

LEGAL PERSPECTIVES

THE LEGAL LANDSCAPE FOR SCHOOL CLOSURES IN RESPONSE TO PANDEMIC FLU OR OTHER PUBLIC HEALTH THREATS

James G. Hodge, Jr.

Together with other nonpharmaceutical interventions in response to pandemic influenza or other public health emergencies, communitywide closure of schools (grades K-12) for up to several weeks may mitigate the impacts of pandemic flu or other public health threats across populations. Though debatable, the public health premise is that closing schools could limit the spread of influenza (or other communicable conditions), consistent with social distancing theories. This presumes that laws support school closures for extended time periods during each wave of an influenza pandemic. However, government agencies and others have incomplete and inconsistent information about whether laws authorize long-term school closure for public health purposes in routine and emergency circumstances. As a result, the Centers for Law and the Public's Health: A Collaborative at Johns Hopkins and Georgetown Universities examined laws that expressly authorize school closure due to pandemic flu or other public health threats in 52 U.S. jurisdictions. While school closure is legally possible in most jurisdictions during routine and emergency circumstances, significant legal issues remain. When can schools be closed for public health purposes, and under what standards? Which levels and departments of government are actually responsible for closing schools? How does an emergency declaration affect government authority to close schools? This article explains the Center's study methodology, presents major findings on express laws allowing for school closure, and discusses legal issues underlying school closures during nonemergencies and declared emergencies.

PUBLIC AND PRIVATE SCHOOLS (grades K-12) can play a critical role in protecting the health of their students, staff, and the community from significant infectious disease threats such as pandemic influenza.¹ Modeling and analyses conducted by the Centers for Disease Control and Prevention (CDC) and others suggest that communitywide school closures (eg, cancellation of classes, dismissal of students, evacuation of premises) may mitigate the impacts of pandemic influenza on the public's health and the economy,^{2,3} especially when coupled with other nonpharmaceutical in-

Legal Perspectives is a regular journal column aimed at informing healthcare providers, emergency planners, and other decision makers about important legal issues related to public health and healthcare preparedness and response. The articles will describe these potentially challenging topics and conclude with the authors' suggestions for further action. The articles do not provide legal advice. Therefore, those affected by the issues discussed in this column should seek further guidance from legal counsel. Readers may submit topics of interest to the column's editor, Brooke Courtney, through the Journal's editorial office at jfox@upmc-biosecurity.org.

James G. Hodge, Jr., JD, LL.M., is Professor, Johns Hopkins Bloomberg School of Public Health, and Executive Director and PI, Centers for Law and the Public's Health: A Collaborative, Johns Hopkins University, Baltimore, Maryland.

terventions.⁴ In conjunction with other social distancing measures (eg, isolation of infected people, voluntary quarantine of exposed individuals), school closures have been shown historically, as during the global 1918-1919 influenza pandemic,⁵ and more recently to be effective in controlling the spread of infectious diseases.^{3,6} However, the efficacy of school closures as a tool for limiting morbidity and mortality during a modern influenza pandemic is debatable because of epidemiologic uncertainties,⁷ questionable use of historic models to predict future results,⁸ difficulties in implementation,⁹ and potential negative public health effects arising from school closures that have not been adequately measured.¹⁰

Still, CDC has recommended (consistent with World Health Organization guidance¹¹) national school closures in the United States for potentially up to 3 months during each wave of a modern pandemic influenza outbreak.¹² Implementation of this recommendation presupposes that schools may lawfully be closed for extended durations during the regular school year, which is not entirely clear. While 47 states identify school closure as a potential control measure in their pandemic influenza preparedness and response plans (based on December 2006 data), only 9 (17%) states' plans cite specific legal authority to close schools in response to a disease threat.¹³

