

SOVEREIGNTY, CITIZENSHIP, AND PUBLIC HEALTH IN THE UNITED STATES

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Sovereign boundaries, state borders, and distinctions between citizens and non-citizens undermine public health in the United States in a number of ways. For historical reasons, we are prone to view immigration and public health as separate interests, but they are in fact convergent. Historically, federal authority over immigration alleviated costs otherwise borne by state and local governments. Today, however, states are primarily responsible for the prevention and control of communicable disease acquired outside U.S. borders. The federal and state governments confront a stark division of authority with respect to non-citizens: The federal government decides which non-citizens to admit into the country and the terms under which they may stay, while states must cover the costs of foreign nationals who present a public health threat within the United States. Our system of federalism and a fragmented public health infrastructure mean that the cost of health control measures falls on state and local governments, with uneven effectiveness and greatly disproportionate impact in some communities. The problem is thus systemic: the fragmented structure of public health agencies in the United States can prevent an effective response to even wholly local epidemics. Nonetheless, because immigration laws affect public health in many complicated ways, we can make progress by addressing the externalities of public health problems through creative approaches to federal law, along with providing the resources needed to support these changes. This Article concludes with a discussion of a specific public health threat—drug-resistant tuberculosis—to provide a compelling context for the problems I identify.

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INTRODUCTION

The fear of global spread of pandemic diseases—SARS, Avian influenza, and more recently, the Ebola virus¹—compels governments to emphasize national security at their borders.² As recent events have

1. WORLD HEALTH ORG., PANDEMIC AND EPIDEMIC DISEASES 1 (2013), *available at* http://www.who.int/csr/disease/WHO_PED_flyer_2013.pdf?ua=1.

2. The World Health Organization's International Health Regulations address how member states should respond to pandemic threats, such as the Swine Flu epidemic originating in Mexico in 2009 and SARS outbreak in southern China in 2002. Discussion of the many international laws that concern communicable disease controls is beyond the scope of this Article. The focus of this Article is contagious disease that is not present in pandemic form, but many of the conclusions that I draw would also apply. See WORLD HEALTH ORG., INTERNATIONAL HEALTH REGULATIONS (2d ed. 2005), *available at* http://whqlibdoc.who.int/publications/2008/9789241580410_eng.pdf.

shown, the United States is no exception, even with its world-class diagnostic and surveillance capability. But no border is impermeable. While health screening of travelers entering a country can slow down a global pandemic, a nation's best defense lies not in border control but in the strength of its domestic health system.³

The notion that U.S. borders can be sealed against epidemic threats is, of course, false, as public health officials have long recognized. Mosquitoes, notably, do not need visas; the Chikungunya virus, for example, comes from the bite of the *Aedes* mosquito, introduced into the United States through the international used-tire trade.⁴ We also know that diseases originating in other continents, such as the Ebola virus, are as likely to be introduced into the United States by a returning citizen as through a foreign national.⁵

The modern conflation of public health vigilance with immigration control is exemplified in the United States by the name of the federal agency whose primary responsibility it is: the federal Centers for Disease Control and Prevention's (CDC) Division of Global Migration and Quarantine.⁶ In any nation, "blame the immigrant" political rhetoric obscures a clearer view of both immigration law and public health policy.⁷ The fear of disease in migrant children amassed at the southern U.S. border is a recent example.⁸ The risks can be

3. See WORLD HEALTH ORG., EVERYBODY'S BUSINESS: STRENGTHENING HEALTH SYSTEMS TO IMPROVE HEALTH OUTCOMES (2007), available at http://www.who.int/healthsystems/strategy/everybodys_business.pdf.

4. Kent Sepkowitz, *Chikungunya: The Mosquito-Borne Virus that Contorts Your Limbs*, THE DAILY BEAST, Mar. 5, 2014, <http://www.thedailybeast.com/articles/2014/03/05/chikungunya-the-mosquito-borne-virus-that-contorts-your-limbs.html>.

5. The first persons to enter the U.S. with the Ebola virus were U.S. medical workers via planned evacuations. See Liz Szabo, *Ebola Patient Discharged from Emory Hospital*, USA TODAY, Oct. 20, 2014, <http://www.usatoday.com/story/news/nation/2014/10/20/ebola-patient-emory-discharged/17625303/>. Subsequently, a New York physician who had treated Ebola patients abroad was diagnosed with the disease after he returned to the United States. Marc Santora, *Doctor in New York City is Sick With Ebola*, N.Y. TIMES, Oct. 23, 2014, http://www.nytimes.com/2014/10/24/nyregion/craig-spencer-is-tested-for-ebola-virus-at-bellevue-hospital-in-new-york-city.html?_r=0.

6. See *Division of Global Migration and Quarantine (DGMQ)*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/ncezid/dgmq/> (last updated July 10, 2014).

7. For examples of what I term "blame the immigrant" political rhetoric, see, for example, Guillermo Cantor, *Restrictionists Spread Unfounded Rumors About Migrant Children and Disease*, AMERICAN IMMIGRATION COUNCIL, July 25, 2014, <http://immigrationimpact.com/category/rhetoric/>.

8. See, e.g., Paula I. Fujiwara, *There is no Health Crisis from Immigrant Children at the Border*, WASH. POST, Aug. 1, 2014, <http://www.washingtonpost.com/opinions/there-is-no-health-crisis-from-immigrant-children-at-the-border/2014/08/01/e6603d>

exaggerated on both sides, but the unifying theme links immigration with heightened health risks to U.S. residents.

Whatever one's view of the desirability of immigration, governmental distinctions between citizens and non-citizens undermine public health in the United States in a number of ways. The federal and state governments confront a stark division of authority with respect to non-citizens: The federal government decides which non-citizens to admit into the country and the terms under which they may stay, while states must cover the cost of foreign nationals who present a public health threat within the United States. Local governments pay for U.S. diplomatic and humanitarian goals. Our system of federalism and a fragmented public health infrastructure result in the cost of health control measures falling on state and local governments, with uneven effectiveness and greatly disproportionate impact in some communities. The main impediment is thus systemic: the fragmented structure of public health agencies in the United States can prevent an effective response to even wholly local epidemics. Nonetheless, because immigration laws affect public health in many complicated ways, I suggest that we can make progress by addressing these externalities through creative approaches to immigration law.

Since 9/11, the federal government has marshaled both financial assets and legal authority—in the name of national security—to combat the potential public health threat of bioterrorism.⁹ Scholars have begun to explore these developments through a framework of federalism and constitutional authority.¹⁰ Shortcomings in the U.S. system of public health defense are often left out of the debate over immigration reform. Instead, the threat of epidemic disease is usually addressed as a matter of national security, but immigration law is not seen as a necessary component of either national security or public health defense. More importantly, current immigration law actively undermines public health control measures in the interior in a number of ways.

Immigration law in the United States already empowers the federal government to deny entry to non-citizens suffering from a handful

90-175c-11e4-9e3b-7f2f110c6265_story.html (reviewing debate about disease in migrant children).

9. See SARA A. LISTER, CONG. RESEARCH SERV., RL31719, AN OVERVIEW OF THE U.S. PUBLIC HEALTH SYSTEM IN THE CONTEXT OF EMERGENCY PREPAREDNESS (2005).

10. See, e.g., Laura K. Donohue, *Pandemic Disease, Biological Weapons, and War*, in *LAW AND WAR* (Austin Sarat, Lawrence Douglas & Martha Merrill Umphrey eds, 2014); LAWRENCE O. GOSTIN & DAVID P. FIDLER, *BIOSECURITY IN THE GLOBAL AGE: BIOLOGICAL WEAPONS, PUBLIC HEALTH, AND THE RULE OF LAW* (2008).

of communicable diseases, including active tuberculosis.¹¹ Immigration law provides U.S. Customs and Border Protection (CBP) with authority to intercept and prevent entry to unwell travelers.¹² With most communicable disease, the difficulty is timely diagnosis of a health condition. If contagious disease is suspected, options for U.S. border control officers are limited: quarantine at the port of entry (a legal “limbo”), transfer to a federal detention facility to be placed in isolation, or repatriation to the country of origin.¹³ Returning U.S. citizens can be quarantined but cannot be denied entry.¹⁴ The more likely scenario is that contagious disease is not detected. Even if it is detected, foreign nationals may be admitted into the country, where they become the responsibility of state and local public health agencies.¹⁵

Public health defense at U.S. borders is primarily an exercise of the federal government’s plenary power over immigration, but federal immigration officials are not part of a coherent plan to defend the territorial United States from contagion. The Immigration and Nationality Act (INA) requires customs and border patrol agents at the nation’s entry points to turn away anyone suspected of carrying certain contagious diseases “banned” by the Act.¹⁶ These agents have some training to identify symptoms of a limited number of contagious diseases, but resources available to them are insufficient.¹⁷ The U.S. Public Health Service plays a limited role in this process, relying mainly on its rarely used federal quarantine power. Where available, a U.S.

11. Immigration and Nationality Act § 212(a)(1)(A)(i), 8 U.S.C. § 1182 (2013). The Department of Health and Human Services regulations at 42 C.F.R. § 34.2(b) (2013) define the term “communicable disease of public health significance” as including: (a) chancroid; (b) gonorrhea; (c) granuloma inguinale; (d) human immunodeficiency virus (HIV) infection; (e) leprosy, infectious; (f) lymphogranuloma venereum; (g) syphilis, infectious stage; and (h) tuberculosis, active.

12. If, that is, the diagnosis is known. Even if immigration officers suspect a TB case based upon physical symptoms, it takes some time for laboratory testing to confirm TB infection, and an even longer wait to know whether it is a drug-resistant strain. *See infra* Part III.A.

13. 42 C.F.R. §§ 71.32–71.33 (2013) (authorizing quarantining or isolating someone with a suspected communicable disease).

14. *See* Rachel E. Rosenbloom, *The Citizenship Line: Rethinking Immigration Exceptionalism*, 54 B.C. L. REV. 1965, 1970 (2013) (recounting instances of erroneous denial of admission of U.S. citizens at the border).

15. *See* LAWRENCE O. GOSTIN, *PUBLIC HEALTH LAW: POWER, DUTY, RESTRAINT* 47 (2000).

16. *See* § U.S.C. § 1182 (2013) (any alien with an enumerated communicable disease is deemed to be inadmissible).

17. *See* U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-09-58, *PUBLIC HEALTH AND BORDER SECURITY: HHS AND DHS SHOULD FURTHER STRENGTHEN THEIR ABILITY TO RESPOND TO TB INCIDENTS* 38 (2008), available at <http://www.gao.gov/assets/290/282735.pdf>.

Public Health Service officer would be detailed to the port of entry to provide a higher level of expertise regarding an immigrant who appears to be carrying one of the specified diseases.¹⁸ But medical treatment is a state responsibility, even if the federal public health officer orders quarantine or isolation for the traveler.¹⁹

While the specter of fast-spreading, pandemic disease arriving from abroad focuses attention on preventive measures at U.S. borders, the greater threat to public health occurs within our borders. Temporary visitors and undocumented migrants, as well as many legal permanent residents, are excluded from access to preventive health care and often fall off the radar with respect to public health control measures. The critically important daily work of public health agencies is compromised by policies and practices determined by U.S. immigration law, as well as bylaws that distinguish between citizens and non-citizens.

In this Article, I make three observations. First, the rapid increase in cross-border travel makes it nearly impossible to prevent the spread of communicable disease.²⁰ Because only a small percentage of foreign nationals are required to undergo health screening prior to entry (those seeking legal permanent residence), health exclusions in the INA are only minimally effective to prevent the spread of communicable disease acquired outside U.S. borders.²¹ Once a powerful tool, health-based immigration exclusions are now largely a quaint relic of our early history. In the late nineteenth century, as I relate,²² the federal government took over from states the authority to screen persons landing on their shores. The federal government also provided health care to sick immigrants at some ports of entry, most notably at Ellis

18. See INST. OF MED., QUARANTINE STATIONS AT PORTS OF ENTRY PROTECTING THE PUBLIC'S HEALTH (2005), available at <http://iom.edu/Reports/2005/Quarantine-Stations-at-Ports-of-Entry-Protecting-the-Publics-Health.aspx>. A CDC official stated in 2007: "The partnership between Customs and Border Protection and CDC is particularly vital, as CBP officers act as CDC's 'eyes and ears.'" *Protecting the United States From Drug-Resistant Tuberculosis: Hearing Before the S. Comm. on Health, Education, Labor, and Pensions*, 110th Cong. 6 (2007) (statement of Kenneth G. Castro, Assistant Surgeon General, U.S. Public Health Service) [Hereinafter Castro].

19. See *U.S. Quarantine Stations*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/quarantine/quarantine-stations-us.html> (last updated July 31, 2014). For medical treatment, the CDC relies upon "Emergency Medical Services, local and state public health departments, state public health laboratories, state and territorial epidemiologists, hospitals, and health care providers." *Id.*

20. The 2009 H1N1 pandemic provides a good example. See *The 2009 H1N1 Pandemic*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/h1n1flu/cdc-response.htm> (last updated Aug. 3, 2010).

21. See 8 C.F.R. § 245.5 (2014).

22. See *infra* Part I.B.

Island.²³ But the current federal government's reduced ability to police the health of immigrants has not been offset by public resources sufficient to guard each state's public health interests.²⁴ Continuation of nineteenth-century government structures, which were never ideal in the first place, will not meet twenty-first century needs.

Second, the federal and state governments confront a stark division of authority with respect to non-citizens: the federal government decides which non-citizens to admit or expel, while states are charged with the cost of care for immigrants who present a public health threat once they are inside the United States. Aside from the financial cost of medical care or quarantine borne by the states, no one is responsible for organizing treatment or directing where the patient should go. The CDC can assist with this organizational burden, but it has no care facilities of its own, and has no funds to pay for (or mandate) medical care in public or private hospitals.²⁵ As I will relate,²⁶ limited resources to treat non-citizens and fragmentation of public health authority are a potentially lethal combination for all U.S. residents.

Third, exclusion of non-citizens from access to medical care on the basis of immigration status undermines public health control measures in other ways. The U.S. visa system is extraordinarily complex.²⁷ Visa status determines access both to public and private healthcare services.²⁸ Even many persons with "legal" status are effectively excluded from the basic healthcare that is essential to protect the general public.²⁹ In addition, the estimated eleven million undocumented foreign nationals currently residing in the United States³⁰ have little or no access to health care primarily because immigration law deems them to be "illegal."³¹

23. See Alan McLaughlin, *How Immigrants are Inspected at Ellis Island*, 66 POPULAR SCI. MONTHLY 357, 357–61 (1905) (describing the procedure of the examinations).

24. See *infra* Part II.

25. See *CDC Overview*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/about/pdf/resources/congressional-factsheet-final-508.pdf> (last visited Nov. 26, 2014) (showing distribution of the CDC budget).

26. See *infra* Part II.A.

27. See *infra* text accompanying notes 139–40.

28. See *infra* text accompanying notes 141–45.

29. See *infra* Part II.B.

30. See Carrie Dann, *By the Numbers: How America Tallies its 11.1 Million Undocumented Immigrants*, NBC NEWS (Apr. 11, 2013, 1:43 AM), http://nbcpolitics.nbcnews.com/_news/2013/04/11/17691515-by-the-numbers-how-america-tallies-its-111-million-undocumented-immigrants?lite (describing various efforts to estimate the number of undocumented immigrants in the United States).

31. See *infra* text accompanying notes 178–80.

The presence of these persons in communities throughout the United States proves that communicable disease control is not just a border community problem. It also proves that immigration regulation cannot keep even healthy foreign nationals out, so there is little reason to suppose that it can effectively identify unhealthy non-citizens who are already here.

Collectively, these observations at least establish that public health defense cannot safely rely upon citizenship status. All public health is essentially local, dependent upon the weakest link in a community. That link may or may not be a citizen. The historical determinants of the current state of affairs have thus far prevented fashioning a better system.

But the extent of the problem is hidden when debate over immigration reform excludes public health considerations. We are prone to view immigration and public health as separate interests, but they are in fact convergent. Re-thinking immigration law in light of public health realities is overdue. I conclude this article with a discussion of a specific public health threat—drug-resistant tuberculosis—to provide context for the problems I identify.

I.

HEALTH-BASED EXCLUSIONS IN IMMIGRATION LAW

I begin with an overview of statutory provisions related to public health in current immigration law, before turning to historical explanations for the disordered system of public health defense within the United States.

For domestic public health concerns, four categories of non-citizens are relevant: (1) foreign nationals residing abroad who are seeking permanent residence in the United States;³² (2) foreign nationals residing abroad who seek permission for a temporary visit, but not permanent residency; (3) foreign nationals already residing in the U.S. who seek to adjust their status to legal permanent resident; and (4) foreign nationals who have entered the United States illegally and thus are not subject to any kind of screening or other controls.

Under current law, foreign nationals who wish to come to the United States to reside permanently must obtain a visa and submit to an inspection, including a medical examination, in their home coun-

32. This category includes refugees who are resettled in the United States, who are usually screened for health conditions before they are resettled. *See Refugee Health Guidelines*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/immigrantrefugeehealth/guidelines/refugee-guidelines.html> (last updated Nov. 12, 2013).

try.³³ A foreign national can be denied a visa on health-related grounds.³⁴ The diseases that trigger inadmissibility in the INA are those communicable diseases designated by the Secretary of Health and Human Services.³⁵ Persons applying for permanent residence (known as a “green card”) through a U.S. consulate abroad must pay for a medical examination by a contracted physician.³⁶

Since 1967, the federal Centers for Disease Control and Prevention has been tasked with the designation of “communicable disease[s] of public health significance,” as detailed in regulations promulgated by the Department of Health and Human Services.³⁷ At present, these regulations define the term “communicable disease of public health significance” to include leprosy, syphilis, and tuberculosis, among others.³⁸ New diseases can be quickly added by executive order if they meet the criteria of a “public health emergency of international concern.”³⁹ The INA also renders inadmissible foreign nationals who are

33. 42 C.F.R. § 34.3 (2014).

34. For some green card applicants, waivers may be available despite a diagnosed condition. See U.S. CITIZENSHIP AND IMMIGRATION SERVICES, PA-2014-002, GUIDANCE FOR HEALTH-RELATED GROUNDS OF INADMISSIBILITY AND WAIVERS (2014), available at <http://www.uscis.gov/policymanual/Updates/20140128-Health-Related%20Grounds%20of%20Inadmissibility%20and%20Waivers.pdf>; U.S. CITIZENSHIP AND IMMIGRATION SERVICES, WAIVER OF COMMUNICABLE DISEASE OF PUBLIC HEALTH SIGNIFICANCE (2014), available at <http://www.uscis.gov/policymanual/HTML/PolicyManual-Volume9-PartC-Chapter2.html>.

35. RUTH ELLEN WASEM, CONG. RESEARCH SERV., R40570, IMMIGRATION POLICIES AND ISSUES ON HEALTH-RELATED GROUNDS FOR EXCLUSION (2011).

36. Non-citizens within the United States who are seeking adjustment of status to lawful permanent residence are also required to pay for a health screening. Whether the health screening takes place abroad or in the United States depends upon where the applicant is. This issue is addressed in Part I.D *infra*.

37. 42 C.F.R. § 34.2(b) (2013).

38. *Id.* For the current list of quarantinable communicable diseases, see *Prevention, Legal Authorities for Isolation and Quarantine*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/quarantine/aboutlawsregulationsquarantineisolation.html> (last visited Aug. 2, 2014).

39. A “public health emergency of international concern . . . meets one or more of the factors listed in 42 C.F.R. § 34.3(d) (2013) and for which the CDC Director has determined (A) a threat exists for importation into the United States, and (B) such disease may potentially affect the health of the American public. The determination will be made consistent with criteria established in Annex 2 of the revised International Health Regulations . . . as adopted by the Fifty-Eighth World Health Assembly in 2005, and as entered into effect in the United States in July, 2007, subject to the U.S. Government’s reservation and understandings:

- (i) Any of the communicable diseases for which a single case requires notification to the World Health Organization (WHO) as an event that may constitute a public health emergency of international concern, or
- (ii) Any other communicable disease the occurrence of which requires notification to the WHO as an event that may constitute a public health

not vaccinated against certain vaccine-preventable diseases, including polio, measles, and diphtheria.⁴⁰

The INA requires only applicants for permanent residency to submit to a medical examination.⁴¹ The same statutory authority, however, allows immigration officials to exclude on health grounds any non-citizen at the border, even if that person possesses a properly issued visa.

In fact, the INA envisions that all non-citizens seeking to enter the United States will undergo an individual health examination, although that is a practical impossibility today. First enacted in 1952, the following provision has not been amended or superseded:

“Aliens (including alien crewmen) arriving at ports of the United States shall be examined by at least one such medical officer or civil surgeon under such administrative regulations as the Attorney General may prescribe, and under medical regulations prepared by the Secretary of Health and Human Services.”⁴²

Modern realities and limited resources stand in stark contrast to this anachronistic provision.

The CDC actively operates eighteen Quarantine Stations at a small percentage of the nation’s 326 entry points.⁴³ CDC Quarantine Stations have a Public Health Service (non-physician) officer on primary duty, with a medical officer on call. The quarantine duty officer responds to notification of suspected illness by airlines, border control agents, public health agencies, and ship captains. The health officer can place a sick traveler in a room to provide isolation while negotiating with local medical care facilities for treatment. Even at entry points with a quarantine station, CDC officers are not present at border points on a daily basis.⁴⁴

emergency of international concern. HHS/CDC’s determinations will be announced by notice in the FEDERAL REGISTER.”

