justification. For
34 example, a quarantine imposed by the city of San Francisco in 1900 was deemed unconstitutional
35 because it unjustly targeted Chinese households and businesses.¹⁶ In contrast, the fact that the
36 burdens associated with New York City’s TB control efforts in the early 1990s fell
37 disproportionately upon marginalized indigent populations was not found to be ethically
38 objectionable. The essential distinction between these situations is that New York’s program
39 focused on a specific population that faced the greatest risk of contracting and transmitting the
40 disease, while San Francisco’s focus on a specific ethnic population was based on racial biases
41 rather than medical considerations. To further ensure that quarantine and isolation measures are
42 implemented fairly, public health interventions should also contain due process safeguards and
43 appropriate legal review of individual cases.¹⁷

1 The medical profession must lend its expertise to ensure that no group is arbitrarily deprived of
2 personal liberties and that the design and implementation of public health interventions are
3 scientifically valid. To further encourage access to public health services, physicians should also
4 reach out to patients who might not normally have access to the health care system.¹⁸

5
6 Moreover, the pursuit of optimal outcomes requires that the quarantine or isolation interventions
7 not undermine the overall care received by patients. The profession should help to ensure that
8 individuals who are quarantined or isolated receive medical services in accordance with accepted
9 standards of care.

10
11 In anticipation of exceptional situations where adequate resources are not readily available,
12 treatment policies should be developed that would maximize quarantined or isolated patients'
13 welfare subject to available medical resources.¹⁹ Physicians should participate in the development
14 of these policies and promote the use of ethically appropriate criteria in establishing allocation
15 guidelines (see Opinion E-2.03, "Allocation of Limited Medical Resources").

16
17 *Promoting Transparency and Public Participation*

18
19 It is ethically imperative that all persons being subjected to quarantine or isolation be fully
20 informed of the risks and benefits associated with the intervention, and that policies infringing
21 upon patient autonomy be available for examination and periodic thorough review.²⁰

22
23 Accordingly, the medical profession should promote transparency by participating in the planning
24 and review of public health policies, and by educating patients and the public, informing them of
25 the necessity of public health measures and of their potential risks and benefits.

26
27 **RESPONSIBILITIES OF INDIVIDUAL PHYSICIANS**

28
29 Principle VII of the *Code of Medical Ethics* advises physicians to "participate in activities
30 contributing to the improvement of the community and the betterment of public health." When
31 faced with epidemics and the threat of contagious diseases, physicians must shoulder the tasks of
32 prevention, detection, containment, and treatment. In addressing these obligations, they confront
33 dual responsibilities toward public protection and respect for individuals' autonomy and privacy.

34
35 *Physicians' Obligations to Detect and Report Communicable Diseases*

36
37 The detection of contagious disease is a necessary antecedent to its treatment and containment.
38 The United States' public health surveillance system relies heavily upon reports from health care
39 professionals. The early signs of an impending epidemic would likely be noted first among
40 physicians examining symptomatic patients.²¹ Physicians must be aware of reporting
41 requirements²² and recognize case reporting as an important component of patient care.

42
43 Opinion E-5.05, "Confidentiality," advises physicians not to "reveal confidential communications
44 or information without the express consent of the patient, unless required to do so by law."
45 Therefore, physicians must comply with legal requirements to report affected patients to

1 appropriate public health authorities. Public health agencies must adhere to the same standards of
2 confidentiality that apply to physicians and their staffs. Disclosure of confidential information
3 must be limited to the few circumstances in which it is allowed by law and required for the
4 protection of the health of others. Physicians who are concerned about possible breaches of
5 confidentiality should discuss their concerns candidly with public health authorities and legal
6 counsel.

7
8 *Physicians' Use of Quarantine and Isolation*
9

10 State laws often empower state and local health department officials to invoke quarantine or
11 isolation measures as a matter of professional judgment, thereby isolating such decisions from
12 clinicians primarily responsible for attending to individual patients' interests. In considering the
13 use of quarantine or isolation, physicians should consult with public health specialists when there is
14 doubt about the best way to prevent patients from harming others.²³ Physicians should first engage
15 in educational efforts aimed at encouraging their patients to cooperate voluntarily with public
16 health measures. To respect the principle of patient autonomy while protecting the health of others,
17 physicians should inform their patients regarding the details of their illness, the potential harm that
18 it poses to themselves and others, as well as the personal and public benefits of quarantine or
19 mandatory isolation. Physicians must be available to answer patients' questions and help them
20 understand why they are asked to adhere to restrictive interventions.

21
22 If patients fail to comply voluntarily with public health measures, the physician should support
23 scientifically grounded public health policies that mandate quarantine or isolation. If necessary,
24 physicians should also make themselves available to participate in their patients' legal appeals,
25 such as due process procedures.