Accordingly, CDC requested the Centers for Law and the Public's Health: A Collaborative at Johns Hopkins and Georgetown Universities to examine express legal authorities to close schools for extended periods in response to public health threats. The Center examined laws that expressly authorized school closure in response to public health threats in 52 U.S. jurisdictions, including all states, the District of Columbia, and Puerto Rico.¹³ The Center's research and findings suggest that while school closure is legally possible in most jurisdictions during routine and emergency circumstances, significant legal issues remain. When and under what standards can schools be closed for public health purposes? Which levels and departments of government are actually responsible for closing schools? How does the declaration of an emergency affect government authority to close schools? The sections below explain the Center's methodology for its examination of express school closure laws, present major findings on express laws allowing for school closure, and discuss these and other legal issues underlying school closures during nonemergencies and declared emergencies.

THE ROLE OF LAW CONCERNING SCHOOL CLOSURES

During an imminent outbreak of pandemic flu or other public health emergency, health or education officials may seek to close schools in an attempt to protect the health of

students, staff, and the surrounding community. Yet, closing schools for extended periods is not as simple as temporarily shutting down facilities due to snowstorms, water main breaks, or power outages. Long-term school closures implicate an array of legal issues concerning (1) the authority of departments of health, education, and emergency management to close schools in the interests of protecting the public's health; (2) the level of government (eg, state or local) empowered to close schools; and (3) how to resolve potential conflicts in decision making among multiple agencies and private actors. Closing schools in nonemergencies—that is, outside a government-declared state of emergency—or declared emergencies for public health purposes may require distinct legal authorization rooted in statutes, regulations, cases, or other laws.

Methodology

A core premise underlying the Center's study is that every jurisdiction has general health or other legal powers during nonemergencies, as well as broad public health powers during declared emergencies, that may authorize school closure for myriad reasons (eg, inclement weather, physical breakdowns, natural disasters).¹³ Although these laws support school closures generally, they lack specificity, typically authorize closures for shorter periods (eg, 1 day, 2 weeks), and may be contested if relied on to close schools for extended periods (up to 3 months) to avert perceived or known threats from pandemic flu. Reliance on general legal authorities to support long-term school closure in response to public health threats may ultimately preclude a timely and coordinated response to contain the spread of disease.¹⁴

The Center's research objective was thus to look beyond general public health laws and focus on express laws that specifically authorize school closure for extended durations in response to an actual or potential spread of disease or other public health threat.¹³ Express legal authorities across all states (as of December 2006), the District of Columbia, and Puerto Rico were examined to assess whether they support school closures during (1) nonemergencies, specifically concerning communicable disease control or public health purposes, or (2) declared emergencies, allowing for the closure or evacuation of facilities (that may include schools) or disassembly of groups, including school populations. Also examined were the departments (ie, public health, education, emergency management) and levels (ie, local, county, city, state) of government that are responsible for closing schools in each jurisdiction.¹³

Limitations

Though comprehensive, there are several limitations of the research on express school closure laws. First, the focus of the research is largely on state-level laws that may authorize express school closures at the state or local levels in many

jurisdictions. Potentially relevant federal, tribal, or municipal laws authorizing school closures were not fully examined.

Second, laws were not prioritized within each jurisdiction studied. For example, in jurisdictions that allow both departments of education and departments of health to close schools in nonemergencies, no attempt is made to prioritize each department's role unless this is legally specified (which is atypical).

Third, the Center's study does not address (1) the timing or appropriateness of school closure decisions with respect to the epidemiology of disease introduction, transmission, or severity, or (2) the legal liability or accountability of government actors who exercise school closure authority in response to actual or potential public health threats.