42 C.F.R. § 34.2(b) (2013).

40. See 8 U.S.C. 1182(a)(1)(ii) (2013); *Diseases and Vaccines Included*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/immigrantrefugeehealth/exams/diseases-vaccines-included.html> (last visited Nov. 10, 2014).

41. As previously noted, screening of refugees resettled in the U.S. involves a different process. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 32.

42. 8 U.S.C. § 1222(b) (2012). The language in the modern statute originated in Pub. L. No. 414, 66 Stat. 163 (1952).

43. Officially, there are twenty federal Quarantine Stations, but the Boston and Dallas Quarantine Stations do not have on-site staff. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 19.

44. *Quarantine Stations*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/quarantine/quarantinestations.html> (last updated January 15, 2014).

At best, the United States has a weak form of screening at border crossings and other ports of entry for the first three categories of immigrants defined above.⁴⁵ In the 2012 fiscal year, immigration authorities processed 350 million travelers to the United States.⁴⁶ Of these, fewer than 500,000 received any kind of health screening, meaning that only one of every 700 non-citizens legally entering the United States had prior medical clearance to do so.⁴⁷ For the millions of foreign nationals not required to obtain advance screening, including tourists, business travelers and daily commuters, it is unlikely that border agents will identify dangerous contagious disease even though they have some training to do so.⁴⁸ This training is infrequent and often lacks timely updates, and there are no measures in place to ensure compliance with the training.⁴⁹ Land borders are especially problematic due to the large number of persons crossing each day.⁵⁰

As a practical matter, then, public health vigilance at the nation's borders is quite limited, due to a fragmentation of authority which is embedded in our history.⁵¹ This complicated history constrains the nation's present-day capability to respond to public health threats ema-

45. See *supra* text accompanying note 32.

46. Press Release, U.S. Customs & Border Protection, CBP's Fiscal Year in Review (Feb. 1, 2013), available at http://www.cbp.gov/xp/cgov/newsroom/news_releases/national/02012013_3.xml.

47. This estimate is based upon the number of annual immigrant visas issued at foreign consulates from 2009–2013. See U.S. STATE DEPT., IMMIGRANT AND NON-IMMIGRANT VISAS ISSUED AT FOREIGN SERVICE POSTS tbl.1 (2013), available at <http://travel.state.gov/content/dam/visas/Statistics/AnnualReports/FY2013AnnualReport/FY13AnnualReport-TableI.pdf>.

48. See, e.g., U.S. CUSTOMS AND BORDER PROTECTION, INSPECTOR'S FIELD MANUAL § 9.4 (2011), available at <http://foiarr.cbp.gov/streamingWord.asp?j=237>; see also U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 17, at 43 (providing recommendations to CBP to increase its effectiveness in screening travelers).

49. See Forrest Burnson, *CBP, CDC Face Problems in Detecting Disease*, TEX. TRIB., Aug. 6, 2010, <https://www.texastribune.org/2010/08/06/cbp-cdc-face-problems-in-detecting-disease/>.

50. Airports provide a better opportunity for screening, because airlines are required to report passenger illness prior to arrival. See *Guidance for Airlines on Reporting Onboard Deaths or Illnesses to CDC*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/quarantine/air/reporting-deaths-illness/guidance-reporting-onboard-deaths-illnesses.html> (last updated Oct. 15, 2014).

51. As clarified in this Article, I do not suggest that public health can be protected with a better inspection service at the border. Very few symptoms would be pathognomonic enough to be able to diagnose upon inspection, and even then some diagnostic tools would not be available or reliable. The CDC recognizes that the volume and speed of travel prevents border inspection as the only answer to disease transportation. The CDC emphasizes understanding population movement, disease outbreaks in other countries, and outreach programs to help address the disproportionate burden of disease in some foreign-born populations. See Linda A. Selvey et al., *Evaluation of Border Entry Screening for Infectious Diseases in Humans*, EMERGING INFECTIOUS

nating abroad. These historical origins and the resulting constraints are considered below.

A. *Origins: The Attempt to Stop Contagious Disease at the Border*

The background for debate about public health federalism stems from the historical understanding that states possessed exclusive police powers with respect to the health and welfare of their citizens.⁵² The federal government, by contrast, was viewed to have no such authority within states because the health and welfare of individuals was not an enumerated power in the Federal Constitution.⁵³

As Lawrence Gostin has summarized, “The states and localities have had the predominant public responsibility for population-based health services since the founding of the republic.”⁵⁴ For state and local governments, historically and today, the “police power”—the power to enact laws and promulgate regulations to protect and promote health, safety, morals, and general welfare of the people—is primary. States possess this authority as an innate power, and, throughout our history, states have been viewed as having primary responsibility for the health and welfare of *all* persons residing within the state.⁵⁵

Understandably, state and local governments might prefer to exclude persons who, because of illness or otherwise, would become a public charge or would present health risks to others. As described in more detail below, the shift from state to federal control over immigration was based in part on a desire by states to rid themselves of public welfare burdens.

Health-based exclusions have been part of U.S. immigration law for well over a century. Federal legislation permitting the exclusion of foreign nationals on the basis of health or communicable disease dates back to the Immigration Act of 1891.⁵⁶ “Persons suffering from a

DISEASES, http://wwwnc.cdc.gov/eid/article/21/2/13-1610_article (last updated Oct. 31, 2014).

52. See LAWRENCE O. GOSTIN, *PUBLIC HEALTH LAW: POWER, DUTY, RESTRAINT* 47 (2000). Public health federalism in the United States is a topic of scholarly interest today. See, e.g., James G. Hodge, Jr., *The Role of New Federalism and Public Health Law*, 12 J.L. & HEALTH 309 (1998) (reviewing the historical federal role in public health law); Wendy E. Parmet, *After September 11: Rethinking Public Health Federalism*, 30 J.L. MED. & ETHICS 201 (2002) (exploring public health federalism, including doctrinal developments that may restrict the federal government’s ability to regulate).

53. The *Federalist Papers*, among other sources, confirms this understanding prior to ratification of the U.S. Constitution. See Parmet, *supra* note 52, at 202.

54. GOSTIN, *supra* note 52, at 47.

55. *Id.*

56. Immigration Act of 1891, Ch. 551, 26 Stat. 1084, 1084 (1891).

loathsome or a dangerous contagious disease” were included in the grounds of exclusion, and the 1891 act also required a medical inspection of all non-citizens arriving at ports of entry.⁵⁷ Other features of the law prohibited the immigration of “idiots” and “insane persons.”⁵⁸ The Nationality Act of 1952 included seven health-related grounds for exclusion.⁵⁹

From the beginning, health-based exclusions were used to weed out socially undesirable immigrants.⁶⁰ Health-based exclusions justified the banishment of homosexuals, prostitutes, and ethnic and racial groups.⁶¹ Over the course of the twentieth century (and continuing today), these health-based exclusions were also linked to poverty and the likelihood that a non-citizen might become a public charge, which remains a separate ground of exclusion.⁶²

In the early decades of the twentieth century, the U.S. Public Health Service screened all immigrants arriving at an official port of entry for contagious disease, mental illness, and physical ability to earn a living.⁶³ At New York’s Ellis Island, as elsewhere, each immigrant arriving by ship received a cursory physical exam before being admitted into the United States.⁶⁴ Shipping companies that did not

57. *Id.*

58. *Id.*

59. Immigration and Nationality Act of 1952, § 212(a), 66 Stat. 163,182; *see also* WASEM, *supra* note 35, at 2.

60. *See generally* ALAN M. KRAUT, *SILENT TRAVELERS: GERMS, GENES, AND THE “IMMIGRANT MENACE”* (1994) (describing discriminatory policies); Roxana Galusca, *From Fictive Ability to National Identity*, 72 *CULTURAL CRITIQUE* 137, 137–38 (2009) (same); Alan M. Kraut, *Comment: Health, Disease, and Immigration Policy*, *J. AM. ETHNIC HIST.*, Spring 2005, at 54 (2005) (same).

61. *See* DANIEL KANSTROOM, *DEPORTATION NATION: OUTSIDERS IN AMERICAN HISTORY* 91–130 (2007) (describing laws excluding on a racial and ethnic basis); HIROSHI MOTOMURA, *AMERICANS IN WAITING: THE LOST STORY OF IMMIGRATION AND CITIZENSHIP IN THE UNITED STATES* 39–40 (2006) (describing laws excluding convicted criminals and prostitutes); Carol Leslie Wolchok, *AIDS at the Frontier: United States Immigration Policy*, 10 *J. LEGAL MED.* 127, 127 (1989) (describing laws requiring HIV testing as a prerequisite for naturalization of homosexuals).

62. *See* AMY L. FAIRCHILD, *SCIENCE AT THE BORDERS: IMMIGRANT MEDICAL INSPECTION AND THE SHAPING OF THE MODERN INDUSTRIAL LABOR FORCE* 4–5 (2003) (exploring intent of medical inspections); *see also* U.S. CITIZENSHIP AND IMMIGRATION SERVICES, *PUBLIC CHARGE FACT SHEET* (2011), available at <http://www.uscis.gov/news/fact-sheets/public-charge-fact-sheet>.

63. *See, e.g.*, U.S. PUBLIC HEALTH AND MARINE-HOSPITAL SERVICE, *ANNUAL REPORT OF THE SURGEON GENERAL OF THE PUBLIC HEALTH AND MARINE-HOSPITAL SERVICE OF THE UNITED STATES* 197 (1911); *see also* FITZHUGH MULLAN, *PLAGUES AND POLITICS* 40–48, 92 (1989); Galusca, *supra* note 60, at 148–49. The last PHS hospitals closed in 1981 as a mandate of Congress. MULLAN, *supra*, at 201.

64. *See* McLaughlin, *supra* note 23, at 357–61 (describing the procedure of the examinations). Individual health inspections at Ellis Island between 1891 and 1930 resulted in 80,000 exclusions from entry for diseases or defects. Alison Bateman-

“weed out” sick immigrants could be required to pay for their medical care at Ellis Island as well as their transport back to the immigrants’ port of origin.⁶⁵ Medical care was provided for immigrants at one of several hospitals operated by the Public Health Service at Ellis Island Hospital, in most cases at no cost to the patient.⁶⁶



Health inspections at Ellis Island in the early 1900s. (Photo in public domain.)

House & Amy Fairchild, *Medical Examination of Immigrants at Ellis Island*, 10 AM. MED. ASS'N J. ETHICS 235, 237 (2008). Immigrants not immediately deported but who were accorded hospital treatment were often deported for inability to pay the expenses. *Id.*

65. ANN NOVOTNY, STRANGERS AT THE DOOR: ELLIS ISLAND, CASTLE GARDEN, AND THE GREAT MIGRATION TO AMERICA 23 (1971).

66. See John Parascandola, *Doctors at the Gate: PHS at Ellis Island*, 113 PUB. HEALTH REP. 83, 86 (1998).



Health inspections at Ellis Island and Angel Island in the early 1900s. (Photos in public domain.)

The federal government retains the authority to exclude non-citizens on certain defined health grounds.⁶⁷ Moreover, any chronic disease or disability can lead to exclusion on the basis of “likely to become a public charge.”⁶⁸ Unless the immigrant is independently wealthy or has relatives in the United States who are, immigration law still serves to weed out “undesirable” persons on the basis of poverty.⁶⁹

Before federal immigration health screenings began, state and local governments conducted their own.⁷⁰ They did so through the exercise of port quarantines against diseases such as cholera and yellow fever.⁷¹ As explained in the following section, the transition from state to federal immigrant inspection had its origins in disputes over quarantine authority. Those disputes, in turn, were likely informed by the desire to assert a central, national authority in the wake of the extreme sectionalism that provoked and characterized the Civil War.

B. State Versus Federal Power in Public Health and Quarantine

In the late nineteenth and early twentieth centuries, U.S. Public Health Service officers sometimes deferred to their state counterparts out of staffing necessity. In part, this was because the U.S. Public Health Service had its origin in quarantine of contagion, not individual inspection of immigrants.⁷² But through the development of a federal quarantine power, the U.S. government took over from state health inspectors the exclusive authority to admit or deny entry to foreign nationals.⁷³

The federal government’s assumption of primary responsibility for border control late in the nineteenth century merged two functions: preventing importation of disease through quarantine authority, and weeding out “undesirables” through immigration restrictions imposed

67. 8 U.S.C. §1182(a)(1) (2013).

68. See U.S. CITIZENSHIP AND IMMIGRATION SERVICES, *supra* note 62 (describing conditions which lead to a determination that someone is a public charge).

69. See 8 U.S.C. § 1182(a)(4) (2013) (denying admission for an alien who is or is likely at any time to become a public charge).

70. Felice Batlan, *Law in the Time of Cholera: Disease, State Power and Quarantines Past and Future*, 80 TEMP. L. REV. 53, 64 (2007).

71. *Id.*

72. See *id.* at 110.

73. Historically, quarantine at seaports was the most prominent example of state control over immigration. However, states had long regulated conditions of citizenship for foreign nationals already within their borders. One example was restrictions on property rights. See, e.g., Polly J. Price, *Alien Land Restrictions in the American Common Law: Exploring the Relative Autonomy Paradigm*, 43 AM. J. LEGAL HIST. 152, 152–53 (1999) (describing exclusion of non-citizens from landholding).

by Congress.⁷⁴ The preceding section suggests that this dual role encouraged an overly aggressive application of health-based exclusions for immigrants. At the same time, Congress directed some forms of health-based exclusions precisely because it doubted the constitutional validity of the new federal quarantine powers.⁷⁵

A key to understanding the modern fragmentation of public health defense is the limited scope of federal quarantine authority. In the late nineteenth and early twentieth centuries, the conflict occurred most starkly at the nation's borders. As related below, states reluctantly, and slowly, ceded control over maritime quarantine to the federal government. As they did so, Congress began to specify health criteria (along with other requirements) for non-citizens arriving at the seaports formerly policed by state and municipal authorities. I describe these developments in order to elucidate the intersection between temporary contagion quarantine and health-based exclusions in federal immigration law.

The modern division of quarantine authority among federal, state, and local governments can be traced historically to important precedents resulting from yellow fever outbreaks in the southern United States in the nineteenth century.⁷⁶ This era was marked by public panic and the reflexive use of geographic quarantines by state and local governments.⁷⁷ These circumstances led to enhanced federal quarantine authority, as well as practical limits to state authority over border entry.

In the late nineteenth century, state and local health authorities exercised inspection and quarantine authority at ports of entry and border crossings.⁷⁸ Passengers and crew entering these ports were subject to detention for “suspicious sickness” on board their ship or at the point of landing.⁷⁹ Refusing entry to foreign ships—with passengers and crew—came at the order of a state or local health official.⁸⁰

74. See *supra* notes 60–62 and accompanying text.

75. See W.E. Walz, *Federal Regulation of Quarantine*, 4 MICH. L. REV. 189, 191–92 (1906).

76. This development is described generally in Batlan, *supra* note 70 (describing historical conflicts between state, local, and federal governments over quarantine). My contribution in this Article is to explicitly link developments in immigration law with quarantine debates surrounding yellow fever epidemics in the late nineteenth century, a topic I will further explore in a forthcoming article.

77. See *id.* at 63–66.

78. See Margaret Warner, *Local Control Versus National Interest: The Debate over Southern Public Health, 1878–1884*, 50 J.S. HIST. 407, 407–08 (1984).

79. See, e.g., *Report from Fort Monroe, Va.—Case of Suspicious Sickness on Steamship Elswick Lodge*, 21 PUB. HEALTH REP. 1007 (1881).

80. See Warner, *supra* note 78, at 407–08.

These quarantines by local officials aimed to stem the terror of yellow fever epidemics, a frequent occurrence in southern port cities in the nineteenth century.⁸¹ The severity of yellow fever epidemics and the resulting economic impact caught the attention of Congress in the 1870s. Proponents of a national quarantine measure, known as the “Yellow Fever Bill,” justified the federal government’s intervention under its constitutional right to regulate commerce and to protect the country from foreign “invader[s].”⁸² Opponents of the bill argued that it was unconstitutional and a violation of state rights.⁸³

Ultimately, a much weaker bill, one that satisfied some opponents of federal power, created a National Board of Health in 1879.⁸⁴ The Board’s functions were limited to advising state and local boards of health, publishing health information, and investigating public health issues.⁸⁵ Even with the weakened version, health officials in Louisiana, Georgia, and Alabama objected to the National Board’s “interference” in local affairs.⁸⁶ A memorandum to Congress from Alabama stated that it was “neither wise nor prudent for us to entrust the administration of quarantine to the hands of any other health authorities than those who are of our own appointment and directly responsible to our own people.”⁸⁷ Further, “the State cannot afford to allow this large grant of power, so nearly affecting the welfare of our people, to be placed in the hands of the National Board of Health, or of any other agent of the federal government.”⁸⁸ Congress permitted the Board to expire in 1883 at the conclusion of its initial appropriations.⁸⁹

Although the National Board of Health was short-lived, it did set a precedent for future public health efforts by the federal government. Congress had given the Board authority to provide money to state and local health boards “and to assume quarantine powers when states did

81. *See generally* KHALED J. BLOOM, *THE MISSISSIPPI VALLEY’S GREAT YELLOW FEVER EPIDEMIC OF 1878* (1993); JAMES L. DICKERSON, *YELLOW FEVER: A DEADLY DISEASE POISED TO KILL AGAIN* (2006); JOHN DUFFY, *SWORD OF PESTILENCE: THE NEW ORLEANS YELLOW FEVER EPIDEMIC OF 1853* (1966); MARGARET HUMPHREYS, *YELLOW FEVER AND THE SOUTH* (1992).

82. *See* Warner, *supra* note 78, at 412.

83. *Id.*

84. National Quarantine Act of 1878, ch. 66, 20 Stat. 37 (1878).

85. Warner, *supra* note 78, at 413.

86. *Id.* at 426.

87. *Id.* (quoting JEROME COCHRANE ET AL., *TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA* 124 (1880)) (internal quotation marks omitted).

88. *Id.* (quoting COCHRANE ET AL.) (internal quotation marks omitted).

89. *See id.* at 413–14.

not appear competent or willing to do so.”⁹⁰ As a condition of receipt of federal funds, state and local agencies were required to adopt uniform standards (provided by the Board) for any geographic quarantine they put in place.⁹¹ One historian concluded that “[t]here was considerable confusion among state and local boards over the limitations of the National Board’s powers,” providing as an example that the “National Board could not intervene until local boards had submitted itemized requests for funds.”⁹² Future federal grants to state health agencies, likewise, would often condition receipt of funds for specified uses or with conditions attached.⁹³

By 1893, the federal government’s Marine Hospital Service⁹⁴ was given explicit statutory authorization to use interstate quarantine powers to prevent the introduction and spread of cholera, yellow fever, smallpox, and plague, with jurisdiction soon extended to include quarantine powers for all infectious and contagious diseases.⁹⁵ These powers were to be exercised “in cooperation” with state and local health agencies⁹⁶ but federal officials did not intervene in the absence of a formal request from a state.

As a general rule, geography determined states’ views on federal intervention: Coastal areas favored federal intervention to prevent what they considered economic embargoes by inland areas; inland areas asserted states’ rights. Ironically, southern senators were key in allowing the National Health Board to lapse and preventing consideration of a national quarantine law.⁹⁷ The proposed statute, however, reflected the modern law of federal quarantine authority—plenary authority at land borders, with seaport quarantine facilities taken over from state operation.⁹⁸

But before a federal takeover occurred, there was a significant call for Congress to pass laws setting the ground rules for these quarantines, even if they continued to be operated by state and local

90. *Id.* at 413.

91. *Id.*

92. *Id.* at 414.

93. This is still the model used by the U.S. Public Health Service. *See* 42 U.S.C. § 247B-6 (2013) (stating national strategy for combatting tuberculosis).

94. The Marine Hospital Service was originally established by Congress in 1798 to care for merchant seamen, and is viewed as a precursor to the U.S. Public Health Service. *See Legislative Chronology*, NATIONAL INSTITUTES OF HEALTH, http://history.nih.gov/research/sources_legislative_chronology.html (last updated June 16, 2009).

95. Act of Feb. 15, 1893, ch. 114, § 3, 27 Stat. 449, 450 (repealed 1944).

96. *Id.*

97. *See* Warner, *supra* note 78, at 413–14.