26
27 *Professionalism and the Duty to Treat Patients during Epidemics*
28

29 The responsibility to treat those in need is a key component of medical professionalism. As stated
30 in CEJA Report 6-A-04, "Physician Obligation in Disaster Preparedness and Response," individual
31 physicians are ethically obligated to provide urgent medical care during disasters. This ethical
32 obligation holds in the face of greater than usual threats to their own safety, lives, or health.
33 However, the physician workforce is not an unlimited resource and physicians should balance
34 immediate benefits to individual patients with ability to care for patients in the future.

35
36 When faced with the possibility of personal harm such as infection with a communicable disease,
37 physicians must arrange for continuity of care for their patients. In anticipation of this possibility,
38 the medical profession should advocate for availability of protective and preventive measures for
39 physicians and others at risk. In turn, frontline physicians should utilize these measures to remain
40 healthy and be available to provide necessary medical services during epidemics.

41
42 Physicians who have been exposed to a communicable disease and have reason to believe they may
43 have become infected should contact appropriate health professionals for clinical evaluation.²⁴ If
44 infected, physicians must adhere to mandated public health measures. In some circumstances,
45 exposed physicians may be placed on "working quarantine."²⁴ While adhering to quarantine

1 measures, these physicians may continue to provide indirect medical services or provide limited
2 direct patient care for other quarantined individuals.

3

4 CONCLUSION

5

6 The practices of quarantine and isolation have long been used to curtail the spread of
7 communicable diseases. Although patients generally participate voluntarily, public health
8 authorities can mandate isolation. However, restrictions upon patient autonomy and invasions of
9 privacy should occur only when the public health risk has been assessed with valid scientific
10 methods. Physicians should maintain expertise in the recognition of communicable diseases and
11 assessment of their risks, and should collaborate with public health authorities to help ensure that
12 public health interventions respect patient autonomy and privacy to the greatest extent possible.
13 Ultimately, it remains the obligation of individual physicians to balance their public obligations
14 with their professional roles as patient advocates and providers of medical care.

15

16 RECOMMENDATIONS

17

18 The Council on Ethical and Judicial Affairs recommends that the following be adopted and the
19 remainder of this report be filed:

20

21 Quarantine and isolation to protect the population's health potentially conflict with the
22 individual rights of liberty and self-determination. The medical profession, in collaboration
23 with public health colleagues, must take an active role in ensuring that those interventions are
24 based on science and are applied according to certain ethical considerations.

25

26 (1) To this end, the medical profession should:

27

28 (a) seek an appropriate balance of public needs and individual restraints so that quarantine
29 and isolation use the least restrictive measures available that will minimize negative
30 effects on the community through disease control while providing protections for
31 individual rights;

32

33 (b) help ensure that quarantine and isolation are based upon valid science and do not
34 arbitrarily target socioeconomic, racial, or ethnic groups;

35

36 (c) advocate for the highest possible level of confidentiality of personal health information
37 whenever clinical information is transmitted in the context of public health reporting;

38

39 (d) advocate for access to public health services to ensure timely detection of risks and
40 prevent undue delays in the implementation of quarantine and isolation;

41

42 (e) help to educate patients and the public about quarantine and isolation through the
43 development of educational materials and participation in educational programs;

44

- 1 (f) advocate for the availability of protective and preventive measures for physicians and
2 others caring for patients with communicable diseases.
3
- 4 (2) Individual physicians should participate in the implementation of appropriate quarantine
5 and isolation measures as part of their obligation to provide medical care during epidemics
6 (see Opinion E-9.067, “Physician Obligation in Disaster Preparedness and Response.”). In
7 doing so, advocacy for their individual patients’ best interests remains paramount. (see
8 Opinion E-10.015, “The Patient-Physician Relationship.”) Accordingly, physicians
9 should:
10
- 11 (a) encourage patients to adhere voluntarily to scientifically grounded quarantine and
12 isolation measures by educating them about the nature of the threat to public health,
13 the potential harm that it poses to the patient and others, and the personal and public
14 benefits to be derived from quarantine or isolation. If the patient fails to comply
15 voluntarily with such measures, the physician should support mandatory quarantine
16 and isolation for the non-compliant patient;
17
- 18 (b) comply with mandatory reporting requirements and inform patients of such reports;
19
- 20 (c) minimize the risk of transmitting infectious diseases from physician to patient and
21 ensure that they remain available to provide necessary medical services by using
22 appropriate protective and preventive measures, seeking medical evaluation and
23 treatment if they suspect themselves to be infected, and adhering to mandated public
24 health measures.
25
- 26 (3) Frontline physicians have an increased ethical obligation to avail themselves of safe and
27 effective protective and preventive measures (for example, influenza vaccine).
28
29 (New HOD/CEJA Policy)

Fiscal Note: Staff cost estimated at less than \$500 to implement.