Finally, the study's results are based solely on the authors' interpretation of the laws in each jurisdiction. Legal practitioners in each jurisdiction were not consulted to review or confirm the findings of the study.¹³ As a result, *legal statements in the sections below should be assessed in terms of these limitations, noting especially the potential for differing legal interpretations and conclusions among legal practitioners.*

EXPRESS LEGAL AUTHORITY TO CLOSE SCHOOLS IN RESPONSE TO PUBLIC HEALTH THREATS

Assuming that school closures are warranted to protect the public's health during an influenza pandemic, the optimal timing for closure may vary depending on the scope and nature of the outbreak. For example, it may be essential to act early to limit the spread of avian influenza by closing schools before federal or state governments formally declare a state of public health emergency. Yet, legal authorities to close schools in nonemergencies and during declared states of emergency differ extensively.¹⁵ Accordingly, the Center examined express laws authorizing school closure in response to public health threats during nonemergencies and declared emergencies. The results, discussed below, illustrate significant variations in the legal authorities of state or local governments to close schools in response to public health threats.

School Closure Authority in Nonemergencies

Schools may be closed during nonemergencies for many reasons, as discussed above. However, only 27 (52%) jurisdictions' laws expressly authorize schools to be closed in nonemergencies in response to a potential disease outbreak or to generally protect the public's health.¹³ Of these 27 jurisdictions, 17 legally authorize health or education officials to close schools due to the imminent or actual presence of

disease.¹³ In Missouri, for example, a school superintendent may close any school because of a current epidemic in the school district.¹⁶ In the remaining 10 states, health or education officials may close schools when necessary to "protect public health."¹⁷

Additional differences among these express school closure laws relate to which departments of government are actually authorized to close schools. Laws in 26 (50%) jurisdictions expressly authorize only health departments to close schools.¹³ New Mexico statutes allow the state public health department to close schools if there is a likelihood of epidemic where any case of communicable disease occurs or is likely to occur.¹⁸ Conversely, 19 (36%) jurisdictions' laws allow only departments of education to close schools.¹³ In Arizona, local departments of education may close a school if a danger is posed to the health or safety of the students or staff;¹⁹ local health department officials are not similarly expressly authorized to close schools. Laws in 4 (8%) jurisdictions (Iowa, Mississippi, Oregon, and Puerto Rico) authorize both departments of health *and* education to close schools.¹³

The level (ie, state or local) of government at which officials are expressly authorized to close schools also varies. Laws in 12 (23%) jurisdictions authorize school closure only at the state level of government. Twenty-two (42%) jurisdictions' laws allow for closure only at local (county or city) levels.¹³ In Colorado, the county department of public health can "close theatres, schools, and other public places . . . when necessary to protect the public health."²⁰ As noted above, the Center did not separately review local-based laws (eg, ordinances, local school policies) to assess whether they may separately authorize school closure at the local level. Fifteen (29%) jurisdictions' laws allow for school closure at the state *and* local levels in nonemergencies.¹³ State laws in Nebraska, South Dakota, and Texas do not address express school closure for public health purposes in nonemergencies by any department or level of government.¹³

School Closure Authority in Declared Emergencies

Once a state of emergency, disaster, or public health emergency is declared by government in response to pandemic flu or other public health crises, the legal landscape changes.¹⁵ The legal authority to close schools changes as well, often broadening in scope and shifting powers from departments of education or health to state emergency management agencies. Laws in 7 (13%) jurisdictions specifically allow for school closure in response to a disease threat during emergencies. In considerably more states, the authority to close schools is grounded in broader emergency powers to manage property, protect persons, or evacuate populations from threatened areas. Laws in 48 (92%) jurisdictions authorize the acquisition or utilization of or con-

control over public and private property, including schools.¹³ In Kentucky, the governor may authorize government's temporary or permanent acquisition (or "taking") of property, including buildings (eg, schools) to protect the public during declared emergencies.²¹ Pennsylvania authorizes government use of public or private property as needed to respond to an emergency.²² Evacuation of people from threatened areas (including schools) is authorized by the emergency laws of 45 (87%) jurisdictions.¹³ In Tennessee, the governor may deem a school to be a "threatened area," or to be within a "threatened area," and "compel public evacuation."²³