98. *See* GOSTIN, *supra* note 52 (describing modern law of federal quarantine authority).

officials. “[N]ot a few leading men of the South” argued that the federal Constitution must be amended in order to give Congress direct quarantine power.⁹⁹ Others, including W.E. Walz, writing in 1906, argued that Congress already possessed national quarantine authority.¹⁰⁰ Walz urged passage of national quarantine legislation—a step that would require federal takeover of ports of entry (and inspection of passengers)—fearing that “the states directly affected by the danger [of infection] will naturally do as they have always done[:] regulate it rapidly, hurriedly, in their own way, and with a view to their own interests, with the legislative mind more or less affected by the general panic.”¹⁰¹

The U.S. Supreme Court addressed quarantine in a case involving a yellow fever epidemic in New Orleans in the 1880s. In *Morgan’s Steamship v. Board of Health*, the Supreme Court stated: “Whenever Congress shall undertake to provide for the commercial cities of the United States a general system of quarantine, or shall confide the execution of the details of such a system to a National Board of Health, or to local boards, as may be found most convenient, all state laws on the subject will be abrogated, at least so far as the two are inconsistent,” at least implying that the federal government had the authority to establish “a general system of quarantine” under the Commerce Clause.¹⁰²

99. Walz, *supra* note 75, at 191–92. (“If the police power, so far as it affects quarantine and health laws, has not been surrendered to the Federal Government at the time of its formation, has it not a right to take charge of the quarantine service if asked to do so by the state legislatures? And should it not accept this charge if tendered? All that can be said in reply to this view is that the state legislatures cannot surrender this power if they would, and that the Federal Government, however much it might feel inclined to do so, cannot accept such a surrender. It is just as little possible for the states to do this as it is possible for them to enlarge the maritime jurisdiction of the United States. The only legitimate method of accomplishing such a result would be an amendment to the Constitution made in accordance with the provisions of that instrument.”).

100. *Id.* at 195 (“If quarantine against such dread diseases as yellow fever, cholera, and the bubonic plague is essentially a national measure for the protection of the whole country and not merely a local matter of no concern to the people except those residing in the infected port or state, it would follow . . . that the states cannot safely legislate in this matter; and that if there is to be any satisfactory regulation of interstate commerce with a view to meeting the inevitable dislocation of trade in a time of general panic incident to the sudden appearance of infectious diseases of this nature, Congress is bound to deal with this aspect of the question, not merely because the states cannot effectively do it, but because such regulation is an imperative necessity for the entire nation, North and South, and in the interest not only of interstate commerce itself but also, incidentally, of the national health.”).

101. *Id.* at 196–97.

102. *Morgan’s Louisiana & T.R. & S.S. Co. v. Bd. of Health*, 118 U.S. 455, 465 (1886).

Created by Congress in 1912 as a renamed version of the earlier Marine Hospital Service,¹⁰³ the U.S. Public Health Service's primary mission was preventing contagious disease from entering the country via immigration and trade.¹⁰⁴ Congress assisted this transformation with the Public Health Service Act of 1944.¹⁰⁵ The 1944 act "clearly established the federal government's quarantine authority for the first time."¹⁰⁶ The act gave the U.S. Public Health Service responsibility for "preventing the introduction, transmission, and spread of communicable diseases from foreign countries into the United States."¹⁰⁷ While the act is said to be the "modern statutory basis for federal power in a health crisis,"¹⁰⁸ that authority is limited by the continuation of primary state authority over public health within its borders.¹⁰⁹

The federal government's quarantine authority had been a frequent source of conflict with state and local governments throughout the nineteenth century and into the early decades of the twentieth.¹¹⁰ Prior federal quarantine law emanated from the theory that the federal government was already responsible for customs collections and related inspections at the nation's borders.¹¹¹ In the 1944 act, by contrast, the federal government's quarantine power was clarified to extend to interstate transmission of communicable diseases, presuma-

103. Act of Aug. 14, 1912, ch. 288, 37 Stat. 309 (repealed 1944). The U.S. Public Health Service was authorized in 1912, among other tasks, to "study and investigate the diseases of man and conditions influencing the propagation and spread thereof [and] issue information in the form of publications for the use of the public." *Id.* § 1.

104. HUMPHREYS, *supra* note 82, at 69–70.

105. Public Health Service Act, ch. 373, 58 Stat. 682 (1944) (codified as amended at 42 U.S.C. §§ 201–300mm-61 (2013)).

106. *History of Quarantine*, CTRS. FOR DISEASE CONTROL & PREVENTION <http://www.cdc.gov/quarantine/HistoryQuarantine.html> (last updated Mar. 10, 2014).

107. *Id.*

108. John Thomas Clarkson, Note, *Phase Six Pandemic: A Call to Re-Evaluate Federal Quarantine Authority Before the Next Catastrophic Outbreak*, 44 GA. L. REV. 803, 816 (2010).

109. See Philip R. Lee, *Reinventing the Public Health Service: A Look in a 5-Year-Old Mirror*, 109 PUB. HEALTH REP. 466, 466 (1994).

110. See generally Batlan, *supra* note 70 (describing historical conflicts between state, local, and federal governments over quarantine). I have supplemented Batlan's important article with other historical sources to emphasize the fragmentation of quarantine authority as an important precursor to changes in immigration law. My portrayal of the development of federal immigration law thus differs from explanations that prioritize race and morality. See generally Kerry Abrams, *Polygamy, Prostitution, and the Federalization of Immigration Law*, 105 COLUM. L. REV. 641 (2005); Matthew Lindsay, *Preserving the Exceptional Republic: Political Economy, Race, and the Federalization of American Immigration Law*, 17 YALE J.L. & HUMAN. 181 (2005).

111. See H.R.J. Res. 42, 39th Cong., 14 Stat. 357 (1866). In 1866, Congress had authorized the Secretary of the Treasury to issue regulations it "deemed necessary and proper, in aid of State or municipal authorities" with respect to quarantine. *Id.*

bly under a Commerce Clause theory.¹¹² The act authorized the Surgeon General to “make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States” as well as “from one State or possession into any other State or possession.”¹¹³ The statutory language created broad authority to attack the conditions under which an epidemic might be introduced within the nation.

C. *Federal Quarantine Authority and its Relation to Health-Based Immigration Exclusions*

As we have seen, prior to congressionally directed, health-based exclusions for individual immigrants, the federal government began exercising health inspection authority at U.S. borders and ports of entry as a function of maritime quarantine. By 1925, a writer in *Public Health Reports* noted an additional role:

The enforcement of the maritime quarantine laws and the regulations issued thereunder is a strictly Federal function, performed by the United States Public Health Service. . . . Of [] importance from the standpoint of the prevention of the introduction of exotic diseases is the inspection of arriving aliens. . . . The medical inspections under these laws by the Public Health Service is [also] a Federal function, the object being to prevent the introduction of exotic diseases and to exclude the mentally unfit who will endow their offspring with an unstable mentality.¹¹⁴

The transfer of maritime and quarantine authority from states to the federal government, however, did not resolve the conflict over the exercise of the police power at land borders. The following exchange of telegrams in 1903, between a state health officer and two members of the U.S. Public Health Service, illustrates the transition period.¹¹⁵ In these telegrams, Tabor, a state health officer, and Hume and Hamilton, both PHS officers in Texas, report to Wyman, the Public Health Service director in Washington, DC, concerning suspected cases of yellow fever in Mexico which they feared could spread across the border:

112. Public Health Service Act, ch. 373, § 311, 58 Stat. 682, 703.

113. Public Health Service Act, § 361.

114. J.W. Kerr, *The Legal Authority and Limitations Governing Federal Public Health Activities*, 40 PUB. HEALTH REP. 1677, 1680 (1925). As Roxana Galusca noted, the emphasis on mental defect coincided with the eugenics movement in the United States. See Galusca, *supra* note 60, at 150–51.

115. *Spread of Yellow Fever in State of Tamaulipas, Mexico—Necessity for Quarantine*, 18 PUB. HEALTH REP. 1586, 1586 (1903).

Hume: “County and State anxious over fever situation. Four additional guards and camp outfit absolutely necessary for protection. Will put all suspects in camp.”¹¹⁶

Tabor: “Thanks for your assistance. Texas Rangers will aid us on border, as well as other guards. Quarantine at Laredo is perfect. I was there yesterday. Saw one case yellow fever. Mexican officials claim epidemic of dengue, but it is evidently yellow fever. No cases on Texas side.”¹¹⁷

Hamilton: “County judge and postmaster Zapata County telegraphs this morning: “People from Laredo, Mexico, attempting to cross at various points. Need at least four more guards for few days. Request authority to employ guards.”¹¹⁸

Hamilton: “[G]uard line covers about 300 miles river. . . . Two guards are needed at 15 miles from Laredo to watch 5 miles of river where are 3 skiffs. The vice-consul reports dengue epidemic raging Nuevo Laredo, Mexico: few deaths; believes no cases yellow fever exist. This is the situation at the present writing, but it may change at any moment.”¹¹⁹

Hamilton: “Laredo, Mexico, authorities claim yellow fever does not exist. Case seen now convalescent. Officials report no suspicious cases there. Epidemic dengue acknowledged. Total guards, including customs, immigration, State, county, city and Bureau, 52, all under supervision of customs inspectors, cover 100 miles frontier.”¹²⁰

This exchange illustrates the interaction between federal and state medical personnel as well as federal and state police authority. Their focus was contagion, not the citizenship status of border crossers. The episode also provides an example of migrants attempting to enter the United States to escape an epidemic somewhere else.

Episodes such as this provide ample evidence that as of the early 1900s, transfer of quarantine authority to the federal government was as yet incomplete even on the borders. Transfer to federal authority was a slow process requiring purchase of existing state quarantine inspection facilities or construction of new facilities. In the interim, state health officials continued to shoulder primary responsibility, “aided”

116. *Guards and Camp Equipment at Eagle Pass*, 18 PUB. HEALTH REP. 1586, 1586 (1903).

117. *Quarantine on Texas Border—Yellow Fever at Nuevo Laredo*, 18 PUB. HEALTH REP. 1586, 1586–87 (1903).

118. *Attempts at Laredo, Mexico, to Break Through River Cordon*, 18 PUB. HEALTH REP. 1587, 1587 (1903).

119. *Additional Guards for Zapata County*, 18 PUB. HEALTH REP. 1587, 1587 (1903).

120. *Quarantine at Laredo, Tex.—Epidemic Dengue*, 18 PUB. HEALTH REP. 1587, 1587 (1903).

or advised by federal public health service officers.¹²¹ The state health official in charge could detain all passengers for “suspicious sickness” on board a ship.¹²²

While federal government authority at borders and ports of entry was still contested, Congress assumed primary authority over immigration, including various iterations of health-based exclusions as described above. In the early decades of the twentieth century, immigration officials provided basic healthcare and treatment for immigrant arrivals through its remaining “marine” hospitals or existing facilities taken over from a local government.¹²³ At Ellis Island, the U.S. Public Health Service hospital consisted of twenty-nine buildings where immigrants could receive healthcare during quarantine.¹²⁴ This healthcare for sick immigrants, however, clashed with the view of the U.S. Commissioner General of Immigration, who stated in 1902 that the United States must not become “the hospital of the nations of the earth.”¹²⁵

In 1889, the U.S. Supreme Court ruled that the federal government, not the states, had absolute jurisdiction over the nation’s sovereign boundaries, a pronouncement that ultimately provided the foundation for the federal government’s public health exclusions.¹²⁶ The federal government today exercises this “plenary power” through its immigration laws, supplemented by a generalized and weak quar-

121. *See Maritime Quarantine Regulations with Regard to Yellow Fever*, 18 PUB. HEALTH REP. 463, 463 (1903) (presenting regulations adopted at a conference between state quarantine authorities from Louisiana and Texas and municipal quarantine authority from Mobile, Alabama).

122. *Cf. id.* (providing for vessels from Mexico and Cuba to be detained and providing for an exception if there is no “suspicious sickness on board or in port”).

123. For example the federal government bought the first marine hospital from Virginia in 1801. S.L. Christian, *Marine Hospitals and Beneficiaries of the Public Health Service*, 51 PUB. HEALTH REP. 799, 800 (1936). The author noted that, as of 1936, the U.S. Public Health Service operated twenty-six marine hospitals. *Id.* at 802. He further noted: “In addition to these hospitals, the Public Health Service also operates 126 outpatient offices, or contract hospital facilities, in which 36 full-time and 110 part-time physicians and 51 full-time and part-time employees are on duty.” *Id.* at 803. These hospitals were available for treatment of immigrants. *Id.* at 806. *See also* MULLAN, *supra* note 63, at 40–48 (describing medical inspections at Ellis Island).

124. *See Unrestored Ellis Island Buildings Opening for the First Time in 60 Years*, NAT’L PARK SERV. (Sept. 25, 2014), <http://www.nps.gov/elis/parknews/south-side-tours-begin.htm> (“In its day, the 29-building complex was the largest U.S. Public Health Service Institution in the United States.”). Ellis Island served as an immigrant processing center until it was closed in 1954. Galusca, *supra* note 60, at 137. More than 350 births took place in Ellis Island hospitals. Parascandola, *supra* note 66, at 86.

125. KRAUT, *supra* note 60, at 377.

126. *Ping v. United States (Chinese Exclusion Case)*, 130 U.S. 581, 604, 609 (1889).

antine authority.¹²⁷ Despite this power, it no longer has any medical-care facilities for travelers entering the United States, or funds to pay for treatment.

D. Modern Significance of Disputes over Quarantine, Health Exclusions, and Immigration

As the number of persons entering the United States increased dramatically in the twentieth century, the federal government gradually eliminated individual health screenings at border entry points.¹²⁸ Health screenings, instead, were transferred to U.S. consulates abroad, and are now required for only a small percentage of U.S. visitors—those seeking permanent residence or refugees who are to be resettled in the United States.¹²⁹ Thus, most travelers to the United States, including returning U.S. citizens, have no health examination prior to or upon arrival.¹³⁰

The abandonment of individual inspection for all people entering the country has removed at least a partially effective public health defense mechanism, and in doing so imposed a greater burden on state and local public health agencies.¹³¹ Today, the federal government provides no health care for foreign nationals, except for those temporarily in immigration detention or serving time in a federal prison.¹³² Otherwise, medical care necessary to prevent larger public health crises is a state responsibility.

Oddest of all, given the original purpose of health exclusions, the majority of people who are required to undergo a physical examination are already present in the United States. Under the INA, many foreign nationals may apply for “adjustment of status” in the United

127. For a general background on the “plenary power” doctrine as it applies to immigration authority, see Gabriel J. Chin, *Chae Chan Ping and Fong Yue Tin: The Origins of Plenary Power*, in IMMIGRATION STORIES 7 (David A. Martin & Peter Shuck, eds., 2005); Stephen H. Legomsky, *Immigration Law and the Principle of Plenary Congressional Power*, 1984 S. CT. REV. 255 (1984).

128. This process was gradual but had begun in the 1930s. Writing in 1936, one author noted: “During late years much of the work of examining immigrants has been performed by officers of the Public Health Service detailed to serve as medical advisers to the American consuls in foreign ports. This has resulted in a great decrease in the number of arriving aliens who would otherwise make a trip to our country only to be detained and deported.” Christian, *supra* note 123, at 806.

129. *Id.*

130. *But see The Immigrant Visa Process*, U.S. DEP’T. OF STATE, <http://travel.state.gov/content/visas/english/immigrate/immigrant-process/interview/prepare/medical-examination.html> (last visited Nov. 15, 2014) (requiring a medical examination for immigrant visa applicants).

131. See Bateman-House & Fairchild, *supra* note 65.

132. See Part II.C *infra*.

States, rather than first returning to their home countries to undergo the medical screening that is required for persons applying abroad.¹³³ Health inspections taking place after years of presence in the United States do not further the original aim of preventing the introduction of disease from abroad, a key part of the compromise with states to take over quarantine authority as part of immigration control. These health exclusions, furthermore, identify communicable diseases that are already present in the United States or are rare abroad (such as leprosy).

Nonetheless, there are significant public health benefits resulting from medical screenings for visa applicants already residing in the United States. Tuberculosis is an important example, as explained further in Part III. Latent TB can be identified and treated to circumvent progression to an infectious stage. Often, a visa applicant might not be aware that he or she is infected by TB until medical screening reveals it. Health screenings prior to arrival in the United States also benefit refugees who are resettled here, as well as the communities where they will reside.¹³⁴

But perhaps most importantly, health exclusions as a central feature of the INA mask the added costs to state and local governments for all foreign nationals present in the United States. Debates over the net public cost or benefit of immigration routinely ignore this added public health burden.¹³⁵

To be clear, I do not propose that health inspections should be extended to all visitors, even if that were administratively feasible. With current technology, risk assessment based on conditions in other countries is likely the only viable administrative approach for border screening.¹³⁶ Nationality profiling, then, may be unavoidable. Despite

133. *See id.*

134. The CDC's Division of Global Migration and Quarantine promulgates regulations related to health screening and medical intervention for refugees who are to be resettled in the United States. More than 50,000 refugees are resettled in the United States each year, as authorized by the Immigration and Nationality Act and by Presidential Order. *Immigrant and Refugee Health*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/immigrantrefugeehealth/> (last updated Dec. 5, 2013).

135. *But see* Daniel T. Griswold, *Immigration and the Welfare State*, 32 *CATO J.* 159, 169–70 (2012).

136. For example, the CDC monitors infectious and endemic disease in other countries, and this information can be used for closer scrutiny of groups of travelers arriving at U.S. airports or seaports. *See* CTRS. FOR DISEASE CONTROL & PREVENTION, *FINAL RULES FOR CONTROL OF COMMUNICABLE DISEASE: INTERSTATE AND FOREIGN* (last updated Mar. 10, 2014), <http://www.cdc.gov/quarantine/final-rules-control-communicable-diseases.html>. During the 2014 Ebola epidemic in West Africa, federal immigration officials individually screened only persons travelling from countries where Ebola was present, and required travelers from these areas to arrive at one of five designated U.S. airports. CTRS. FOR DISEASE CONTROL & PREVENTION, *ENHANCED*

our much stronger medical understanding of communicable disease today, the legal safeguards against the spread of disease have become less effective over time.

The development of health-based exclusions from quarantine authority also exacerbated the fragmentation of public health authority today. This fragmentation poses tremendous obstacles to the control of public health threats arising outside of U.S. borders as well as in the interior, the subject of the next section.

II.

UNARMED SENTINELS: IMMIGRATION, FRAGMENTATION AND PREVENTION

The advent of health-based exclusions in immigration law highlights the vulnerability inevitable at any boundary. As noted in Part I above, our government structures for both immigration and public health were established in the nineteenth century. We continue them as a matter of course, with one important exception: the federal government no longer operates hospitals or other facilities for the care of sick immigrants at ports of entry. The federal government now has no resources to pay for healthcare for foreign nationals.¹³⁷ This may be because the historical purpose of its power over immigration was not to treat or handle cases but to turn them away. But at the same time, the U.S. Public Health Service provided humanitarian aid for immigrants at hospitals it once administered. At present, federal immigration law sets the terms for admission into the country without any public health regulatory or financial element.

An additional way that immigration law ignores public health concerns stems from the extraordinary complexity of immigration status. There are nearly 200 different types of visas for non-citizens.¹³⁸ Each visa category carries specific, often complex requirements defined in the INA and, as a result, immigration attorneys are often necessary to navigate a path for legal status in the United States. The U.S.

EBOLA SCREENING TO START AT FIVE U.S. AIRPORTS AND NEW TRACKING PROGRAM FOR ALL PEOPLE ENTERING U.S. FROM EBOLA-AFFECTED COUNTRIES, <http://www.cdc.gov/media/releases/2014/p1008-ebola-screening.html>.

137. Limited exceptions are discussed later. See *infra* text accompanying notes 194–196.

138. See *Directory of Visa Categories*, U.S. DEP'T OF STATE, <http://travel.state.gov/content/visas/english/general/all-visa-categories.html> (last visited Nov. 15, 2014). In 2012, 8.9 million foreign nationals received visas to enter the United States temporarily, and 482,000 received visas for permanent residence. *Visa Statistics*, BUREAU OF CONSULAR AFFAIRS, U.S. DEPT. OF STATE, <http://travel.state.gov/content/visas/english/law-and-policy/statistics.html> (last visited January 12, 2014).

State Department even provides a “Visa Wizard” for online advice about eligibility for the various categories of legal entry.¹³⁹

From a public-health perspective, a great deal hinges on an individual’s visa category. The distinctions are important primarily for access to health care and preventive services—only lawful permanent residents are eligible for most government benefits, and only after at least five years of residence in the United States.¹⁴⁰ Some of the temporary employment visas can lead directly to permanent residence status, while other categories prohibit that transition, at least without returning to the home country for visa processing (and health screening) at a U.S. consulate.¹⁴¹ Visas may also be issued on humanitarian grounds to obtain health care in the United States, contingent upon proof of ability to pay for that healthcare.¹⁴²

Thus, the millions of foreign nationals legally present in the United States are placed into complex and often confusing categories with respect to rights and obligations.¹⁴³ They rarely have access to employment-based health insurance and are often not entitled to government safety-net programs.¹⁴⁴ These restrictions are among the

139. See *Visa Wizard*, U.S. DEPT. OF STATE, <http://travel.state.gov/content/visas/english/general/visa-wizard.html> (last visited Nov. 15, 2014).

140. See U.S. DEPT. HEALTH & HUM. SERVS., *Overview of Immigrants’ Eligibility for SNAP, TANF, Medicaid, and CHIP* (2012), available at <http://aspe.hhs.gov/hsp/11/ImmigrantAccess/Eligibility/ib.pdf>; *Immigrants and the Affordable Care Act* (2014), NAT’L IMMIGRATION LAW CTR., <http://www.nilc.org/immigrantschr.html> (last updated Jan. 2014). In addition, Medicaid in many states can cover emergency medical services even for those whose immigration status keeps them from getting preventive services, a last-resort and costly result of denying coverage for preventive care. Phil Galewitz, *Medicaid Helps Hospitals Pay for Illegal Immigrants’ Care*, KAISER HEALTH NEWS (Feb. 12, 2013), <http://kaiserhealthnews.org/news/medicaid-illegal-immigrant-emergency-care/>.