ACKNOWLEDGMENTS

The Council gratefully acknowledges the following individuals for their contributions to this Report:

David Cundiff, MD, MPH, Secretary, American Association of Public Health Physicians; Kevin Sherin MD, MPH, Vice-President, American Association of Public Health Physicians; John Schneider, MD, Chair, AMA Council on Science and Public Health; Jonathan Weisbuch, MD, MPH, Director, Maricopa County (Arizona) Department of Public Health.

REFERENCES

- ¹ Kass, N. An ethics framework for public health. *American Journal of Public Health*. 2001;91(11):1776-82.
- ² Gostin, L. *Public Health Law: Power, Duty, Restraint*. Berkeley, CA: University of California Press. (2000).
- ³ Richards, E. Emerging infectious diseases and the law. *Emerging Infectious Diseases*. 2001;7(3 Suppl):543.
- ⁴ Barbara, J., et al. Large-scale quarantine following biological terrorism in the United States: Scientific examination, logistic and legal limits, and possible consequences. *Journal of the American Medical Association*. 2001;286(21):2711-17.
- ⁵ Pickett, G., Hanlon, J. *Public Health Administration and Practice, 9th Edition*. St Louis: Times Mirror/Mosby College Publishing. (1990).
- ⁶ Centers for Disease Control and Prevention. *Public Health Guidance for Community-Level Preparedness in Response to Severe Acute Respiratory Syndrome (SARS) Version 2- Supplement D: Community Containment Measures, Including Non-Hospital Isolation and Quarantine*. Washington: US Department of Health and Human Services. (2004).
- ⁷ Beauchamp, T, Childress, J. *Principles of Biomedical Ethics, 5th Edition*. New York: Oxford University Press. 2001.
- ⁸ *City of Cleburn v. Cleburne Living Ctr., Inc.* 473 US 432,440 (1985).
- ⁹ *State v. Snow*, 324 S.W.2d 532,534 (Ark. 1959).
- ¹⁰ Upshur, R. Principles for the justification of Public Health Intervention. *Canadian Journal of Public Health*. 2002;93(2):101-3.
- ¹¹ Childress, J., et al. Public health ethics: Mapping the terrain. *Journal of Law, Medicine, and Ethics*. 2002;30:170-8.
- ¹² Applegate, J. The precautionary preference: an American perspective on the precautionary principle. *Human and Ecological Risk Assessment*. 2000;6:1-21.
- ¹³ Barbara, J., et al. Large-scale quarantine following biological terrorism in the United States: Scientific examination, logistic and legal limits, and possible consequences. *Journal of the American Medical Association*. 2001;286(21):2711-17.
- ¹⁴ Singer, P, et al. Ethics and SARS: Lessons from Toronto. *British Medical Journal*. 2003;327:1342-44.
- ¹⁵ Gostin, L., Bayer, R., Fairchild, A. Ethical and legal challenges posed by severe acute respiratory syndrome. *Journal of the American Medical Association*. 2003;24(3):3229-3237.
- ¹⁶ *Jew Ho v Williamson*, 103 F1024 (CCD Cal 1900).
- ¹⁷ Annas, G. The impact of health policies on human rights, in *Health and Human Rights*. Mann, J., Gurskin, S., Grodin, M., Annas, G., (eds). New York: Routledge. (1999).
- ¹⁸ Wynia, M., Gostin, L. Ethical challenges in preparing for bioterrorism: Barriers within the health care system. *American Journal of Public Health*. 2004;94(7):1096-1102.

**THIS DOCUMENT MAY NOT BE CITED, REPRODUCED, OR DISTRIBUTED
WITHOUT EXPRESS WRITTEN PERMISSION**

¹⁹ Agency for Healthcare Research and Quality. *Altered Standards of Care in Mass Casualty Events*. Rockville, MD: US Department of Health and Human Services. (2005).

²⁰ Bayer, R. *Ethics and infectious disease control: STDs, HIV, TB*. Accessible at: <http://www.asph.org/UserFiles/Module5.pdf>

²¹ Henderson, D. Public Health Preparedness, in *Science and Technology in a Vulnerable World*. Teich, A., Nelson, D., Lita, S., (eds). Washington: American Association for the Advancement of Science. (2002).

²² Landers, S. Quarantine: An idea whose time may have come again. Accessible at: <http://www.ama-assn.org/amednews/2004/10/18/hlsa1018.htm>

²³ Gostin, L., Burris, S., Lazzarini, Z. The law and the public's health: a study of infections disease law in the United States. *Columbia Law Review*. 1999;99:59-128.

²⁴ Centers for Disease Control and Prevention. *Public Health Guidance for Community-Level Preparedness in Response to Severe Acute Respiratory Syndrome (SARS) Version 2- Supplement C: Preparedness and Response in Healthcare Facilities*. Washington: US Department of Health and Human Services. (2004).