As during nonemergencies, legal responsibility for closing schools during declared emergencies differs also. Laws in 6 (12%) jurisdictions authorize departments of education to close schools during an emergency.¹³ Of these, only 1 state (Alaska²⁴) statutorily authorizes school closure in response to a disease outbreak. Alternatively, 9 (17%) jurisdictions authorize public health authorities to close schools, of which 4 (8%) (Hawaii, Illinois, Massachusetts, and Pennsylvania) tie closure authority to the need to respond to a disease outbreak.¹³ In every jurisdiction except New Jersey, where the department of health is vested with this statutory power,²⁵ the governor or state emergency management agency may close schools pursuant to their emergency powers to control property or evacuate populations. Only 4 (8%) jurisdictions (Arizona, Illinois, Michigan, and Wisconsin) authorize state *and* local governments to close schools during emergencies.¹³

KEY LEGAL ISSUES CONCERNING EXPRESS SCHOOL CLOSURE AUTHORITY

The ability to close schools in nonemergencies and emergencies in response to pandemic influenza or other public health threats depends in part on legal authorization at the state, territorial, and local levels. Yet, specific legal authority to close schools for extended durations to protect the public's health is lacking in some jurisdictions, confusing in others, or shared concurrently among multiple departments or levels of government. In emergencies, legal authority to close schools is grounded in different legal standards and shifts to other government actors than in nonemergencies. Multiple potential legal and public health dilemmas arise from these findings.

When Should Schools Be Closed?

One of the historical lessons from the 1918-1919 pandemic influenza is that school closure, coupled with other social distancing methods, may effectively prevent the spread of highly contagious airborne diseases.^{5,26} Though school closure is subject to ongoing debate as to its modern utility,^{7,13}

public health officials may seek to close schools uniformly within and across jurisdictions even during the early stages of a modern influenza pandemic before formal states of emergency are declared. Implementing school closure, however, may not be so easy. Jurisdictions may be hesitant to close schools for prolonged periods of time because of potential economic impacts, social disarray, loss of worker productivity, educational disadvantages to students, and other issues.^{1,13} These and other factors may be used to challenge early calls for school closure, especially before states of emergency are declared. Laws that are general, amorphous, or highly deferential to the discretion of government agencies may be ill-suited to support long-term school closures. In Idaho, health department officials may order the closing of any school when, "*in [their] opinion*, such closing is necessary to protect public health."²⁷ This and similar provisions bestow considerable discretion on government agencies, but they lack specificity as to when they should be invoked.

During nonemergencies, 35 (67%) jurisdictions lack express authority to close schools during, or in anticipation of, an imminent disease outbreak.¹³ In these jurisdictions, departments of education or health may debate who is in charge of making such decisions.^{28,29} Lacking clarity, broad legal authorities may not ultimately support school closure if legally or politically challenged. Identifying legal criteria for school closure may help public health or education officials gauge when to actually close schools, but these criteria must be carefully crafted. Rigid adherence to particular criteria may hinder state or local officials from closing schools before the disease spreads to other regions.

Who Should Close Schools?

Determining when to close schools in response to public health threats is further complicated by the fact that school closure authority is vested in different agencies in many jurisdictions before a state of emergency is declared. School closure authority during nonemergencies is assigned exclusively to departments of health in 26 (50%) jurisdictions, departments of education in 19 (37%) jurisdictions, and to both departments simultaneously in 4 (8%) states.¹³ Laws in 12 (23%) jurisdictions authorize only state government agencies to close schools in nonemergencies; laws in 22 (42%) jurisdictions authorize only local government agencies to implement school closure; and 15 (29%) jurisdictions' laws dually authorize state and local government authorities to engage in school closure in nonemergencies.¹³

Whether at the state or local level, departments of health and education have different missions, objectives, and priorities that may significantly affect their decisions or abilities to close schools. While education officials may not be inclined to close schools upon identification of a few cases of infectious disease, public health officials may use surveil-

lance techniques to identify clusters of cases within adjacent regions. This information may favor school closure in the view of public health officials, but education departments may decide to remain open because of economic, academic, or political concerns. Inconsistencies in decisions to close schools within and across jurisdictions may defeat potential recommendations for national school closure, which ultimately may contribute to the spread of disease during an influenza pandemic (assuming school closure is an effective nonpharmaceutical intervention). Yet, such inconsistencies are predictable based on the varying legal authorities vested in departments of health and education at various levels of government across jurisdictions.