141. See THOMAS ALEXANDER ALEINIKOFF ET AL., *IMMIGRATION AND CITIZENSHIP* 379–82, 402–04 (7th ed. 2011).

142. See *Humanitarian Parole*, U.S. CITIZENSHIP & IMMIGRATION SERVS., <http://www.uscis.gov/humanitarian/humanitarian-parole> (last updated Oct. 1, 2014); *Visitor Visa for Medical Treatment in USA*, IMMIHELP, <http://www.immihelp.com/visitor-visa/visitor-visa-usa-medical-treatment.html> (last visited Nov. 15, 2014) (noting that persons with a contagious disease may not be eligible).

143. In 2010, the total number of temporary legal visitors to the United States was approximately 160 million with an estimated additional 113.5 million admissions—certain Canadian and Mexican citizens who are excused from I-94 reporting requirements. Jeanne Batalove & Alicia Lee, *Frequently Requested Statistics on Immigrants and Immigration in the United States*, MIGRATION POL’Y INST. (Mar. 21, 2012), <http://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states-0/#8e>.

144. See U.S. DEPT. HEALTH & HUM. SERVS., *supra* note 140.

“second-order structure of immigration law,” a paradigm first proposed by Eric Posner and Adam Cox.¹⁴⁵

Those without legal status pose the greatest public health risk, not because they arrived with a contagious disease (although some may have), but because they consider it strongly in their interest to avoid the public health radar screen.¹⁴⁶ Illegal immigration, resulting from both visa overstays and surreptitious border entry, is a significant side effect of backlogs and complexity in the U.S. visa system.¹⁴⁷ This illegal immigration is often undertaken for family reunification. Labor needs in the United States also encourage undocumented workers.¹⁴⁸ Both of these are motivations that will typically override health concerns among prospective illegal arrivals.

Public health departments in the United States struggle to provide effective health measures even for U.S. citizens. As discussed below, state, local, and tribal public health departments are hopelessly fragmented in jurisdiction as well as technical expertise and financial capability. It remains to demonstrate why this matters, and how the separation of federal immigration authority from state public health responsibility thwarts effective response to contagious disease.

A. *Fragmentation and Public Health Funding in the United States*

The federal government’s modern actions in the area of public health are based primarily upon the U.S. Constitution’s commerce clause,¹⁴⁹ the tax clause (spending to “provide for the common Defense and General Welfare of the United States”),¹⁵⁰ and the national

145. See Adam B. Cox & Eric A. Posner, *The Second-Order Structure of Immigration Law*, 59 STAN. L. REV. 809 (2007) (“Second-order design issues concern the legal institutions that are used to implement the first-order policy goals. Focusing on second-order design raises the question of how to screen applicants for admission so that the desired types are admitted and others are excluded.”).

146. See Jennifer Medina & Abby Goodnough, *States Struggle to Add Latinos to Health Rolls: Among Immigrants, a Fear of Deportation*, N.Y. TIMES, Feb. 13, 2014, <http://www.nytimes.com/2014/02/14/us/states-struggle-to-add-latinos-to-health-rolls.htm> (identifying fear of deportation among Latinos).

147. See Daniel Gonzalez, *Millions of Immigrants Waiting for Greencards*, USA TODAY, June 23, 2013, <http://www.usatoday.com/story/news/nation/2013/06/23/millions-of-immigrants-waiting-for-green-cards/2450461/>.

148. See Mary Giavagnoli, *Overhauling Immigration Law: A Brief History and Basic Principles of Reform*, IMMIGRATION POLICY CENTER (Feb. 14, 2013), <http://www.immigrationpolicy.org/perspectives/overhauling-immigration-law-brief-history-and-basic-principles-reform>.

149. U.S. CONST. art. I, § 8, cl. 3 (“[The Congress shall have Power] To regulate Commerce with foreign Nations, and among the several States, and with the Indian tribes”).

150. U.S. CONST. art. I, § 8, cl. 1 (“The Congress shall have Power To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common

defense responsibility to protect the nation from external threats.¹⁵¹ State and local governments are responsible for population-based health services, including surveillance and treatment of contagious disease.¹⁵²

The nation's primary public health authority, therefore, is divided among 2684 state, local, and tribal health departments.¹⁵³ These health departments are charged with the prevention and control of communicable disease. Most health departments investigate contagious disease outbreaks, coordinate control efforts, and provide public information.

Key responsibilities include immunizations for children and screening and treatment for various sexually transmitted diseases. Each state requires private physicians and other health providers to report to the local health department the names of patients diagnosed with or suspected of having a listed contagious disease or medical condition.¹⁵⁴ Health departments provide screening, drug treatment, and health professionals who oversee individual treatment plans. Tuberculosis control may be the most important of these responsibilities.¹⁵⁵

State and local health departments also inspect restaurants and other commercial establishments and possess authority to abate a public nuisance—a power over property similar to eminent domain but without the requirement to compensate a property owner for actions taken for reasons of public health.¹⁵⁶

For control of dangerous contagious disease, the most important legal authority is a state's power to issue quarantine and isolation orders.¹⁵⁷ Isolation and quarantine are public health practices used to stop or limit the spread of disease: *Isolation* is used to separate *ill* persons who have a communicable disease from those who are

Defence and general Welfare of the United States"). This authority is the modern basis for federal grants to state and local health departments to encourage compliance with public health standards.

151. Several provisions of the U.S. Constitution together provide the authority to "provide for the common defense," a phrase contained in the Constitution's preamble.

152. GOSTIN, *supra* note 52, at 47.

153. See CAROLYN J. LEEP, NATIONAL ASSOCIATION OF COUNTY & CITY HEALTH OFFICIALS, THE LOCAL HEALTH DEPARTMENT WORKFORCE: FINDINGS FROM THE 2005 NATIONAL PROFILE OF LOCAL HEALTH DEPARTMENTS STUDY 1 (2007), available at http://www.naccho.org/topics/workforce/upload/LHD_WorkforceFinal.pdf.

154. See, e.g., *County of Los Angeles: Reportable Diseases and Conditions*, DEP'T OF PUB. HEALTH (Jul. 2012), <http://publichealth.lacounty.gov/acd/reports/DiseaseList2012.pdf>. See generally JAMES G. HODGE, JR., PUBLIC HEALTH LAW IN A NUTSHELL 152–55 (2014) (describing surveillance and reporting).

155. See *infra* Part III.

156. See generally GOSTIN, *supra* note 52, at 4–18.

157. *Id.* at 428–42.

healthy. Isolation restricts the movement of ill persons to help stop the spread of certain diseases.¹⁵⁸ For example, hospitals use isolation for patients with infectious tuberculosis. *Quarantine* is used to separate and restrict the movement of *well* persons who may have been exposed to a communicable disease to see if they become ill.¹⁵⁹ These people may have been exposed to a disease and not know it, or they may have the disease but not show symptoms. Geographic quarantine can also help limit the spread of communicable disease. In addition to serving medical functions for the benefit of the patient, isolation and quarantine authority is derived from the right of the state to take actions affecting individuals for the benefit of society.¹⁶⁰

Isolation and quarantine are used to protect the public by preventing exposure to infected persons or to persons who may be infected, and this authority is especially important to control the spread of tuberculosis. Patients who do not comply with treatment regimens pose not only the threat of spreading tuberculosis to others, but also are at increased risk of developing drug-resistant strains.¹⁶¹ State governments, as part of their inherent police power, possess the civil authority to physically force persons into isolation or quarantine as a means to compel a patient's adherence to a TB medication regime.¹⁶² I explore these issues in detail in Part III below.

As a general rule, local health departments provide screening and treatment for certain contagious diseases regardless of immigration status, and state public health officials are not required to report immigration status.¹⁶³ But undocumented immigrants may be reluctant to interact with any government agency for fear of deportation.¹⁶⁴

158. *Quarantine and Isolation*, CTRS. FOR DISEASE CONTROL & PREVENTION, Dec. 9, 2013, <http://www.cdc.gov/quarantine/> (last visited Jan. 27, 2014).

159. *Id.*

160. See Jorge E. Galva et al., *Public Health Strategy and the Police Powers of the State*, 120 PUB. HEALTH REP. 20, 21 (2005).

161. See *XDR-TB: Extensively Drug-Resistant Tuberculosis*, WORLD HEALTH ORG., <http://www.who.int/tb/challenges/mdr/xdr/en/> (last visited Nov. 28, 2014).

162. As Larry Gostin describes, "Public health authorities possess a variety of powers to restrict the autonomy or liberty of persons who pose a danger to the public. They can direct individuals to discontinue risk behaviors ('cease and desist' orders), compel them to submit to physical examination or treatment, or detain them temporarily or indefinitely." GOSTIN, *supra* note 52, at 428.

163. See Tanya Broder & Jonathan Blazer, *Overview of Immigrant Eligibility for Federal Programs*, NAT'L IMMIGRATION LAW CTR., <http://www.nilc.org/overview-immeligfedprograms.html> (last updated Oct. 2011).

164. See, e.g., Pamela Constable, *For Immigrant Women, Domestic Violence Creates A Double Shadow*, WASH. POST (Dec. 2, 2013), http://www.washingtonpost.com/local/for-immigrant-women-domestic-violence-creates-a-double-shadow/2013/12/02/5626b85e-55e6-11e3-8304-caf30787c0a9_story.html; AM. COLL. OF OBSTETRICIANS & GYNECOLOGISTS, *HEALTH CARE FOR UNDOCUMENTED IMMIGRANTS* 2 (2009); see

Many services offered by public health departments are free of charge for all residents, but funding for health departments is local and dependent upon the political process.¹⁶⁵ In Jackson County, Ohio, for example, voters were asked to approve a separate tax levy to continue to fund the county health department's TB prevention and treatment program.¹⁶⁶ In an effort to ensure approval, tax commissioners reduced the levy, stating that it would leave "just enough generated revenue to keep the program operating in the county."¹⁶⁷ Voters still rejected it—by a vote of 3,363 to 3,195—and the health department lost the program's public health nurse and an assistant.¹⁶⁸

As a result, some health departments are well-funded and staffed, but many are not. Furthermore, jurisdictional boundaries for the approximately 2,800 individual health departments¹⁶⁹ are jealously guarded to preserve limited budgets. CDC funds may not be used for direct clinical care or treatment of patients.¹⁷⁰ The CDC provides some supplemental funding to local departments earmarked for particular prevention or prophylactic programs,¹⁷¹ but fragmentation of public health authority continues.

also 42 U.S.C. § 608(g) (requiring that states receiving TANF block grants report the names and addresses of individuals the state knows are not lawfully present in the United States).

165. See ROBERT WOOD JOHNSON FOUND., COUNTY & CITY HEALTH DEPARTMENTS: THE NEED FOR SUSTAINABLE FUNDING THROUGH HEALTH REFORM 2–3 (2009), *available at* <http://healthyamericans.org/assets/files/Sustainable.pdf> (showing that on average, 45% of local health department funding comes from states and local governments, and indicating that the departments are vulnerable to unpredictable government budget processes).

166. See Felicia Tackett, *TB Replacement/Decrease Levy to Appear on Ballot . . . Again*, JACKSON COUNTY DAILY.COM (updated Nov. 6, 2013, 9:25 AM), http://www.jacksoncountydaily.com/news/article_98f08d6f-75bf-5af9-b4db-40d659237df8.html.

167. *Id.*

168. See Polly J. Price, *If Tuberculosis Spreads . . .*, N.Y. TIMES, July 8, 2014, <http://www.nytimes.com/2014/07/09/opinion/if-tuberculosis-spreads.html>.

169. NAT'L ASSOC. OF COUNTY & CITY HEALTH OFFICIALS, NACCHO PRESS KIT 2 (2014), *available at* <http://www.naccho.org/press/upload/NACCHO-Press-Kit-June-2014-FINAL.pdf>.

170. See SUMMARY OF PPACA PROVISIONS RELATED TO HRSA'S HEALTH PROFESSIONS PROGRAMS AND OTHER PHSA WORKFORCE PROGRAMS, ASS'N OF AM. MED. COLL. 11 (2010), *available at* <https://www.aamc.org/download/131010/data/hrsa.pdf> (Primary Care Extension Program grants not to be used for direct patient care). Federal funds can be used for direct patient care for refugee resettlement in the United States (for the first 8 months), and for persons in federal custody (both the prison system and immigration detention). See Ankita Rao, *As Refugees Settle In, Health Care Becomes a Hurdle*, KAISER HEALTH NEWS (Apr. 17, 2013), <http://kaiserhealthnews.org/news/refugee-health-care/>.

171. See, e.g., CDC's New High-Impact Approach to HIV Prevention Funding for Health Departments Advancing the National HIV/AIDS Strategy, CTNS. FOR DISEASE

And while the CDC offers expertise and guidance, there is little quality control or coordination of local health jurisdictions at the national level. In 1988, the Institute of Medicine concluded that the U.S. public health system was “in disarray.”¹⁷² Since that time, improvement has been minimal, according to a study conducted in 2005 by the National Association of County and City Health Officials.¹⁷³ Moreover, the recent recession and sequestration have reduced health department budgets as well as funding for CDC initiatives.¹⁷⁴

Why does all of this matter? Because federal immigration law does not account for these structural deficiencies in the public health system of the United States. As further detailed below, foreign nationals present in the United States, both legally and illegally, often lack access to basic preventive health care and other services. The overall health of a population is a key component in the emergence and spread of contagious disease.¹⁷⁵

B. Exclusion of Non-Citizens from Access to Private Health Care

With this bleak picture of the public health system—the front line defense against epidemic and serious contagious disease—can private health care in the United States balance the deficit? Persons without health insurance flood hospital emergency rooms for even routine care.¹⁷⁶ The Patient Protection and Affordable Care Act (popularly known as the “Affordable Care Act” (ACA) or “Obamacare”)

CONTROL & PREVENTION, <http://www.cdc.gov/hiv/policies/funding/announcements/PS12-1201/factsheet.html> (last updated Apr. 9, 2014).

172. INST. OF MED., THE FUTURE OF PUBLIC HEALTH 6 (1988), available at <http://iom.edu/Reports/1988/The-Future-of-Public-Health.aspx>.

173. See NAT’L ASS’N OF CNTY & CITY HEALTH OFFICIALS, THE LOCAL HEALTH DEPARTMENT WORKFORCE: FINDINGS FROM THE 2005 NATIONAL PROFILE OF LOCAL HEALTH DEPARTMENTS STUDY 1 (2007), available at http://www.naccho.org/topics/workforce/upload/LHD_WorkforceFinal.pdf (discussing the changes—improvements and deficiencies—to local health departments’ workforce since 1988).

174. *Fact sheet: Impact of Sequestration and other Budget Changes on the Centers for Disease Control & Prevention*, CTRS. FOR DISEASE CONTROL & PREVENTION, http://www.cdc.gov/fmo/topic/budget%20information/appropriations_budget_form_pdf/Sequester_Impacts.pdf (last visited Nov. 15, 2014).

175. See generally Ursula Schlipkötter & Antoine Flahault, *Communicable Diseases: Achievements and Challenges for Public Health*, 32 PUB. HEALTH R. 90 (2010) (discussing challenges and opportunities associated with controlling communicable diseases in the coming decades as it refers to ways in which health systems manage and monitor threats to population health).

176. For more on this subject, see generally Emily Carrier et al., *Coordination Between Emergency and Primary Care Physicians*, NAT’L INST. FOR HEALTHCARE REFORM (2011), available at <http://www.nihcr.org/ED-Coordination.html>; Kevin Grumbach, Dennis Keane & Andrew Bindman, *Primary Care and Public Emergency Department Overcrowding*, 83 AM. J. PUB. HEALTH 372 (1993).

attempts to ease this situation through expanded Medicaid coverage and subsidized private health insurance for low-income persons.¹⁷⁷ Whether this extension of insurance coverage helps communities under-served by other healthcare resources and transportation remains to be seen. But the reality is that private health care, even with the ACA, effectively excludes the vast majority of foreign nationals present in the United States.¹⁷⁸ For this reason, the private health care system provides little support in preventing contagious epidemics in the U.S. population as a whole.

Health care for undocumented immigrants is an especially charged political issue. As just one example, U.S. Representative Joe Wilson of South Carolina interrupted President Obama's 2009 address to Congress on health care, when he shouted "You lie!"¹⁷⁹ The interruption was in response to President Obama's statement, "There are also those who claim that our reform effort will insure illegal immigrants. This, too, is false—the reforms I'm proposing would not apply to those who are here illegally."¹⁸⁰ The fact that the President's statement was a defensive rebuttal underscores the political poison of advocating benefits for "illegals."

President Obama did not mislead. Under the Affordable Care Act, undocumented immigrants may not purchase private health insurance through state exchanges, even if they have the ability to pay for it with their own money.¹⁸¹ Moreover, even foreign nationals who are

177. See Dan Gorenstein, *How Obamacare will Change the Emergency Room*, MARKETPLACE (Jan. 2, 2014), <http://www.marketplace.org/topics/health-care/how-obamacare-will-change-emergency-room>. Some analysts, however, predict that the ACA will in fact increase emergency room visits. See, e.g., Stephanie Armour, *Under Obamacare, Emergency Rooms May Get Even More Visits*, BUSINESSWEEK (May 30, 2013), <http://www.businessweek.com/articles/2013-05-30/under-obamacare-emergency-rooms-may-get-even-more-crowded>.

178. See NAT'L IMMIGRATION LAW CTR., *supra* note 140.

179. Peter Hambry & Deirdre Walsh, *Joe Wilson Says Outburst to Obama Speech 'Spontaneous'*, CNN (Sept. 10, 2009), <http://www.cnn.com/2009/POLITICS/09/10/obama.heckled.speech/>.

180. President Barack Obama, Speech to Congress (Sept. 9, 2009), in *Obama's Health Care Speech to Congress*, N.Y. TIMES (Sept. 9, 2009), <http://www.nytimes.com/2009/09/10/us/politics/10obama.text.html>.

181. NAT'L IMMIGRATION LAW CTR., *supra* note 140; see also Michael K. Gusmano, *Undocumented Immigrants in the United States: U.S. Health Policy and Access to Care*, UNDOCUMENTED PATIENTS, <http://www.undocumentedpatients.org/issuebrief/health-policy-and-access-to-care/> (last updated Oct. 3, 2012) ("If an individual is not, or is not reasonably expected to be for the entire period for which enrollment is sought, a citizen or national of the United States or an alien lawfully present in the United States, the individual shall not be treated as a qualified individual and may not be covered under a qualified health plan in the individual market that is offered through an Exchange.") (quoting 42 U.S.C. § 1312(f)(3) (2013)).

legally present in the United States face severe restrictions for the purchase of health insurance. Most temporary visa holders, like undocumented migrants, are not eligible to participate.¹⁸² Lawful permanent residents are subject to the individual mandate and tax penalty, but many of those who cannot afford to purchase even a subsidized insurance plan remain ineligible for Medicaid or must wait five years for eligibility, including pregnant women and children.¹⁸³

In addition, employment-based health insurance remains a significant feature of private coverage. Most temporary visa holders are ineligible to work.¹⁸⁴ The conclusion is that Obama's avowal is undoubtedly true: undocumented persons are not eligible to purchase private health insurance. But, in addition, many if not most of those *legally* present cannot do so either. This applies even to the "Dreamers"—undocumented children brought to the United States by undocumented parents. Non-citizens granted "deferred action for childhood arrivals" under President Obama's plan may not participate in the ACA exchanges and are not eligible for Medicaid.¹⁸⁵ Their numbers are estimated to be 1.7 million.¹⁸⁶

This result is perverse, especially from a public health perspective. Preventive care for individuals is an important tool for overall population health and containment of contagious disease. Millions of persons residing in the United States are not even permitted to purchase private health insurance under the ACA, assuming they could afford to do so. One result, as previously noted, is reliance on hospital emergency rooms for preventable conditions, taxing the resources of hospitals even with the availability of Medicaid reimbursement in some states. Citizens and non-citizens alike who rely on emergency room care often arrive with an advanced state of illness, and poor health greatly enhances susceptibility to contagious disease. The consequences affect everyone, especially if lack of preventive care contributes to drug resistance mutation in contagious disease.¹⁸⁷

182. See NAT'L IMMIGRATION LAW CTR., *supra* note 140. Enrollment in a health exchange requires proof of citizenship or immigration status as well as a Social Security number. Most temporary visa holders do not possess Social Security numbers because they are ineligible for employment.

183. *Id.*

184. See ALEINIKOFF ET AL., *supra* note 141, at 385, 389 (noting that short-term visitors and students make up the "lion's share" of temporary visa-holders and that those visas generally do not permit employment).

185. NAT'L IMMIGRATION LAW CTR., *supra* note 140.

186. Gusmano, *supra* note 181.

187. See WORLD HEALTH ORG., *supra* note 161.

And emergency-room care is not organized to handle treatment regimens for ongoing contagious illness.¹⁸⁸

The problem would be less compelling if a greater number of foreign nationals had access to Medicaid and other government-provided health services on the same basis as citizens, as detailed in the following section.