What Is the Effect of a Declaration of Emergency?

Effective responses to pandemic flu or other public health emergencies require appropriate, well-timed public health interventions. At some point, state or local governments may need to declare a state of emergency to invoke specific emergency powers to facilitate public and private sector responses. The effect of these emergency powers on school closure authority is pronounced. The ability of departments of health and education in nonemergencies to close schools is largely supplanted by the legal authority of state emergency management agencies during declared emergencies in 98% of jurisdictions studied.¹³ Of course, deciding to close schools during emergencies should be a shared responsibility of state departments of health, education, and emergency management, given the public health and logistical complexities of these decisions. Indiana's pandemic influenza plan encourages "advance discussions" among multiple key decision makers before issuing any mandates to close schools or take other actions.⁹ Still, the shift in the locus of power to close schools during declared emergencies is palpable. If conflicts arise among government authorities as to whether (or for how long) to close schools in emergencies, state emergency management agencies are largely authorized in most jurisdictions to effectuate closure in declared emergencies.

CONCLUSION

School closures, when coupled with other social distancing measures, may help limit the spread of infectious disease during a modern influenza pandemic. While there are multiple legal avenues to closing schools in many jurisdictions, unresolved legal issues may preclude timely, nationally consistent implementation of school closure decisions at the state and local levels. Express legal authority to close schools is distributed among different departments and levels of government across jurisdictions in nonemergency and

emergency settings. Significant variations among these laws, coupled with anticipated differences among communities exercising their lawful discretion to close schools, may lead to (1) disagreements as to who is responsible for closing schools, or when they should be closed; (2) delays in implementing effective public health interventions; (3) potential challenges to governments' decision to close (or not close) schools; and (4) failure to take appropriate action recommended by public health authorities due to various political pressures, economic forces, or other social factors.

Government officials and their legal counsels should examine the express legal routes for closing schools in their jurisdictions. As specific laws supporting school closure are identified, vetted, and tested through realistic exercises or legal reviews in each jurisdiction, officials and their legal counsels may seek to resolve potential legal barriers to the effective implementation of school closure. Where needed, statutory or regulatory amendments may be considered to clarify the meaning of "closure" concerning school operations, the criteria on which school closure decisions should be made, the levels of government and departments responsible for closing schools to avert public health threats, and procedures to resolve potential conflicts.

DISCLAIMER AND ACKNOWLEDGMENTS

The author would like to thank Anna Flynn, MHS, for her editing and research assistance on this manuscript. This article is based in part on the report: Hodge JG, Bhattacharya D, Gray J. *Legal Preparedness for School Closures in Response to Pandemic Influenza or Other Emergencies*. Atlanta: CDC; April 1, 2008. <http://www2a.cdc.gov/phlp/docs/Legal%20Preparedness%20for%20School%20Closures%20in%20Response%20to%20Pandemic%20Influenza.pdf>. Accessed February 3, 2009. The report was funded by the Centers for Disease Control and Prevention (CDC), pursuant to its collaborating center grant (Grant # U50/CCU323385-02) to the Centers for Law and the Public's Health: A Collaborative at Johns Hopkins and Georgetown Universities. The contents of this article are solely the responsibility of the author and do not represent the official legal positions of the U.S. Department of Health and Human Services, CDC, or state or local governments and are not meant to provide specific legal advice.

REFERENCES

1. Soronen LE. Closing the schools: legal issues for school boards. *Biosecur Bioterror* 2006;4:403-407.
2. Glass RJ, Glass LM, Beyeler WE, Min HJ. Targeted social distancing design for pandemic influenza. *Emerg Infect Dis* 2006;12:1671-1681.