C. *Exclusion of Non-Citizens from the Social Safety Net*

The major public benefits programs have always prevented some non-citizens from securing assistance, but in 1996 the Illegal Immigrant Reform and Immigrant Responsibility Act drastically expanded federal welfare exclusions.¹⁸⁹ In recent years, a number of states have also strictly limited access to government benefits at the same time that legislatures have cut funding for public health departments.¹⁹⁰

Access to safety-net benefits depends upon immigration status.¹⁹¹ Lawful permanent residents living in the United States must wait at least five years before they are eligible for federally funded benefits, although some states provide benefits earlier. Lawful permanent residents (LPRs) are eligible for the federal Supplemental Nutritional Assistance Program (formerly known as Food Stamps) if they meet income guidelines. Some states have been able to restore Medicaid benefits for LPR children and pregnant women who have not yet met the residency requirement.¹⁹² In general, though, few other options are

188. See generally Alejandro Portes et al., *The U.S. Health System and Immigration: An Institutional Interpretation*, 24 SOC. FORUM 487, 487 (2009) (examining “the institutions that comprise the U.S. health system and their relationship to a surging immigrant population. The clash between the system and this human flow originates in the large number of immigrants who are unauthorized, poor, and uninsured and, hence, unable to access a system largely based on ability to pay.”). My Article, by contrast, identifies specific features of U.S. immigration law that undermine public health, although I certainly agree with Portes et al. that, with respect to undocumented migrants, “[t]his human wave eventually comes into contact with the U.S. health system, leading to a clash whose multiple dimensions are poorly understood.” *Id.* at 488.

189. See Michael E. Fix & Karen C. Tumlin, *Welfare Reform and the Devolution of Immigrant Policy*, URBAN INST. (Oct. 1, 1997), <http://www.urban.org/publications/307045.html>; James R. Edwards, Jr., *Public Charge Doctrine: A Fundamental Principle of American Immigration Policy*, CTR. FOR IMMIGR. STUD. (2001), <https://cis.org/PublicChargeDoctrine-AmericanImmigrationPolicy>.

190. See Gusmano, *supra* note 181.

191. See *Public Charge*, U.S. CITIZENSHIP AND IMMIGR. SERVS., <http://www.uscis.gov/green-card/green-card-processes-and-procedures/public-charge> (last updated Sept. 3, 2009) (describing federal benefit programs).

192. Leighton Ku & Brian Bruen, *Poor Immigrants Use Public Benefits at a Lower Rate than Native-Born Citizens*, CATO INST. (Mar. 4, 2013), <http://www.cato.org/publications/economic-development-bulletin/poor-immigrants-use-public-benefits-lower-rate-poor>. Immigrants granted refugee or asylee status are generally eligible for public

available for safety-net healthcare, even with the lofty goals of the ACA to reduce the ranks of the uninsured.¹⁹³

Lawfully present temporary immigrants—for example, those with tourist, student, or employment visas—are generally not eligible for means-tested public benefits.¹⁹⁴ Undocumented immigrants are excluded from all federal programs except the Women, Infants and Children Nutrition Program (WIC), the National School Lunch Program, and Head Start.¹⁹⁵ They are excluded from safety-net programs in most states, too, although California state legislators have proposed a bill to extend the ACA to undocumented immigrants, and a handful of other states allow undocumented persons to receive emergency aid.¹⁹⁶

One bright spot in this picture is the allocation of federal dollars to Federally Qualified Health Centers (FQHCs) and Migrant Health Centers.¹⁹⁷ Both are non-profit entities partially funded by the Health Resources and Service Administration.¹⁹⁸ The centers offer primary care regardless of immigration status, insurance status, or ability to pay.¹⁹⁹ As of 2010, there were 1,214 FQHCs and 159 federally funded migrant health centers.²⁰⁰ Not every state or region has one—and those that do offer only basic services, are often over-crowded, and suffer from limited staffing and medical supplies.²⁰¹

States that opt into the expansion of Medicaid eligibility under the Affordable Care Act²⁰² can benefit lawful permanent residents

benefits if they meet program eligibility criteria. *Id.* See also Gusmano, *supra* note 182 (“In about half of the U.S. states, immigrant children under the age of 21 and pregnant woman who have been granted deferred action on their immigration status are allowed to apply for Medicaid and the CHIP or enroll in their state’s high risk insurance pool.”).

193. See Mark A. Hall, *Rethinking Safety-Net Access for the Uninsured*, 364 NEW ENG. J. MED. 7, 7 (2011).

194. Ku & Bruen, *supra* note 192.

195. *Id.*

196. *State Sen. Pushes for Insurance for Undocumented Immigrants*, CAL. HEALTHLINE (Jan. 13, 2014), <http://www.californiahealthline.org/articles/2014/1/13/state-sen-pushes-for-insurance-for-undocumented-immigrants>; see also Medina & Goodnough, *supra* note 146 (describing difficulties in California for Latino ACA participants).

197. See Gusmano, *supra* note 181.

198. *Id.*

199. *Id.*

200. *Id.*

201. See Portes et al., *supra* note 188, at 490 (“Barriers to care are especially high for those outside federal or state charity systems whose access to long-term or specialty services is a lottery—a chance encounter with a motivated advocate or a compassionate professional.”).

202. For a current list of states opting to expand Medicaid under the ACA, see *Where the States Stand on Medicaid Expansion*, ADVISORY BOARD COMPANY, <http://>

who have been in the United States for at least five years.²⁰³ At present, those persons are only a small percentage of an estimated 40 million foreign nationals present in the United States.²⁰⁴

Thus, the social safety-net of federal government programs excludes the vast majority of foreign nationals present in the United States. As one result, state and local public health departments serve as the primary defense against the spread of contagious disease for a population already disposed to preventable health conditions that lead to greater susceptibility to contagious disease. For more than a decade, the National Association of Community and City Health Officers has urged the federal government to provide greater assistance for all foreign nationals.²⁰⁵ Specifically, these recommendations include (1) “Communication and mandatory follow-up by the federal government with local health departments . . . regarding immigrants, refugees, and asylees who have been identified during screening as having either a communicable disease or a potentially communicable disease of public health significance” and (2) “Reimbursement from the federal government . . . for services provided to immigrants, refugees, and asylees with communicable diseases of public health significance that are currently not covered by other funding sources.”²⁰⁶

Most local health departments provide critical services to all persons regardless of citizenship or immigration status, primarily in the

www.advisory.com/daily-briefing/resources/primers/medicaidmap (last visited Nov. 15, 2014).

203. MAGGIE MORGAN, *THE MEDICAID EXPANSION: OPTIONS FOR IMMIGRANTS* (2013), available at <http://www.nclr.org/images/uploads/pages/The%20Medicaid%20Expansion%20-%20Options%20for%20Immigrants%20-%20Maggie%20Morgan,%20Harvard%20Law%20School.pdf>.

204. Chiamaka Nwosu et al., *Frequently Requested Statistics on Immigrants and Migration in the United States*, MIGRATION POL’Y INST. (Apr. 28, 2014), <http://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states> (estimating foreign-born population for 2012). In 2010, the federal government estimated there were 12.6 million LPRs living in the United States. Nancy Rytina, *Estimates of the Legal Permanent Resident Population*, POPULATION ESTIMATES (Dep’t of Homeland Sec., D.C.), Oct. 2011, at 3, available at http://www.dhs.gov/xlibrary/assets/statistics/publications/ois_lpr_pe_2010.pdf. Compare this figure to the total number of foreign nationals present at any time during that year—a number that would include tourists, temporary business visitors, students, and, of course, undocumented aliens.

205. NAT’L ASS’N OF CNTY & CITY HEALTH OFFICIALS, *STATEMENT OF POLICY: SCREENING, FOLLOW-UP, AND REIMBURSEMENTS FOR IMMIGRANTS, REFUGEES, AND ASYLEES WITH COMMUNICABLE DISEASES OF PUBLIC HEALTH SIGNIFICANCE 1* (2002), <http://www.naccho.org/advocacy/positions/upload/07-02-Immigrant-Policy-updated.pdf>.

206. *Id.*

form of immunizations and tuberculosis screening and treatment.²⁰⁷ Effective outreach to immigrant groups is often lacking, however.²⁰⁸ Furthermore, undocumented immigrants fear that their immigration status will be reported to government officials who have the power to deport them.²⁰⁹ For both structural and social reasons, then, undocumented migrants are less likely to avail themselves of the very few health services available to them.²¹⁰

A question largely ignored in immigration reform debates is how the potential legalization of undocumented persons could affect Medicaid rolls. A sudden influx of thousands of new enrollees could overwhelm administrative as well as financial resources. A phased process based on a path to legalization or citizenship, however, would deny safety-net health benefits to currently undocumented persons potentially for decades.²¹¹ This is yet another example characteristic of the disjuncture between debates about immigration reform and debates about public health.

Legalization of some of the estimated 11 million undocumented immigrants, as proposed in the U.S. Senate's 2013 comprehensive immigration reform bill, would not provide access to need-based govern-

207. NAT'L ASSOC. OF COUNTY & CITY HEALTH OFFICIALS, 2013 NATIONAL PROFILE OF LOCAL HEALTH DEPARTMENTS 36 (2013).

208. See NAT'L CENTER FOR FARMWORKER HEALTH, HIDDEN POPULATIONS: HEALTH, HELP, AND HOPE, (2012), available at <http://www.nphic.org/conferences/2012/nphic-symposium>.

209. The privacy rules of the Health Insurance Portability and Accountability Act (HIPAA), if not medical ethics generally, should bar this kind of disclosure. See generally HODGE, *supra* note 154, at 156–59 (describing various laws of privacy and confidentiality with respect to individual medical information). With specific reference to TB, a CDC study reported: “Express TB control laws in 11 (44%) jurisdictions appear to protect TB patients’ rights to privacy and confidentiality of information concerning their infections. In at least two states (FL, AZ), medical/health records of TB patients are held confidential. In some jurisdictions (e.g. CO, MD, SC), laboratory reports of persons infected with TB are apparently deemed confidential. However, the express TB control laws of only two jurisdictions (TX and CO) appear to prohibit discrimination or stigmatization related to TB infection. Colorado law seems to ensure access of individuals to TB services by specifically noting that TB services must be provided regardless of race, religion, gender, ethnicity, national origin, or immigration status. Texas law, it seems, restricts state hospitals from discriminating against TB patients when providing medical care and treatment and requires that hospitals provide equal services to all TB patients.” CTRS. FOR DISEASE CONTROL & PREVENTION, TUBERCULOSIS CONTROL LAWS AND POLICIES: A HANDBOOK FOR PUBLIC HEALTH AND LEGAL PRACTITIONERS 24 (Oct. 1, 2009), <http://www.cdc.gov/tb/programs/TBLawPolicyHandbook.pdf>.

210. See Medina & Goodnough, *supra* note 146 (describing fear of deportation among immigrant groups).

211. *Id.*

ment benefit programs.²¹² Under the Senate bill, newly legal workers would not be eligible for Affordable Care Act benefits and most other welfare programs for at least a decade, and likely longer.²¹³ As U.S. Senator Jeff Flake of Arizona explained,

After at least 10 years, if the six security triggers are met and the backlog of legal immigrant applicants has been cleared, then, and only then, will those currently here illegally have the ability to apply for a green card – and even then, they still will not be eligible to receive any federal benefits. The earliest any person who meets these requirements could naturalize and become an American citizen is after having spent three years in the U.S. with a green card. The result is that for at least the next 13 years, millions of people already living in the U.S. will begin paying taxes without receiving any benefits – resulting in a net surplus for our federal budget.²¹⁴

The prospect of legalization for millions of persons carries with it another significant challenge to the U.S. health care system, one that has received little public attention. The transition from temporary legal status to lawful permanent resident (a green card) requires a health screening for each applicant, as described above.²¹⁵ The Senate bill does not change this. Health screening must be paid for by the immigrant and must be conducted by a private physician approved by the U.S. government for this purpose. Millions of applicants seeking health examinations at approximately the same time may overwhelm the system. Or, if the path to permanent legal status is too onerous, public health departments will miss an opportunity to identify carriers of serious contagious disease without paying the cost of screening.

D. Migrant Workers and Immigration Detainees

Public health concerns are most pressing for two classes of non-citizens: migrant agricultural workers and persons in immigration detention. Both present unique challenges for communicable disease control as a direct result of the U.S. immigration system.

212. Border Security, Economic Opportunity, and Immigration Modernization Act of 2013, S. 744, 113th Cong. § 1 (as passed by Senate, July 10, 2013).

213. See S. Rep. No. 113-40, at 166 (2013).

214. Press Release, Senator Jeff Flake, Getting Immigration Reform Right: State and Local Benefits (Apr. 30, 2013), available at <http://www.flake.senate.gov/public/index.cfm/press-releases?ID=077a77b5-90c7-49f3-af9c-73c6c7990531>.

215. 8 C.F.R. § 245.5 (2014).

1. *Migrant Workers*

Consider first the seasonal workers who are legally in the United States.²¹⁶ These workers are somewhat less likely to experience labor exploitation because of their legal status, but lack of access to basic healthcare as well as a high degree of mobility lead to the possibility of undiagnosed disease that is not treated and that can easily spread to others.²¹⁷

Agricultural and other temporary workers may enter the country and receive work authorization under the H-2A visa program, so-named from the statutory provision in the INA that creates it.²¹⁸ This visa category encompasses seasonal work and temporary jobs for which U.S. citizens are not available. Around 55,000 such visas are issued to foreign nationals each year.²¹⁹ Each temporary worker who receives a visa may bring a spouse and unmarried children under the age of 21, although these family members are not eligible for employment.²²⁰ Prospective temporary workers must apply for the visa after approval of an employer's petition, but the health screening required of green-card applicants is not required at any stage.²²¹ It is thus possible to import, undetected, serious contagious diseases like tuberculosis that local public health departments are ill-equipped to detect and treat.

In earlier agricultural guest worker programs, extensive and intrusive individual health screenings took place along the U.S. border with Mexico.²²² Health inspections for Mexicans have a long history

216. Annual numbers fluctuate, but temporary workers in all visa categories, including migrant farm workers, accounted for 2.8 million arrivals (six percent of total admissions) in 2010. See MIGRATION POL'Y INST., *supra* note 143 ("How Did Nonimmigrant Admissions Break Down by Visa Category in 2010?").

217. See *Policy Statement: Improving Housing for Farmworkers in the United States is a Public Health Imperative*, AM. PUB. HEALTH ASSOC., (Nov. 1, 2011), <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1418>; see also Ctrs. for Disease Control & Prevention, *HIV Infection, Syphilis, and Tuberculosis Among Migrant Farm Workers*, 41 MORBIDITY & MORTALITY WEEKLY REP. 723 (Oct. 2, 1992), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/00017692.htm>.

218. 8 U.S.C. §1101(a)(15)(H)(ii)(a) (2013).

219. See *H-2A Program for Temporary Agricultural Workers*, CTR. GLOBAL DEV., http://www.cgdev.org/doc/migration/H-2A_Fact_Sheet8.6.pdf (last visited Nov. 15, 2014).

220. *Id.*

221. See *H-2A Temporary Agricultural Workers*, U.S. CITIZENSHIP & IMMIGRATION SERVICES, <http://www.uscis.gov/working-united-states/temporary-workers/h-2a-agricultural-workers/h-2a-temporary-agricultural-workers#Period%20of%20Stay> (last visited Nov. 15, 2014).

222. See Natalia Molina, *Borders, Laborers, and Racialized Medicalization*, 101 AM. J. PUB. HEALTH 1024 (2011).

of racial stigma and degrading practices.²²³ Individual health inspections in the “Bracero” program (1942–1964), for example, took place long after the federal government had ceased individual examination of persons arriving at Ellis Island.²²⁴ As one historian described, “[b]raceros were recruited in Mexico and underwent health screenings in both Mexico and the United States . . . [which] required every prospective bracero to undergo a physical examination, with chest x-rays to check for tuberculosis, serological tests to check for venereal disease, psychological profiling, and a chemical bath.”²²⁵

By contrast, U.S. immigration officers do not require health screening for temporary visitors, including agricultural workers in the H-2A visa program.²²⁶ Moreover, there is no mechanism in place for routine screening as they work in the United States. As one study summarized:

Health requirements that pertain to applicants for an immigrant–permanent resident visa do not apply to visitors and temporary residents. . . . Visitors and temporary residents do not receive medical screening for infections such as tuberculosis (TB) and are not required to fulfill US vaccination requirements. No surveillance system is in place to identify health problems in this population. Therefore, medical conditions are known only if a person has a reportable disease, for which reporting to health departments is mandatory.²²⁷

This situation presents a problem for several reasons. Workers who do not know that they have a serious contagious disease are not likely to be screened, nor are they likely to seek medical assistance during their stay in the United States. Such screening would be the responsibility of the local public health agency where the workers are currently located, but few agencies offer health screenings even on a voluntary basis.²²⁸ Most volunteer organizations who work in migrant camps also do not offer testing for HIV or TB, primarily because they are not in a position to offer any treatment to those who test positive,

223. See *id.* at 1024–31; John Burnett, *The Bath Riots: Indignity Along the Mexican Border*, NAT’L PUB. RADIO (Jan. 28, 2006), <http://www.npr.org/templates/story/story.php?storyId=5176177>.

224. See Molina, *supra* note 222, at 1025, 1027.

225. *Id.* at 1027.

226. See Emad A. Yanni et al., *Health Status of Visitors and Temporary Residents, United States*, 15 EMERGING INFECTIOUS DISEASES 1715, 1716 (2009).

227. *Id.*

228. See Eric Hanson & Martin Donohoe, *Health Issues of Migrant and Seasonal Farm Workers*, 14 J. HEALTH CARE POOR & UNDERSERVED 153, 160 (2003).

or to provide local public health authorities with timely notification before the migrant workers have moved on.²²⁹

It is this common mobility—agriculture workers moving from field to field and state to state, often following seasonal harvests over a period of months—that thwarts any effort to employ the most basic public health control measures. By the time any medical screening reveals a contagious disease, the worker has likely left the jurisdiction of the local health agency. That agency must then be willing and able to track the migrant to a new location, alert that public health jurisdiction to the migrant's condition, and coordinate continuity of care if treatment has already begun. In turn, the second public health agency must be willing to assume the cost of care (tuberculosis treatment, for example, is lengthy and expensive²³⁰) and take necessary measures to ensure that the patient complies with treatment or isolation orders. Isolation is especially problematic for an agricultural migrant who plans to keep moving with the harvest (and his or her family). State and local public health agencies are simply not equipped to accomplish these often multiple transfers. And even if a migrant is successfully tracked and treatment has begun, the H-2A visa may expire before treatment is completed. The worker then must either return to his country of origin or remain in the United States illegally. In either case the worker still poses a public health threat.

The existing temporary agriculture worker visa program is widely criticized as costly and too slow for employers.²³¹ But the leading proposals to reform it do not provide for health screening of foreign nationals prior to arrival.²³² Pre-screening temporary agriculture workers for serious contagious disease could lessen a public health threat, but it would do nothing to prevent the spread of disease for temporary workers who acquire disease within the United States. The same public health authority fragmentation problems apply.

229. For example, the medical volunteers for the South Georgia Farmworker Health Project do not test migrant workers who seek care for HIV. Jodie Guest, South Georgia Farmworker Health Project, Statement at the Emory University forum: Immigrant Health in an Era of Deportation (Sept. 9, 2013), *Farm Worker Project*, EMORY UNIV. SCH. OF MED. (last visited Nov. 15, 2014), http://med.emory.edu/pa/about_us/communty_service/farm_worker/index.html.

230. See *infra* Part III.

231. Allison Sherry, *Farmers, Immigration Activists Hopeful about GOP Immigration Effort*, DENVER POST, Feb. 2, 2014, http://www.denverpost.com/politics/ci_25044059/farmers-immigration-activists-hopeful-about-gop-immigration-effort.

232. See generally *Preliminary Summary of Farmworker Provisions of Senate Immigration Bill*, NAT'L FARM WORKER MINISTRY, <http://nfwm.org/wp-content/uploads/2013/04/Senate-Bill-Ag-Imm-provisions-FJ-Summary-4-17-13.pdf> (last visited Feb. 4, 2014).

For public health concerns, then, it matters little whether agriculture workers are here legally or illegally. One exception is that employers of agricultural workers with “legal” status are required to furnish housing, meals, and worker’s compensation insurance, and must comply with U.S. labor laws.²³³ In addition, workers legally present are more likely to seek medical care or visit a public health agency.²³⁴ Undocumented workers, as previously noted, tend to stay purposely below the radar. But even those willing to work with a local public health agency face insurmountable obstacles for continued treatment.

2. *Immigration Detainees*

A similar problem involves persons held in immigration detention. The Department of Homeland Security has detained nearly 500,000 adult non-citizens since 2012, a record number.²³⁵ Immigration facilities hold an average of 34,000 foreign nationals per day, including those awaiting adjudication of immigration status or an asylum claim in addition to those held for deportation.²³⁶ Most face a lengthy stay, the end of which is either deportation or release into the community.²³⁷ Health care during detention is the responsibility of the federal government, as it is for federal prisoners.²³⁸ Immigration detainees, however, are often housed in state prisons and local jails and face frequent transfer into and out of contracted detention facilities

233. *Work Authorization for Non-Citizens: Temporary Agricultural Workers (H-2A Visas)*, U.S. DEPT. OF LABOR, <http://www.dol.gov/compliance/guide/taw.htm#EmplRights> (last updated Sept. 2009).

234. See Marc L. Berk & Claudia L. Schur, *The Effect of Fear on Access to Care Among Undocumented Latino Immigrants*, 3 J. IMMIGR. HEALTH 151, 153 (2001).

235. *Immigration Detention: Behind the Record Numbers*, CTR. FOR MIGRATION STUDIES (Feb. 13, 2014), <http://cmsny.org/immigration-detention-behind-the-record-numbers/>.

236. *Immigration Detention*, ACLU, <https://www.aclu.org/immigrants-rights/immigration-detention> (last visited Feb. 1, 2014); see also *FY 2013 ICE Immigration Removals*, U.S. IMMIGRATION & CUSTOMS ENFORCEMENT, <http://www.ice.gov/removal-statistics/> (last visited Nov. 15, 2014) (providing data on detention and removals).

237. See CTR. FOR MIGRATION STUDIES, *supra* note 235 (“[T]he average length of detention was much longer for those in formal removal proceedings—81 days. The report also found that 13 percent had been detained for six months or longer.”).

238. See *Medical Care and Treatment of Immigration Detainees and Deaths in DRO Custody: Hearing Before the H. Appropriations Comm., Subcomm. on Homeland Security*, 111th Cong. 3 (2009) (statement of Dora Schriro, Special Advisor to Secretary Napolitano on Detention and Removal Operations) (“ICE has an affirmative obligation to ensure appropriate medical treatment to detainees in its custody and ICE is appropriated funds to provide that care.”); U.S. DEPT. OF JUSTICE, THE FEDERAL BUREAU OF PRISON’S EFFORTS TO MANAGE INMATE HEALTH CARE 1 (2008), available at <http://www.justice.gov/oig/reports/BOP/a0808/final.pdf>.

throughout the country.²³⁹ Each facility has varying protocols for treatment and ensuring continuity of care upon transfer or release.

Basic healthcare for immigration detainees is a serious problem, unevenly addressed, as illustrated by the fact that the incidence of HIV and tuberculosis are higher in prisons than in the general population.²⁴⁰ At a 2008 House Judiciary Committee hearing, U.S. Representative Lamar Smith stated: “About one-quarter of all immigration detainees are diagnosed as having chronic illnesses when they enter the detention facility. Many of these individuals are being diagnosed for the first time, and many of them have infectious diseases such as tuberculosis, which poses a serious health threat to Americans.”²⁴¹ One advocacy group reported that “the provision of health care in the [immigration] detention system . . . suffers from conflicting missions of the agencies handling health care, inadequate staffing, muddled accountability, inadequate independent oversight, insufficient procedural protections for detainees, and lack of legally enforceable standards.”²⁴²

But the greater problem is how to coordinate with a local public health agency when a sick detainee is released from detention. Detainees often find themselves assigned to detention facilities in states with no relationship to their former or intended residence. It is not sufficient for a detention facility to notify the local public health agency of state A if the released detainee is headed for state B.

To be clear, the issue is not whether to detain non-citizens who may have violated the nation’s immigration laws, nor is it whether

239. See HUMAN RIGHTS WATCH, *A COSTLY MOVE: FAR AND FREQUENT TRANSFERS IMPEDE HEARINGS FOR IMMIGRANT DETAINEES IN THE UNITED STATES* 36 (2011), available at http://www.hrw.org/sites/default/files/reports/us0611webwcover_0.pdf (“ICE has built a detention system, relying on subcontracts with state jails and prisons, which cannot operate without shuffling detainees among hundreds of facilities located throughout the United States.”).

240. See generally American Civil Liberties Union, *ICE Agrees to Improve Health Care Provided to Immigration Detainees* (Dec. 16, 2010), <https://www.aclu.org/prisoners-rights/ice-agrees-improve-health-care-provided-immigration-detainees-part-settlement-aclu->; Nina Bernstein & Julia Preston, *Better Healthcare Sought for Detained Immigrants*, N. Y. TIMES, May 7, 2008, http://www.nytimes.com/2008/05/07/washington/07detain.html?_r=0.

241. *Problems with Immigration Detainee Medical Care: Hearing Before The Subcomm. on Immigration, Citizenship, Refugees, Border Security, And International Law of The H. Comm. On The Judiciary*, 110th Cong. (2008) (statement of Rep. Lamar Smith, Ranking Member, H. Comm. on the Judiciary).

242. MICHAEL FORDHAM ET AL., *IMMIGRATION DETENTION AND THE RULE OF LAW: SAFEGUARDING PRINCIPLES* 30 (2013) (quoting PHYSICIANS FOR HUMAN RIGHTS, *DUAL LOYALTIES: THE CHALLENGES OF PROVIDING PROFESSIONAL HEALTH CARE TO IMMIGRATION DETAINEES* 29 (2011)).

current detention numbers are too high. Those are political questions that do not easily gain attention, especially the issue of health care in the detention system. At whatever detention rate and under whatever variety of detention conditions, at some point detention ends. A sick detainee who wins his or her appeal is cast upon the nation's fragmented public health system, with placement often disproportionately based upon the location of the holding facility, and always subject to the local jurisdictional constraints these fragmented agencies face. Immigration law determines who has the right to stay versus who must be deported. Immigration enforcement officials determine whether detention is necessary and are prone to "over-enforcement" in the current political environment, sweeping up foreign nationals (and occasionally U.S. citizens) who have a right to stay.²⁴³ Over-enforcement exposes an even larger number of people to the sick and contagious who are legitimate detainees. When those persons are released, the federal government provides no follow-up care, even for those who present serious public health threats.²⁴⁴

All of the issues described above coalesce with border security, choices made in immigration policy, and a powerful historical legacy. It is difficult, if not impossible, for border security procedures to prevent the introduction of contagious disease. Given that reality, national public health defense becomes the responsibility of state and local health departments, who are hampered by decisions made under a federal immigration law that ignores public health consequences. Moreover, these public health agencies—already under-resourced because public funding is politically tenuous²⁴⁵—must work within a system in which citizens and non-citizens are segregated with respect to access to health care. A good example of the threat to public health created by this situation is drug-resistant tuberculosis, which is discussed in some detail in the following section. A closer study of this serious disease, together with the response of federal immigration of-

243. See CTR. FOR MIGRATION STUDIES, *supra* note 235 ("Since the Obama Administration announced its detention reform initiative in 2009, the number of noncitizens DHS detains yearly has increased by nearly 25 percent. Since passage of the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) in 1996, it has expanded over fivefold.").

244. The provision of health care to ICE detainees ends upon release or repatriation though a weakly stated policy urges additional measures to ensure continuity of care: "The DIHS medical staff and the Epidemiology Branch monitor tuberculosis cases to ensure continuity of care, whether the detainee is to be released from custody into the United States or returned to his or her country of origin." U.S. IMMIGRATION & CUSTOMS ENFORCEMENT, FACT SHEET: DETAINEE HEALTH CARE 2 (2008), available at <http://www.ice.gov/doclib/news/library/factsheets/pdf/dhc-fy08.pdf>.

245. See *supra* notes 165–171 and accompanying text.

ficers and local health departments, illustrates many of the problems that I have identified.

III.

ILLUSTRATION: CONTROLLING DRUG-RESISTANT TUBERCULOSIS

Dangerous contagious disease that is both difficult to diagnose and that requires lengthy treatment presents most starkly the deficiencies in U.S. immigration law that actively undermine public health. One such example is drug-resistant tuberculosis. As explained by the CDC in 2013, drug-resistant tuberculosis is already at the level of a “serious threat” for the United States:

Multidrug-resistant and extensively drug-resistant tuberculosis (MDR and XDR TB) infections are an increasing threat outside of the United States. In the United States, infections are uncommon because a robust prevention and control program is in place. If infection rates of MDR and XDR TB increase within the U.S., this antibiotic-resistant threat will change from serious to urgent, because it is transmissible through respiratory secretions, and because treatment options are very limited.²⁴⁶

Not only does drug-resistant tuberculosis present uniquely immigration-driven challenges, it also exposes weaknesses in the U.S. public health system that concern citizens and non-citizens equally.²⁴⁷ I first describe drug-resistant tuberculosis from the perspective of a local public health agency in the United States, before turning to specific problems along the United States-Mexico border.

A. *The Threat of Drug-Resistant Tuberculosis in the Framework of Immigration and Public Health Law*

Tuberculosis is a contagious airborne disease caused by a bacterial pathogen. Most TB transmissions result from exposure to people with undiagnosed TB.²⁴⁸ According to the World Health Organization,

Left untreated, each person with active TB will infect on average between 10 and 15 people every year. But people infected with TB will not necessarily get sick with the disease. The immune system ‘walls off’ the TB bacilli which, protected by a thick waxy

246. CTRS. FOR DISEASE CONTROL & PREVENTION, ANTIBIOTIC RESISTANCE THREATS IN THE UNITED STATES 20 (2013), available at <http://www.cdc.gov/drugresistance/threat-report-2013/pdf/ar-threats-2013-508.pdf>.

247. See Price, *supra* note 168 (describing these weaknesses).

248. See CTRS. FOR DISEASE CONTROL & PREVENTION, CORE CURRICULUM ON TUBERCULOSIS 193, 196 (2013).

coat, can lie dormant for years. When someone's immune system is weakened, the chances of getting sick are greater.²⁴⁹

TB typically affects the lungs, but it also may affect any other organ of the body.²⁵⁰ Symptoms may include coughing, fever, chest pain, night sweats, and weight loss.²⁵¹ It is usually treated with a regimen of drugs (isoniazid or rifampin are the most effective) taken for six months to two years.²⁵² Once the leading cause of death in the United States, TB can be fatal if not treated properly.²⁵³ Worldwide, millions contract the disease each year; tuberculosis is second only to AIDS as an infectious disease killer.²⁵⁴ The global response targets developing countries as most in need of intervention.²⁵⁵

Tuberculosis has become much more serious because of increasing resistance to standard medical treatment.²⁵⁶ A form of the disease known as "Multidrug-Resistant Tuberculosis"—far more difficult to treat than ordinary TB—developed from strains of TB that were already present in the United States, and has been present in this country for some time.²⁵⁷

When the Centers for Disease Control and Prevention revealed that an undocumented immigrant from Nepal entered south Texas in 2012 with an extremely drug-resistant form of tuberculosis, the fear of epidemic disease imported by clandestine border crossers received media attention.²⁵⁸ News reports emphasized the high prevalence of

249. *Tuberculosis*, WORLD HEALTH ORG., <http://www.who.int/mediacentre/factsheets/fs104/en/> (last updated Oct. 2014).

250. *Id.*

251. *Learn the Signs and Symptoms of TB Disease*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/features/tbsymptoms/> (last updated Aug. 13, 2014).

252. CTRS. FOR DISEASE CONTROL & PREVENTION, FACT SHEET: TB DRUG RESISTANCE IN THE U.S. (2014), available at <http://www.cdc.gov/nchstp/newsroom/docs/TB-Drug-Resistance-FactSheet.pdf>.

253. *Id.*

254. WORLD HEALTH ORG., *supra* note 249.

255. The Global Fund to Fight Aids, Tuberculosis, and Malaria provides the majority of global financing for TB prevention and treatment. See Susan Blumenthal & Shaina Vinayek, *Our Shared Responsibility: Ending Aids, Tuberculosis, and Malaria*, HUFFINGTON POST (Jan. 31, 2014), http://www.huffingtonpost.com/susan-blumenthal/aids-tuberculosis-malaria_b_4703093.html. The World Health Organization devotes significant resources to tuberculosis treatment as well, issuing an annual global report, treatment guidelines, and technical support. See *Health Topics: Tuberculosis*, WORLD HEALTH ORG., <http://www.who.int/topics/tuberculosis/en/> (last visited Nov. 16, 2014).

256. See Susan Blumenthal, *The Missed 3 Million: Reducing the Threat of Tuberculosis Worldwide*, HUFFINGTON POST (Aug. 1, 2014), http://www.huffingtonpost.com/susan-blumenthal/the-missed-3-million-redu_b_5641576.html.

257. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 246, at 82.

258. See, e.g., Betsy McKay, *Dangerous TB Patient Detained on U.S. Border*, WALL ST. J., Mar. 2, 2013, <http://online.wsj.com/news/articles/SB10001424127887323978104578332461533970412>; Polly J. Price, *Tuberculosis is Back, and Nastier than Ever*,

the disease in other countries, largely ignoring the fact that drug-resistant TB was already present in the United States, and that it is far more likely to enter the United States carried by citizens and legal travelers than by illegal border-crossers.²⁵⁹

The Nepalese traveler had “Extensively Drug-Resistant Tuberculosis” (XDR-TB). This is a less common but especially dangerous form of the disease that is resistant not only to the two most effective TB drugs, but also to the handful of available second-line drugs and the “new generation” drug, fluoroquinolone.²⁶⁰ As a result, patients with extensively drug-resistant TB need two years or more of very costly and toxic drug treatment. It is the most challenging form of the illness to treat, and the prognosis is poor.²⁶¹

All forms of drug-resistant TB, and especially extensively drug-resistant TB, are on the rise globally. For the most recent year, the World Health Organization reported one-half million new drug-resistant cases worldwide (a number that is limited, of course, to cases that have been identified and documented).²⁶² Drug-resistant TB strains can develop when there are interruptions in treatment. When a patient does not complete a full course of treatment, that patient is more likely to develop resistance to the most common TB drugs and spread the resistant form to others. Drug-resistance can also occur when health-care providers prescribe the wrong treatment, the wrong dose, or the wrong length of treatment.²⁶³ In some parts of the United States, an adequate supply of drugs is not always available or drugs are of poor quality.²⁶⁴ These are the primary reasons that the United States has become increasingly susceptible to potential epidemics of drug-resis-

NEWSWEEK, Nov. 26, 2013, <http://www.newsweek.com/tuberculosis-back-and-nastier-ever-207293>.

259. While extremely drug-resistant tuberculosis (XDR-TB) remains rare in the United States, it has been reported in ninety-two countries. *What is Multi-Drug Resistant Tuberculosis and How Do We Control It?*, WORLD HEALTH ORG., <http://www.who.int/features/qa/79/en/index.html> (last updated Mar. 2014). In the United States, sixty-three cases of XDR-TB were reported between 1993 and 2011. *Fact Sheet: Extensively Drug-Resistant Tuberculosis (XDR-TB)*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/tb/publications/factsheets/drtb/xdrtb.htm> (last updated Jan. 18, 2013).

260. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 252, at 2.

261. Price, *supra* note 168.

262. WORLD HEALTH ORG., *supra* note 249.

263. *See id.*

264. Ctrs. for Disease Control & Prevention, *Interruptions in Supplies of Second-Line Antituberculosis Drugs—United States, 2005–2012*, 62 MORBIDITY & MORTALITY WEEKLY REP. 23 (2013), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6202a2.htm>; see also Erica Lessem & Donna Hope Wegener, Letter to the Editor, *What to Do About Drug Shortages?*, N.Y. TIMES, Feb. 17, 2014, <http://www.nytimes.com/2014/02/18/opinion/what-to-do-about-drug-shortages.html> (“In

tant TB on its own, without factoring in the possibility of importation of the disease from regions of the world where it is highly endemic.²⁶⁵

The public health challenge in the United States is unmistakable, even if the numbers at present are not high. Of a total of 10,528 cases of TB in the United States reported in 2011, antibiotic resistance was identified in 1,042, or 9.90%, of all TB cases.²⁶⁶ One hundred and thirty cases of multi- or extensively-drug-resistant TB were reported in the United States in 2011, the most recent year for which complete drug-susceptibility results are available.²⁶⁷ Foreign-born individuals accounted for 85% of these cases.²⁶⁸ Among the U.S.-born population, the greatest disparity in TB rates is between blacks and whites; the rate among blacks was nearly six times as high.²⁶⁹ The poor, especially those without access to basic medical care, are the weakest link in the U.S. chain of defense.

The stakes are much higher with the emergence of progressively more drug resistant forms of TB. Drug-resistant tuberculosis is rightly feared by the medical community because it is spread the same way that ordinary TB is spread: through the air when a person with active TB infection coughs, sneezes, or speaks.²⁷⁰ A person with undetected and untreated active TB can infect a large number of persons in a short period of time. Just one case can put many lives at risk.

Successful prevention requires a complex choreography among state, local, and tribal health departments, along with guidance from the CDC. Prevention relies upon identification of persons infected with tuberculosis, along with what health professionals call “continuity of care” and “directly-observed therapy,” the medical standard of care in the United States.²⁷¹ TB treatment can require nine months

2013, the two main products for diagnosing and treating TB were in shortage [in the US], endangering individual and public health.”)

265. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 252, at 1.

266. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 246, at 81.

267. *Id.*

268. The CDC reports: “Since 1997, the percentage of U.S.-born patients with MDR TB has remained below 1.0%. However, of the total number of reported primary MDR TB cases, the proportion occurring in foreign-born persons increased from 25.3% (103 of 407) in 1993 to 86.1% (62 of 72) in 2012.” *Trends in Tuberculosis, 2012*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/tb/publications/factsheets/statistics/TBTrends.htm> (last updated Sept. 16, 2013).

269. *Id.*

270. *See* CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 251.

271. *See Menu of Suggested Provisions for State Tuberculosis Prevention and Control Laws*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/tb/programs/laws/menu/treatment.htm> (last updated Oct. 8, 2010).

of consistent drug therapy.²⁷² The standard of care in the United States requires that public health workers dispense the drugs and observe patients taking them as often as five times per week per patient.²⁷³ This extra precaution ensures continuity of care: patients may stop taking the drugs due to unpleasant side effects or because they believe, prematurely, that they have been cured.²⁷⁴ We know what can happen when these standards aren't met: inconsistent or interrupted treatment can lead to drug resistance.²⁷⁵

Tuberculosis control in the United States is paid for and governed by state law. The CDC provides technical advice and some funding for preventive measures, but the CDC is prohibited from using its resources for treatment.²⁷⁶ Costs for treatment can be very high and are borne by local and state public health agencies. Federal quarantine authority exists for the interior, but it is rarely used and is limited to interstate travel.²⁷⁷ As a practical matter, this power is relevant only to air travel. At the request of a state public health officer, the CDC can place a TB patient on a federal "Do Not Board" list, which prevents an individual on the list from boarding both domestic and international flights.²⁷⁸ But buses are a more common form of transportation for poor persons, who as a group are most susceptible to TB. The CDC also notifies state and local health departments when it is aware of any migrant with a specific medical condition that needs prompt evaluation or treatment, as happened in the case of the man from Nepal.²⁷⁹

272. *Treatment*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/TB/topic/treatment/default.htm> (last updated Dec. 9, 2011).

273. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 271.

274. Thomas R. Frieden & John A. Sbarbaro, *Promoting Adherence to Treatment for Tuberculosis: The Importance of Direct Observation*, 85 BULLETIN OF THE WORLD HEALTH ORG. 407 (May 2007), available at <http://www.who.int/bulletin/volumes/85/5/06-038927/en/>.

275. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 209, at 30.

276. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 271.

277. See *United States-Mexico Unit, El Paso and San Diego Quarantine Stations*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/quarantine/stations/us-mexico-unit.html> (last updated Jan. 15, 2014).

278. The "Do Not Board" list is also relevant at land border entry points, where it is technically a "Border Look Out" list. CBP officials can use this list to contact the CDC and local health authorities, while temporarily holding the traveler at the point of entry. See Ctrs. for Disease Control & Prevention, *Public Health Interventions Involving Travelers with Tuberculosis—U.S. Ports of Entry, 2007–2012*, 61 MORBIDITY & MORTALITY WEEKLY REP. 570, 570 (2012), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6130a2.htm>. While the "Do Not Board" list is authorized and governed by DHS regulations, those regulations emanate from the federal government's quarantine authority in the federal Constitution. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 17, at 28–29.

279. Ctrs. for Disease Control & Prevention, *supra* note 278.

State laws relevant to tuberculosis case management in the United States are similar in key respects.²⁸⁰ Health officials must attempt to trace persons who may have been exposed to TB, and a TB patient is required to disclose all recent close contacts and places visited.²⁸¹ State and local health departments have legal authority to issue isolation orders that can result in prison confinement for patients who are noncompliant with prescribed treatment.²⁸² In most states, non-compliance with TB treatment or ignoring an isolation order is a civil offense or a criminal misdemeanor.²⁸³ The patient must be shown to be noncompliant before civil quarantine and isolation authority may be used.²⁸⁴ State enforcement actions are relatively rare, however, probably because patient awareness of potential health authority enforcement is usually sufficient to ensure compliance with medical directives.

Patients referred to civil authorities for persistent non-adherence are protected by U.S. constitutional provisions including due process.²⁸⁵ A few states provide an attorney free of charge to represent the patient in any judicial or administrative proceedings.²⁸⁶ An initial confinement order must be periodically reviewed, and state laws also allow the conditional release of persons from quarantine if they comply with medical monitoring and surveillance.²⁸⁷

The CDC's recommended steps to control the spread of drug-resistant tuberculosis include specialized testing, appropriate patient monitoring and medication, and the use of TB registries to assist with continuity of care if a patient relocates. The CDC conducts ongoing surveillance for drug-resistant TB in all 50 states and the District of Columbia using the National Tuberculosis Surveillance System.²⁸⁸ It also funds five TB Regional Training and Medical Consultation Centers.²⁸⁹

280. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 209, at 16–18.