3. Heymann A, Chodick G, Reichman B, Kokia E, Laufer J. Influence of school closure on the incidence of viral respiratory diseases among children and on health care utilization. *Pediatr Infect Dis J* 2004;23:675-677.
4. Koonin LM, Cetron MS. School closure to reduce influenza transmission [letter]. *Emerg Infect Dis* 2009;15:137-138.
5. Markel H, Lipman HB, Navarro JA, et al. Nonpharmaceutical interventions implemented by US cities during the 1918-1919 influenza pandemic. *JAMA* 2007;298:644-654.
6. Cauchemez S, Valleron AJ, Boelle PY, Flahault A, Ferguson NM. Estimating the impact of school closure on influenza transmission from sentinel data. *Nature* 2008;452:750-754.
7. Inglesby TV, Nuzzo JB, O'Toole T, Henderson DA. Disease mitigation measures in the control of pandemic influenza. *Biosecur Bioterror* 2006;4(4):366-375.
8. Barry J. Nonpharmaceutical interventions implemented during the 1918-1919 influenza pandemic. *JAMA* 2007;298(19):2260-2261.
9. Cowling BJ, Lau EH, Lam CL, et al. Effects of school closures, 2008 winter influenza season, Hong Kong. *Emerg Infect Dis* 2008;14:1660-1662.
10. Berkman BE. Mitigating pandemic influenza: the ethics of implementing a school closure policy. *J Public Health Manage Pract* 2008;14(4):372-378.
11. Bell DM, World Health Organization Writing Group. Non-pharmaceutical interventions for pandemic influenza, national and community measures. *Emerg Infect Dis* 2006;12:88-94.
12. U.S. Centers for Disease Control and Prevention. *Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States*. http://www.pandemicflu.gov/plan/community/community_mitigation.pdf. Accessed January 8, 2009.
13. Hodge JG, Bhattacharya D, Gray J. *Legal Preparedness for School Closures in Response to Pandemic Influenza or Other Emergencies*. Atlanta: Centers for Disease Control and Prevention; 2008. <http://www2a.cdc.gov/phlp/docs/Legal%20Preparedness%20for%20School%20Closures%20in%20Response%20to%20Pandemic%20Influenza.pdf>. Accessed January 7, 2009.
14. Kahn LH. Pandemic influenza school closure policies [letter]. *Emerg Infect Dis* 2007;13:344-345.
15. Hodge JG, Anderson ED. Principles and practice of legal triage during public health emergencies. *NYU Ann Surv Am L* 2008;64:249-291.
16. Miss. Code Ann. § 37-13-65.
17. IDAPA 16.02.10015(05).
18. N.M.A.C. § 7.4.3.9(D)(2).
19. A.R.S. § 15-341(A)(36).
20. C.R.S.A. 25-1-708(1)(d).
21. K.R.S. 39A.100(1)(c)(4).
22. 35 Pa. C.S.A. § 7301(f)(4).
23. T.C.A. § 58-2-107(e)(5).
24. A.C.A. § 6-10-106(a)(2).
25. N.J. Stat. § 26:13-8(a).
26. Tobey JA. *Public Health Law, A Manual of Law for Sanitarians*. Baltimore, MD: Williams & Wilkins; 1926.
27. Idaho Administrative Procedures Act 16.02.10.015(5) (emphasis added).
28. Newsome A, Neal D. Closures do little to stop flu—Yancey, Mitchell schools set to reopen Monday. *Asheville Citizen Times* November 10, 2006:A1.
29. Johnson AJ, Moore ZS, Edelson PJ, et al. Household responses to school closure resulting from outbreak of influenza B, North Carolina. *Emerg Infect Dis* 2008;14:1024-1030.

Address correspondence to:
James G. Hodge, Jr., JD, LL.M.
Professor

Johns Hopkins Bloomberg School of Public Health
Johns Hopkins Berman Institute of Bioethics
Hampton House Room 513
624 N Broadway
Baltimore, MD 21205

Email: jhodge@jhsph.edu