281. *Id.*

282. See Castro, *supra* note 18 at 9 (“It should be noted that state and local governments have primary responsibility for isolation and quarantine within their borders and conduct these activities in accordance with their respective laws and policies.”).

283. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 209, at 23.

284. *Id.*

285. See *id.* at 13–15, 18.

286. Arizona is an example. See *id.* at 24.

287. *Id.* at 13–15, 18, 24.

288. *National TB Surveillance System*, HEALTH INDICATORS WAREHOUSE, http://www.healthindicators.gov/Resources/DataSources/NTBSS_120/Profile (last visited Nov. 28, 2014).

289. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 246, at 82.

On paper, state laws for tuberculosis management comply with (and in most respects exceed) the International Health Regulations²⁹⁰ as well as the specific tuberculosis control recommendations of the World Health Organization.²⁹¹ But while continuity of care with directly observed therapy is highly effective in preventing the development of drug resistant strains, the United States has an unworkable public health defense structure because of the multitude of jurisdictions. Inter-jurisdictional transfers for persons within the United States rely largely on cooperation among state and local health authorities with assistance from the CDC and non-governmental organizations providing TB registration lists.²⁹²

Despite this federal support from the CDC, we rely on regional, county, and city public health workers to prevent a nationwide outbreak: As one CDC official noted, “The best defense against the development of drug resistant tuberculosis is a strong network of state and local public health programs and laboratories.”²⁹³ These local public health authorities are the front line for public health defense. A person diagnosed with infectious tuberculosis poses a severe threat not only to himself or herself, but to the public as well. Tuberculosis is a dangerous and potentially deadly disease if not treated correctly and efficiently. Optimal TB case management includes prompt disease diagnosis, close monitoring of medical regimens, adherence to treatment, and identification and evaluation of close contacts.²⁹⁴ Each of these strategies becomes more difficult when case management must be coordinated among multiple health jurisdictions, particularly across international borders.

Yet we live in a mobile society. Local health officials lose track of patients who travel or relocate to another county or state. Mental health and substance abuse issues can interrupt TB treatment even for

290. See WORLD HEALTH ORG., *supra* note 3.

291. WHO *Guidelines on Tuberculosis*, WORLD HEALTH ORG., <http://www.who.int/publications/guidelines/tuberculosis/en/> (last visited Feb. 11, 2014).

292. See, e.g., CAL. DEPT. OF PUB. HEALTH, TUBERCULOSIS REGISTRY GUIDELINES (2010), available at <http://www.cdph.ca.gov/programs/tb/Documents/TBCB-Tuberculosis-Registry-Guidelines.pdf>; *CureTB*, TEX. DEPT. OF STATE HEALTH SERVS., http://www.dshs.state.tx.us/borderhealth/binational_tb/cureTB.shtm (last updated Jan. 9, 2012) (“CureTB is the name of the US-Mexico binational tuberculosis referral program that has been in operation since June 1997”); *TBNet*, MIGRANT CLINICIANS NETWORK, <http://www.migrantclinician.org/services/network/tbnet.html> (last visited Feb. 17, 2014) (“TBNet is a multi-national tuberculosis patient tracking and referral program designed to keep mobile, underserved populations in care.”).

293. Castro, *supra* note 18, at 8.

294. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 271.

those who remain in one location.²⁹⁵ Migrant agricultural workers are rarely screened for TB.²⁹⁶ Perhaps most critically, the incarcerated population contains a high proportion of people at greater risk for TB than the overall population.²⁹⁷ Together with the thousands of non-citizens in immigration detention, many of whom are ultimately released into the community,²⁹⁸ the potential for spread of the disease is unacceptably high.²⁹⁹

If a patient travels or moves from one health jurisdiction to another, the health department of the patient's home jurisdiction should notify the health department for the area to which the patient is moving, if known. It is important that as much medical information as possible be relayed to the receiving jurisdiction. Once a patient enters a new jurisdiction, his or her treatment may be interrupted, and persons in the new jurisdiction who are exposed to the patient may not be contacted for testing and treatment. (The same can happen, of course, for a non-compliant TB patient who stays in one place.³⁰⁰) The patchwork of jurisdictions and the resultant lack of coordination interfere with the ability to apply these preventive tools.

Not the least of our problems is controversy over who pays for treatment. TB treatment is costly, especially for any drug-resistant case.³⁰¹ Tuberculosis research and development funding by the U.S.

295. See *Module 9: Patient Adherence to Tuberculosis Treatment*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/tb/education/ssmodules/module9/ss9study.htm> (last updated Sept. 1, 2012).

296. See *supra* text accompanying note 229.

297. *TB in Correctional Facilities is a Public Health Concern*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/features/dsTBCorrections/> (last updated Sept. 30, 2013).

298. Immigration judges at present issue removal orders in response to DHS requests at a rate of around 50%. In the remaining half, an immigration judge concluded that the non-citizen was entitled to remain in this country either permanently or at least for the foreseeable future. See *ICE Targeting: Odds Noncitizens Ordered Deported by Immigration Judge Through August 2014*, TRAC IMMIGRATION, http://trac.syr.edu/phptools/immigration/court_backlog/apprep_outcome_leave.php (last visited Nov. 16, 2014).

299. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 209, at 30.

300. A recent example of the difficulty in locating patients who move involved a California man who disappeared after refusing treatment for TB. See Scott Smith, *Tuberculosis Patient Who Refused Care is Arrested*, SEATTLE TIMES, July 29, 2014, http://seattletimes.com/html/nationworld/2024190047_apxtuberculosispatientarrested.html. The same can happen, of course, for a non-compliant TB patient who stays in one place.

301. For example, a CDC official reported in 2007: “[O]ne patient with MDR or XDR TB requires a minimum of 18–24 months of treatment, and in-patient costs alone for XDR TB can average \$500,000 per case. Small programs are vulnerable in the event that an MDR or XDR TB case is identified in their jurisdiction. For example, this year, a case of MDR in Idaho nearly depleted the State’s entire drug budget

government has declined in the face of budget instability and sequestration.³⁰² State and municipal governments have cut public health funding as well.³⁰³ The result should be alarming, given that over the next ten years, state and local health departments will need to spend \$1.3 billion on tuberculosis treatment—and that’s if infection rates don’t rise.³⁰⁴ Decreased funding is precisely the opposite of a CDC advisory council’s recommendation in 1995—nearly two decades ago—“TB programs throughout the nation must be revitalized if they are to provide core TB control activities that enable effective responses to this public health challenge.”³⁰⁵ In most states, that revitalization has not occurred.

B. *Obstacles Created by Immigration Law and Federalism*

The traveler from Nepal with XDR-TB, as noted in the previous section, crossed illegally into Mexico and then Texas.³⁰⁶ What happened next is an illustration of the complex interaction between federal immigration law and local public health interests in the United States.

The Customs and Border Protection officers arrested the Nepalese man near the border on the Texas side, where he then requested asylum.³⁰⁷ Asylum seekers are automatically placed in detention, often spending months in federal custody pending resolution of the asylum application.³⁰⁸ Because the Nepalese man appeared to be

of approximately \$40,000. States that are unable to carry out their TB programs could be more likely to face outbreaks.” Castro, *supra* note 18, at 9.

302. See CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 174; see also Donna Hope Wegener & John Bernardo, Letter to the Editor, *TB Programs Need Money*, N.Y. TIMES, July 20, 2014, <http://www.nytimes.com/2014/07/21/opinion/TB-Programs-Need-Money.html> (“[T]he reality of anticipated fiscal year 2015 funding levels for the Centers for Disease Control and Prevention’s Division of TB Elimination provides a clear warning that history will be repeated.”).

303. JACK MEYER & LORI WEISELBERG, COUNTY AND CITY HEALTH DEPARTMENTS: THE NEED FOR SUSTAINABLE FUNDING AND THE POTENTIAL EFFECT OF HEALTH CARE REFORM ON THEIR OPERATIONS 2 (2009).

304. Price, *supra* note 168.

305. CTRS. FOR DISEASE CONTROL & PREVENTION, *Essential Components of Tuberculosis Prevention and Control Program*, 44 MORBIDITY & MORTALITY WEEKLY REP. (RECOMMENDATIONS & REP.) 1 (1995), available at <http://www.cdc.gov/mmwr/pdf/rr/rr4411.pdf>.

306. See McKay, *supra* note 258; Price, *supra* note 168.

307. See McKay, *supra* note 258.

308. HUMAN RIGHTS FIRST, ARBITRARY DETENTION OF ASYLUM SEEKERS AND U.S. COMMITMENTS UNDER THE INTERNATIONAL COVENANT ON CIVIL AND POLITICAL RIGHTS (ICCPR) 1–2 (2010), available at <http://www.humanrightsfirst.org/wp-content/uploads/pdf/RPP-ICCPR-submission.pdf>.

ill and TB was suspected, immigration detention officers placed him in an isolation area at the detention facility.³⁰⁹

Medical tests soon confirmed TB, but it took longer to determine that he carried an especially dangerous form. A U.S. Public Health Service medical office prescribed a treatment regimen that would be administered (and paid for) while he remained in federal custody. Meanwhile, his asylum claim worked its way through the immigration court. Approximately six months after he entered the United States, an immigration judge granted asylum.³¹⁰

But the Nepalese man was still very sick and highly contagious. Once the asylum claim was granted, federal immigration officers had no authority to continue his medical care or enforce a quarantine order. The CDC, coordinating with officers at the El Paso Quarantine Station, prepared a federal quarantine order that could be put in place following the asylum hearing.³¹¹ Texas health officers were understandably reluctant to issue their own quarantine order or to accept him as a voluntary patient for treatment, given the tremendous expense of XDR-TB treatment and an expected lengthy hospital stay.³¹²

Ultimately, the Texas Department of State Health Services relented, and accepted the patient for treatment at state expense.³¹³ It could hardly do otherwise: The federal immigration system could not legally detain him or provide continuing treatment. He would be released into the state of Texas at the conclusion of his asylum hearing simply because he happened to be in Texas. The public health threat to Texas residents was immense, so the state provided the medical care necessary for its own public health defense even if not for humanitarian reasons.

In another example, this time in California, a Chinese national was stopped at the San Diego border crossing in August 2013 with forged travel documents. An alert CBP officer noticed that the traveler was coughing. The officer placed the traveler in an isolation room and

309. All ICE detainees are screened for TB, regardless of symptoms. *See* U.S. IMMIGRATION & CUSTOMS ENFORCEMENT, *supra* note 244.

310. Interview with anonymous public health official (July 2013) (on file with author).

311. *Id.*

312. *Id.*

313. *Id.* HHS provided some help with the initial cost of his lengthy hospitalization. Once granted asylum, the asylee receives some federal health benefits for a 9-month period. *See Benefits and Responsibilities of Asylees*, U.S. CITIZENSHIP & IMMIGRATION SERVS., <http://www.uscis.gov/humanitarian/refugees-asylum/asylum/benefits-and-responsibilities-asylees> (last updated Apr. 1, 2011).

contacted the CDC medical officer on call. The traveler was diagnosed with a highly infectious, drug-resistant variety of TB.³¹⁴

Because the Chinese national had used a fraudulent border-crossing card in his attempt to enter the United States, he was sent to an U.S. Immigration and Customs Enforcement (ICE) detention facility where he received medical care. ICE could not hold him indefinitely for the sole purpose of medical treatment, however. As ICE prepared for his conditional release pending a future immigration court hearing, CDC officials began negotiations with the Los Angeles County Health Department, the jurisdiction where the man intended to reside. The city health department initially objected to assuming financial responsibility for his care. Ultimately it did accept responsibility, but only after extended discussion of who “owned” the patient—the federal government or the local health department—after release from ICE detention.³¹⁵

The federal government’s lack of authority to continue to hold immigration detainees or to pay the cost of care for treatment once they are entitled to be released is a serious point of controversy with U.S. state and municipal governments. Immigration detention facilities are scattered throughout the nation, and often the location where a detainee is held bears no relation to the place he or she resided before being taken into custody.³¹⁶ As in the Texas and California examples noted above, the cost of medical care often falls disproportionately on local public health agencies. Concerns about “who pays” are not limited to immigration detainees, however. Because of federalism and the fragmentation of public health in the United States, as discussed in Section II, transfers between local health departments of U.S. citizens with TB can also impose disproportionate cost.³¹⁷

A further problem relates to notification of state public health officers when an immigrant with TB is released into the community.³¹⁸ ICE policy specifies that local health agencies are to be in-

314. Interview with anonymous public health official (Feb. 21, 2014) (on file with author).

315. *Id.*

316. See AMNESTY INT’L, JAILED WITHOUT JUSTICE: IMMIGRATION DETENTION IN THE USA 7 (2009), available at <http://www.amnestyusa.org/pdfs/JailedWithoutJustice.pdf> (noting “frequent and sudden transfers of detainees to facilities located far away from courts, advocates, and family”).

317. Interview with anonymous public health official (June 2014) (on file with author).

318. According to ICE policy, “Detainees shall receive continuity of care from time of admission to time of transfer, release or removal. Detainees, who have received medical care, released from custody or removed shall receive a discharge plan, a summary of medical records, any medically necessary medication and referrals to commu-

formed any time a detainee with active TB is released.³¹⁹ Failures occur anyway.³²⁰ The time frame within which ICE informs public health agencies may be only a few hours. It takes time, however, to prepare properly for a complex TB patient to insure continuity of treatment and safe transport from an ICE detention center. In 2007, the Department of Health and Human Services and the Department of Homeland Security began to develop better procedures for federal response to state notification of patients with infectious TB.³²¹ While these agencies have made substantial progress on handling communications *from* state public health agencies—both for released detainees and foreign nationals at the border—good communication is needed in the opposite direction as well: from federal authorities *to* state and local public health agencies.

C. Responsibility for Repatriation of TB Patients

Deportations from the United States have hit record numbers.³²² Repatriation of non-citizens by ICE poses distinct issues with respect to continuity of care for patients with active TB.³²³ ICE does work effectively with the Migrant Clinicians Network's TB-NET program to refer and ensure continuity of care for foreign nationals repatriated

nity-based providers as medically-appropriate." U.S. IMMIGRATION & CUSTOMS ENFORCEMENT, DETENTION STANDARDS, § 4.3(1) (2013), available at http://www.ice.gov/doclib/detention-standards/2011/medical_care.pdf.

319. *Id.*; see also *Problems with Immigration Detainee Medical Care: Hearing Before Subcomm. on Immigration, Citizenship, Refugees, Border Security, and International Law of the H. Comm. on the Judiciary*, 110th Cong. 26 (2008) (statement of Philip Farabaugh, Acting Dir., Div. of Immigration Health Services, Immigration & Customs Enforcement, U.S. Dep't of Homeland Sec.) ("The DIHS medical staff and epidemiology branch monitor tuberculosis cases to ensure continuity of care, whether the detainee is to be released from custody into the United States or returned to his or her country of origin. Between January 1, 2007, and May 31, 2008, ICE coordinated the repatriations to home countries of 156 individuals with active or suspected active tuberculosis.").

320. Interview with anonymous health services officer (July 2013) (on file with author).

321. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 17, at 5.

322. See, e.g., *Barack Obama, Reporter-in-Chief*, *ECONOMIST*, Feb. 18, 2014, at 12 (reporting that "America is expelling illegal immigrants at nine times the rate of twenty years ago," with nearly two million deportations thus far during Barack Obama's presidency).

323. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 209, at 30 ("[R]emoval prior to completion of TB treatment can contribute to the emergence and spread of drug-resistant strains. This is a problem not only for the countries to which such persons may be removed, but also for the U.S. when undocumented persons return to the U.S. with drug-resistant forms of the disease. Therefore, CDC and other organizations have sought to coordinate treatment for these individuals before, during, and after their removal.").

by ICE-sponsored air flights, especially to Central America.³²⁴ But this coordination is often difficult when deportees are returned to Mexico because of a “lack of comprehensive procedures” for addressing public health considerations.³²⁵

Deportations to Mexico are especially problematic when TB patients are involved. ICE is supposed to notify Mexican health officials, federal and state bi-national health organizations, and NGOs in advance, as well as to supply medical records and a limited supply of drugs for the patient.³²⁶ But failures occur, as noted by health professionals on both sides of the border.³²⁷ If appropriate contact and transfer does not occur, Mexican health officials do not know about the patient and cannot provide effective treatment, risking further spread of the disease. The U.S. Public Health Service and ICE are working to fill this gap.³²⁸ Mexico might prefer for the United States to deport only detainees in a non-infectious stage of TB but, at minimum, Mexican officials should receive medical treatment records and the deportee must be provided with a supply of the drugs used in his treatment. ICE attempts to accomplish these aims, but with uneven results. ICE cannot legally detain any person beyond a final order of release or deportation, even if that deportee has infectious TB.

International law does not address conditions under which sick detainees may be deported. There is no stated right to be “cured” prior to deportation, and no generally recognized set of obligations to either a sick deportee or to the receiving nation.³²⁹ In fact, the opposite

324. See *TBNet: Global Tuberculosis Management*, MIGRANT CLINICIANS NETWORK, <http://www.migrantclinician.org/services/network/tbnet.html> (last visited Feb. 21, 2014) (describing the TBNet program).

325. U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 17, at 20.

326. See UNITED STATES-MEXICO BORDER HEALTH COMM'N, PROCEEDINGS REPORT OF THE FOURTH ANNUAL MEETING OF THE UNITED STATES-MEXICO BORDER TUBERCULOSIS CONSORTIUM 1–2, 7 (May 20–21, 2013), available at http://www.borderhealth.org/files/res_2543.pdf.

327. See *id.* (describing efforts to establish more reliable transfer protocols).

328. See, e.g., News Release, U.S. Immigration & Customs Enforcement, Agencies Collaborate to Stop the Spread of Tuberculosis (May 19, 2011), <https://www.ice.gov/news/releases/1105/110519washingtondc.htm> (describing an inter-agency conference held in 2011); U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 17 (describing efforts by DHS and HHS to coordinate response to tuberculosis).

329. The International Health Regulations require notification of “all events which may constitute a public health emergency of international concern” occurring within the U.S., but it is not clear whether an individual case of infectious tuberculosis requires notification. See WORLD HEALTH ORG., *supra* note 2. In the case of the Nepalese traveler with XDR-TB, the CDC initiated “a far-reaching investigation by the U.S. and other health authorities to track down potentially exposed people around the world.” Richard Knox, *A Man's Journey From Nepal To Texas Triggers Global TB Scramble*, NPR (Mar. 8, 2013, 10:15 AM ET), <http://www.npr.org/blogs/health/>

seems to be true: International guidelines specify that immigration detention “must be as short as possible,” implying at least that immigrants may not be detained solely for the purpose of treating a disease.³³⁰ A receiving country, understandably, would prefer not to accept a deportee with tuberculosis, especially the drug-resistant variety. But the only alternative for that country is to deny travel documents for deportation, creating potentially severe diplomatic repercussions.³³¹

Thus, management of the release of incarcerated persons with active TB is a significant challenge. The prison population in the United States is notoriously large, and the same is true for those in immigration detention.³³² At the same time, many immigration detainees eventually are not deportable and are released into the United States. Neither ICE nor Customs and Border Protection require documentation that the hand-off to local health agencies has taken place.³³³ Further, immigration detainees are often held by other federal and state agencies, including the Federal Bureau of Prisons.³³⁴ These agencies turn over detainees to ICE for repatriation, often at the last minute and without adequate time to notify the appropriate public health agency. Continuity of care, critical to prevent the development of drug-resistant tuberculosis, is difficult to accomplish in these circumstances.

D. Management Tools at the U.S. Border

Drug-resistant tuberculosis, which has hit India, China, Russia, and South Africa especially hard, has been reported in 77 countries but likely exists in many more.³³⁵ The highest incidence of drug-resis-

2013/03/07/173750840/a-mans-journey-from-nepal-to-texas-triggers-global-tb-scramble.

330. FORDHAM ET AL., *supra* note 242, at 79–81 (compiling detention guidelines in various international instruments).

331. Cf. Polly J. Price, *Stateless in the United States: Current Reality and a Future Prediction*, 46 VAND. J. TRANSNAT'L. L. 443, 467–83 (2013) (discussing the diplomatic underpinnings of the deportation process).

332. See Adam Liptak, *Inmate Count in U.S. Dwarfs Other Nations*, N.Y. TIMES, Apr. 23, 2008, <http://www.nytimes.com/2008/04/23/us/23prison.html>.

333. See U.S. IMMIGRATION & CUSTOMS ENFORCEMENT, ICE/DRO DETENTION STANDARD: MEDICAL CARE 5 (2008), available at http://www.ice.gov/doclib/dro/detention-standards/pdf/medical_care.pdf (each detention facility prepares its own written plans to provide for “follow up” and “reporting to local, state, and federal agencies”).

334. OFFICE OF THE INSPECTOR GENERAL, OIG-01-01, TREATMENT OF IMMIGRATION DETAINEES HOUSED AT IMMIGRATION AND CUSTOMS ENFORCEMENT FACILITIES 2 (2006).

335. Tracy Dalton et al., *Prevalence of Risk Factors for Resistance to Second-Line Drugs in People with Drug-Resistant Tuberculosis in Eight Countries: A Prospective*

tant tuberculosis in the United States occurs in the region bordering Mexico.³³⁶ How public health officials in the U.S. address this binational problem underscores the role of diplomacy and international relations to protect domestic interests. It also provides a model for successful TB control for other regions in the United States.

California leads the states in the prevalence of both ordinary TB and drug-resistant varieties.³³⁷ Millions of migrants cross into each U.S. border state annually, many on a daily basis. In Texas, for example, more than sixty million people each year are processed through eleven ports of entry.³³⁸ TB patients who live on one side of the border might have their disease diagnosed or treated in the adjacent country; therefore, investigation of close contacts often involves school, work, and social settings on both sides of the border, as well as border control officers and other commuters with whom the patients may have been in contact.

Although attention is focused on the southern border with Mexico, the need for a coordinated U.S. response applies to all points of entry into the United States. A 2008 Government Accountability Office (GAO) report highlighted the need for greater cooperation between the U.S. Department of Health and Human Services (HHS) (which directs the U.S. Public Health Service) and the Department of Homeland Security (DHS) whenever a traveler with drug-resistant TB

Cohort Study, 380 LANCET 1406, 1406 (2012); see also Neel R. Ghandi, et al., *Multi-Drug Resistant and Extensively-Drug-Resistant Tuberculosis: A Threat to Global Control of Tuberculosis*, 375 LANCET 1830, 1830–42 (2010).

336. Betsy McKay, *U.S.-Mexico Border: Hotspot for Drug-Resistant TB*, WALL ST. J. (March 8, 2013), <http://live.wsj.com/video/us-mexico-border-hotspot-for-drug-resistant-tb/440B7D32-9E15-49C8-B63C-91C1878D0FF8.html#1440B7D32-9E15-49C8-B63C-91C1878D0FF8>. Other urban centers outside the border region also have a higher incidence than the average population. New York City, for example, recorded twice the national rate of TB. According to health officials, immigrants comprise the highest number of new cases. Erin Billups, *Tuberculosis Cases Among Immigrants Continue to Rise*, TIME WARNER CABLE NEWS NY1 (Feb. 12, 2014), <http://manhattan.ny1.com/content/lifestyles/health/203499/tuberculosis-cases-among-immigrants-continue-to-rise>.

337. Ryan Miller, *Inconspicuous Consumption: California is the Nation's Leader in Tuberculosis*, NEW TIMES (Jan. 29, 2014), <http://www.newtimeslo.com/cover/10557/inconspicuous-consumption-california-is-the-nations-leader-in-tuberculosis/>. The U.S.-Mexico border area as a whole has the highest rate of all types of TB in the nation. *TB in the U.S.-Mexico Border Region*, PAN AMER. HEALTH ORG. http://www.paho.org/hq/index.php?option=com_content&view=article&id=2511%3Atb-in-the-us-mexico-border-region&catid=1148%3Ahss-0205-research-promotion-and-develop-op-home&Itemid=354&lang=en (last visited Jan. 15, 2014).

338. *United States-Mexico Unit, El Paso and San Diego Quarantine Stations*, CTRS. FOR DISEASE CONTROL & PREVENTION (Jan. 15, 2014), <http://www.cdc.gov/quarantine/stations/us-mexico-unit.html>.

crosses into the United States.³³⁹ The incident that gave rise to the GAO review involved a U.S. citizen returning from abroad. That incident highlighted not only the difficulties of communication between these two federal agencies, but also the need to work with state and local health agencies.³⁴⁰ The GAO recommended that HHS and DHS “develop plans with timeframes for completing additional actions that require cross-agency coordination to respond to future TB incidents.”³⁴¹

A CDC study reported:

TB is brought into the United States from Mexico and Central America in three ways: (1) persons with active TB disease move northward across the border; (2) persons with latent TB infection experience active disease after arrival in the United States; or (3) U.S. residents touring Mexico . . . [develop] TB disease after returning to the United States. After a person with TB enters the United States, further transmission might occur, which contributes to TB morbidity in the United States directly from source patients and indirectly from their contacts.³⁴²

Thus, the United States-Mexico border region is the focus of intense efforts by both countries to address this public health threat. The CDC, through the U.S.-Mexico Unit in the Division of Global Migration and Quarantine, serves as the U.S. government’s official liaison with the Mexico Secretariat of Health.³⁴³ The U.S.-Mexico Unit implements CDC programs that focus on the U.S.-Mexico border, including management of CDC Quarantine Stations in El Paso and San Diego and bi-national infectious disease surveillance projects.³⁴⁴

A coalition of health and government officials from Mexico and the United States gather annually to discuss TB control measures necessary in both countries. This group, the U.S.-Mexico TB Consortium, is an organization sponsored by the U.S.-Mexico Border Health Commission (a bi-national government entity).³⁴⁵ At these meetings, health professionals exchange epidemiology data and discuss treatment pro-

339. U.S. GOV’T ACCOUNTABILITY OFFICE, *supra* note 17.

340. *See id.* at 10.

341. *Id.*

342. Ctrs. for Disease Control & Prevention, *Preventing and Controlling Tuberculosis along the U.S.-Mexico Border*, 50 MORBIDITY & MORTALITY WEEKLY REP. (RECOMMENDATIONS & REP.) 1 (2001), <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5001a1.htm>.

343. *United States-Mexico Unit*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/quarantine/stations/us-mexico-unit.html> (last updated Jan. 15, 2014).

344. *Id.*; Ctrs. for Disease Control & Prevention, *supra* note 342.

345. *See generally Overview*, UNITED STATES – MEXICO BORDER HEALTH COMM’N, http://www.borderhealth.org/about_us.php (last visited Nov. 16, 2014).

ocols and continuity of care. Lawyers and government officers review public health law issues, including the use of isolation and quarantine, delivery of drugs and laboratory samples through U.S. and Mexican customs, and the repatriation of TB patients from ICE custody to Mexico.³⁴⁶

High-level government officials from both countries negotiate broader policies that are then recorded in a “Memorandum of Understanding” (MOU).³⁴⁷ The most recent MOU between the United States and Mexico “provides a framework to encourage bilateral cooperation in addressing issues and problems of importance in the fields of public health, medicine, and science for both countries.”³⁴⁸ The purpose of the agreement is to “strengthen cooperation across a broad range of health issues of mutual interest,” including:

(1) The United States-México Border Health Commission, for which the U.S. Secretary of Health and Human Services and the Secretary of Health of the United Mexican States serve as Commissioners, and other efforts in the United States-México border area;

. . .

(3) Health-related concerns of women and special populations, including migrants, older persons, persons with special needs, adolescents and children, other vulnerable groups, and border populations;

. . .

(5) Public policies oriented to disease prevention and health promotion;

(6) The detection, surveillance, and reporting of infectious and chronic diseases, to enable better tracking and analyses of prevalence and trends, so as to improve the prevention and care of, and the response to, these diseases³⁴⁹

While ICE has the authority to deny entry or remove from the United States any foreign national with TB, it does not exercise this

346. Summaries of these discussions are available in the Consortium’s annual reports. *See, e.g.*, UNITED STATES-MÉXICO BORDER HEALTH COMMISSION, PROCEEDINGS REPORT: FOURTH ANNUAL U.S.-MÉXICO BORDER TUBERCULOSIS CONSORTIUM 3, 4, 7 (2013), available at http://www.borderhealth.org/reports.php?curr=about_us.

347. *See, e.g.*, Memorandum of Understanding, Between the Department of Health and Human Services of the United States of America and the Secretariat of Health of the United Mexican States on Cooperation in the Fields of Public Health and Science, U.S.-Mex., March 4, 2008, <http://www.globalhealth.gov/global-health-topics/health-diplomacy/international-arrangements/20080304-mem.html>.

348. *Id.* § 1.

349. *Id.* § 2.

latter option as a matter of policy.³⁵⁰ Thus, diplomacy and cooperation, not “law,” govern tuberculosis control along the border with Mexico. Yet both countries have their own laws for public health measures, and reconciling the two can present substantial difficulties. Customs laws differ, for example, making the exchange of patient drugs and laboratory samples difficult in border cities such as El Paso and Ciudad Juarez. In addition, unlike U.S. state and local governments, Mexican health officials tend to view coercive treatment of any non-compliant patient as a violation of international human rights, although a minority accept, in principle, the necessity for civil commitment or forced isolation in some TB cases.³⁵¹

Control of tuberculosis on the U.S. side falls to numerous local public health agencies. Mexico, by contrast, has more “top-down” control from both the state government and the Mexico Secretariat of Health (in addition to the provision of universal health care for Mexican citizens).³⁵² In El Paso, Texas, the city itself has a health department serving those within city limits.³⁵³ El Paso is also the seat of a Texas regional health authority, responsible for a large geographic area outside the city limits of El Paso.³⁵⁴ And just twenty miles to the west, the state of New Mexico has its own health districts, including an Office of Border Health.³⁵⁵ These agencies by necessity must cooperate across jurisdictions, in order to track TB patients moving into and out of the densely populated cities of El Paso and Ciudad Juarez.

Public-private treatment models at the U.S.-Mexico border may provide a roadmap for more successful intervention within the United States. “Project Juntos,” for example, has, since 1991, served a bi-

350. CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 209, at 20 (“Federal immigration laws also authorize the U.S. Immigration and Customs Enforcement (ICE) to (1) deny entrance into the country to any undocumented person with TB80 and (2) remove any undocumented person who entered the country with TB (such individual is ineligible by law for admission into the U.S.). However, ICE does not invoke this latter power as a matter of policy. Rather, denials of admission or removals of undocumented persons who cannot prove their TB status are based on the lack of documented proof in support of their entrance in or existence within, U.S. borders.”).

351. See UNITED STATES-MÉXICO BORDER HEALTH COMM’N, *supra* note 346, at 4.

352. *Mexico Achieves Universal Health Coverage, Enrolls 52.6 Million People in Less than a Decade*, HARVARD SCH. OF PUB. HEALTH (Aug. 15, 2012), <http://www.hsph.harvard.edu/news/features/mexico-universal-health/>.

353. CITY OF EL PASO DEP’T OF PUB. HEALTH, <http://home.elpasotexas.gov/health/> (last visited Nov. 16, 2014).

354. *Health Services Regions 9 and 10*, TEXAS DEP’T OF STATE HEALTH SERV., <http://dshs.state.tx.us/region9-10/default.shtm> (last updated Jan. 28, 2014).

355. See *Office of Border Health*, N.M. DEP’T OF HEALTH, <http://nmborderhealth.org/> (last visited Feb. 17, 2014).

national population at El Paso and Ciudad Juarez, where TB rates are twice as high as elsewhere in the region.³⁵⁶ More than 100,000 travelers per day cross the border, in both directions, through El Paso.³⁵⁷ A CDC study in 2009 showed that nearly one-third of El Paso health department patients reported pre-treatment travel to Juarez, and a similar number of Juarez health department patients reported travel to El Paso.³⁵⁸ Residents on both sides of the border are at risk for drug-resistant TB, and continuity of care is the biggest challenge. As the website for Project Juntos notes, “[t]his [large number of border crossings] suggests a ‘floating’ border population that shares infectious disease agents. Tuberculosis is among the most significant infectious disease problems in the El Paso, Texas/Ciudad Juarez, Chihuahua area because of the easy trans-border travel.”³⁵⁹

Project Juntos is one of several bi-national TB programs overseen by the Texas Office of Border Health and medical authorities in the Mexican state of Chihuahua. Other “sister-city” programs include “Grupo Sin Fronteras,” and “Los Dos Laredos.”³⁶⁰ The general objective of these partnerships is to promote TB control activities through joint activities between Mexican and U.S. public health agencies.³⁶¹

CureTB promotes close contact on both sides of the border to facilitate continuity of care:

CureTB staff, primarily Mexican MDs familiar with the structure of the Mexican and United States health care systems, contact patients before they cross the border to assist and motivate them to continue care. They also work with providers to facilitate the exchange of clinical information. Using an over-the-phone case management system and a computer database, CureTB monitors and documents the treatment outcomes for patients.³⁶²

356. See *Project Juntos*, TEXAS DEP’T OF STATE HEALTH SERV., (Jan. 9, 2012), http://www.dshs.state.tx.us/borderhealth/binational_tb/juntos.shtm.

357. See Burnson, *supra* note 50.

358. Ctrs. for Disease Control & Prevention, *Public Health Surveillance Using Emergency Medical Service—U.S.-Mexico Land Border, El Paso, Texas*, 59 MORBIDITY & MORTALITY WEEKLY REP. 649 (2010), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5921a1.htm>.

359. See *Office of Border Health*, TEXAS DEP’T OF STATE HEALTH SERVS., <http://www.dshs.state.tx.us/borderhealth/> (last updated Sept. 24, 2014).

360. *Id.* (containing links to information about various binational Tuberculosis programs).

361. See, e.g., Office of Border Health, *Grupo Sin Fronteras*, TEXAS DEP’T OF STATE HEALTH SERVS., https://www.dshs.state.tx.us/borderhealth/binational_tb/grupo_sinfronteras.shtm (last updated Oct. 14, 2011).

362. Office of Border Health, *Cure TB*, TEXAS DEP’T OF STATE HEALTH SERV., http://www.dshs.state.tx.us/borderhealth/binational_tb/cureTB.shtm (last updated Jan. 9, 2012).

The definition of a bi-national TB case is important for these projects. A report by a work group including both CDC and state health officials proposed the following definition:

The work group defines a binational TB case as one that meets the U.S. or Mexican case definition for active TB disease plus one of the following criteria:

(1) Optimal case management requires communication or collaboration with TB control programs or health-care providers on the opposite side of the border. For example, a TB control program in the United States would transfer clinical or laboratory data, refer a patient for treatment completion, or share information for contact investigation with a Mexican TB control program.

(2) The case-patient is a contact of a binational TB case-patient or is the TB source case-patient for contacts on the opposite side of the U.S.-Mexico border.³⁶³

For Project Juntos, Lupe Gonzalez, Bi-national TB Case Manager of the Texas Department of State Health Services, and her team provide case management to dozens of TB patients every day. When a patient is diagnosed with active TB, the protocol for response requires not only tracing the contacts of that patient, often on both sides of the U.S.-Mexico border, but also initiating a case management program and drug regimen directed by a physician.³⁶⁴ Drug-resistant cases are of special concern. Gonzalez completes the extensive documentation required to transport drugs across the border to Mexico and to return laboratory specimens to the United States.³⁶⁵

Project Juntos is a cooperative effort among local health authorities in Texas and Mexico. Modest funding from CDC provides advanced TB drugs and a limited budget for cross-border travel expenses. Along with the Texas Office of Border Health, Project Juntos enhances bi-national TB control in the greater El Paso/Ciudad Juarez area. Project Juntos has been recognized internationally as a model for the prevention of drug-resistant TB.³⁶⁶ It also received the “Pillars of Public Health Outstanding Support to Community Health Award” in 2014 from the City of El Paso Health Department.³⁶⁷

This cooperation should be the model *within* the United States. Outside of the border region, state and local public health agencies

363. Ctrs. for Disease Control & Prevention, *supra* note 342.

364. Interview with Lupe Gonzalez, Binational TB Project Manager, Texas Department of State Health Services, in El Paso, TX (July 1, 2014).

365. *Id.*

366. See TEXAS DEP'T OF STATE HEALTH SERV., *supra* note 356.

367. Letter from Robert Resendes, Dir., City of El Paso Dep't of Public Health, to Lupe Gonzalez, Binational TB Project Manager, (Feb. 5, 2014) (on file with author).

have little experience with cross-jurisdictional TB cases. It is difficult enough to track and treat TB patients within one state. Georgia, for example, created the Southeast Health District Tuberculosis Program to coordinate TB care within a sixteen-county area, but the state has 159 counties.³⁶⁸ Georgia's Department of Health has no specific procedure or program to communicate with other state health departments about TB cases. TB programs in other U.S. states are structured similarly. Non-border states have little or no history of cooperation among agencies, especially at the interstate level. But migration patterns and general population movement necessitate the development of cross-agency cooperation projects similar to CureTB and Project Juntos.

Too many state and local public health agencies in the United States have yet to surmount these jurisdictional hurdles. Some do not even try to track TB patients who have moved on, even when sufficient financial resources are available. It is ironic that state and local public health departments in the United States face many of the same jurisdictional challenges that arise between sovereign nations.

CONCLUSION

The United States has a long history of dispute about control over the border when public health issues threaten the interior. The emergence of exclusive federal authority at the border coincided with the use of federal immigration power to block sick immigrants from entering the United States. This approach meant that the federal government never had any responsibility for health conditions of foreign nationals once they were inside the United States, and therefore the primary responsibility fell on states. In part because the historic purpose of public health exclusions in U.S. immigration law was to deny admission, not to treat or coordinate care for non-citizens after they entered the country, federal health authorities today have no resources to treat or coordinate care for non-citizens.

This history is largely forgotten and a status quo is accepted that poses unacceptable public health consequences. Federal immigration authority cannot protect the nation from epidemic or contagious disease existing outside the United States, and yet current immigration law also undermines public health control measures in the interior. Debates over immigration reform ignore these public health consequences and fail to consider how the situation might be ameliorated.

368. *Tuberculosis Program*, SOUTHEAST HEALTH DIST., <http://www.sehdph.org/tuberculosis.htm> (last visited Nov. 16, 2014).

Federal immigration law determines who may be admitted into the United States and under what terms, creating artificial distinctions that undermine health care even for those with a legal right to reside in this country. The complexity of visa eligibility and the enormous backlog of persons awaiting legal immigration status also contribute to the presence of illegal immigrants. Undocumented migrants with communicable disease pose a public health threat for two reasons: they are not readily identified by local health authorities and they strive to avoid any interaction with government agencies. Persons in immigration detention present a high risk when they are released or deported with an active contagious disease. This risk falls disproportionately on the U.S. communities where they are released, as well the nations to which they may be repatriated.

The federal government does not provide for the cost of treating foreign nationals who pose a public health threat—that burden falls upon state and local governments. Further, both citizens and non-citizens with serious contagious disease can fall through the cracks of a fragmented public health care system. Immigration law can be better integrated with public health concerns, but fragmentation of the U.S. public health care system is also to blame. Public health departments are hampered by limited resources as well as the complex legal issues which affect continuity of care for patients with serious contagious disease in a mobile society. The safety net is fragile, at best. For some public health issues, especially drug-resistant TB, a broader solution is called for.

But what steps might help to achieve this? Can U.S. immigration law be reconciled with the protection of public health? My recommendations are modest because the issues I have raised are extraordinarily complex and I have likely oversimplified them. These issues are also politically charged. Providing some federally funded health coverage to foreign nationals who are present in the United States is politically unacceptable in Congress. Providing preventive and routine health care to non-citizens in the present political climate is a non-starter, even with the knowledge we have of serious public health consequences. One concern is that availability of government resources to non-citizens could increase the number of migrants who enter illegally or who overstay a visa. But this concern is short-sighted in the face of public health threats such as drug-resistant TB.

At a minimum, the federal government should be given the capacity and resources to provide medical treatment for foreign nationals, both for those stopped at the border and for persons already within the United States who pose a public health threat. The case of the

migrant from Nepal with XDR-TB illustrates this. The U.S. government values a humanitarian image, so it was never a serious possibility that the Nepalese traveler would remain untreated while in the United States, or that he would be repatriated to Nepal untreated if his asylum request had been denied. U.S. diplomatic and humanitarian goals, however, are paid for by local governments. For Texas, the cost in public health resources was extraordinarily high, and this cost was based solely upon its location as a border state where the immigrant happened to cross.

Congress must also establish the capacity to continue treatment for immigration detainees who are released and for those who are to be deported. In addition, greater attention to the health conditions of migrant workers ought to be a centerpiece of any guest worker plan. We cannot rely solely on local public health agencies to supply this need.

Border screening also can be made more effective but at a substantial cost. Although vigilance at the border can be only marginally improved, a greater number of U.S. Public Health Service officers stationed at all entry points could increase the likelihood of identifying a traveler with contagious or epidemic disease. The CDC and other federal partners are actively pursuing more innovative measures to fill the gap. These measures include creation of the CDC's United States-Mexico Unit, expansion of Quarantine Stations, and expanding the scope of duties for quarantine officers.³⁶⁹

The United States should expand TB screening to temporary visitors and returning U.S. citizens based on risk assessment. The reality now is that the burden of defense from global health threats such as extensively-drug-resistant tuberculosis falls to a patchwork of state and municipal public health agencies, which are hampered by jurisdictional and financial constraints. Greater awareness of this reality should move us toward expanded national authority in matters of public health and less reliance on state and local health departments. It should also lead to reform of immigration practices that impede public health efforts.

Even though the CDC and the U.S. Public Health Service are scientific leaders and among the best health agencies in the world,

369. See Stephen H. Waterman et al., *A New Paradigm for Quarantine and Public Health Activities at Land Borders: Opportunities and Challenges*, 124 PUB. HEALTH REPORTS 203, 203–04, 207 (2009); *United States-Mexico Public Health*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/USMexicoHealth/index.html> (last updated July 28, 2014); CTRS. FOR DISEASE CONTROL & PREVENTION, *supra* note 343.

federal law retains much of the same disease-prevention architecture it had more than a century ago. Immigrant health exclusions at one time alleviated some of the burden on state and local governments, but the federal government does not contribute to the cost of preventive health measures for foreign nationals. Modern conditions demand a modern approach. It is abundantly clear, at least, that building fences will not protect the nation's public health.