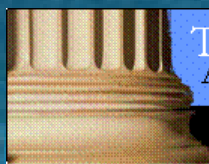


# Tuberculosis Control Laws and Policies:

## A Handbook for Public Health and Legal Practitioners



The Centers for Law & the Public's Health:  
A Collaborative at Johns Hopkins and Georgetown Universities

*CDC Collaborating Center for Public Health Legal Preparedness  
WHO/PAHO Collaborating Center on Public Health Law and Human Rights*

# **Tuberculosis Control Laws and Policies:**

A Handbook for Public Health and Legal Practitioners

Prepared by:

*The Centers for Law and the Public's Health:  
A Collaborative at Johns Hopkins and Georgetown Universities*

Endorsed by:

The Advisory Council for the Elimination of Tuberculosis  
The National Tuberculosis Controllers Association

Prepared for:

The Centers for Disease Control and Prevention (CDC)

As of October 1, 2009<sup>1</sup>

***Disclaimer** – Information in this Handbook does not represent the official legal positions of the U.S. Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention/HHS, or state or local governments, and is not meant to provide specific legal guidance or advice. Users of this Handbook, including state and local officials, should consult with their state and local attorneys and legal advisors for specific legal guidance concerning the scope and extent of public health laws in their jurisdiction.*

---

<sup>1</sup> This document includes descriptions and analyses of tuberculosis control and other public health laws and policies based on research conducted as of October, 2008. Reforms, amendments, interpretations, or other changes related to such laws or policies after this date are not reflected in the document.

# Table of Contents

	Page
<b>Acknowledgment</b> .....	3
<b>Funding</b> .....	3
<b>Disclaimer</b> .....	3
<b>Table of Abbreviations</b> .....	4
<b>I. Introduction</b> .....	5
<b>Table 1: Resources on Communicable Disease and TB Control Methods</b> in Selected U.S. Jurisdictions.....	7
<b>II. Essentials of TB Control in Public Health Practice</b> .....	8
A. TB Incidence in the United States.....	8
B. TB Infection among High-Risk Populations.....	9
C. Public Health Interventions.....	9
<b>III. Basic Legal Framework for Communicable Disease Control</b> .....	11
A. Separation of Powers.....	11
B. Federalism and the Distribution of Governmental Powers.....	11
C. Limitations on Governmental Powers.....	13
<b>IV. Communicable Disease Control Law</b> .....	16
A. State and Local General Communicable Disease Control Law.....	16
B. Federal Communicable Disease Control Law.....	18
C. International Communicable Disease Control Law.....	19
<b>V. Express TB Control Laws</b> .....	21
A. Prevention of TB Cases (TB Control Programs).....	21
B. Identification of TB Cases.....	22
C. Management of TB Cases.....	22
D. Safeguarding Rights.....	23
E. Considerations for Special Populations.....	24
F. Interjurisdictional and Other TB Provisions.....	25
<b>VI. Selected Legal Issues in TB Control Law</b> .....	26
A. TB Screening.....	26
B. Health Information Privacy.....	26
C. Isolation of TB Patients Who Do Not Adhere to Treatment.....	28
D. TB Prevention and Care among Populations under State Control.....	29
E. Discrimination Against Persons with TB.....	29
F. Immigration and Removal of Undocumented TB Patients.....	30
G. Interjurisdictional Coordination of TB Control.....	30
<b>VII. Tools to Assess TB Control Laws</b> .....	32
<b>Table 2. TB Control Law Checklist</b> .....	33
<b>References and Notes</b> .....	39

## Acknowledgment

The *Centers for Law and the Public's Health: A Collaborative at Johns Hopkins and Georgetown Universities (Center)* would like to acknowledge a number of contributors to the conception, research, development, and review of this Handbook. The Handbook was drafted by **James G. Hodge, Jr., J.D., LL.M.**, Associate Professor, Johns Hopkins Bloomberg School of Public Health, *Center* Executive Director; **Evan Anderson, J.D.**, Research Associate, Johns Hopkins Bloomberg School of Public Health, *Center* Fellow; **Gayle Nelson, J.D.**, *Center* Senior Researcher; and **Meredith Larson, J.D., M.P.H.** Candidate, *Center* Researcher.

Additional persons at the *Center* provided research and editing assistance with the Handbook and a corresponding PowerPoint presentation, including **Jon S. Vernick, J.D., M.P.H.**, Associate Professor, Johns Hopkins Bloomberg School of Public Health, *Center* Associate Director; **James T. Tsai, J.D.**, *Center* Senior Researcher; **Tracy Hubbell, J.D., M.P.H.**; **Andrea Vallenilla, M.H.S.**, and **P.J. Wakefield**.

The *Center* also acknowledges the significant review and contributions of initial outlines and drafts of this Handbook by colleagues at the Centers for Disease Control and Prevention's (CDC) Public Health Law Program (PHLP), CDC's Division of Tuberculosis Elimination (DTBE), and the National Tuberculosis Controllers Association (NTCA).

## Funding

The *Center's* development of this Handbook was sponsored by CDC's Public Health Law Program, Office of Strategy and Innovation, with financial support under CDC Cooperative Agreement U50/CCU319118.

## Disclaimer

*Information in this Handbook does not represent the official legal positions of the U.S. Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention/HHS, or state or local governments, and is not meant to provide specific legal guidance or advice. Users of this Handbook, including state and local officials, should consult with their state and local attorneys and legal advisors for specific legal guidance concerning the scope and extent of public health laws in their jurisdiction.*

## Table of Abbreviations

The following abbreviations are used throughout the Handbook.

Abbreviation	Term or Title
ACET	Advisory Council for the Elimination of Tuberculosis
ADA	Americans with Disabilities Act
BCG	Bacille Calmette – Guerin
BIA	Bureau of Indian Affairs
CDC	Centers for Disease Control and Prevention
<i>Center</i>	<i>Centers for Law and the Public’s Health: A Collaborative at Johns Hopkins and Georgetown Universities</i>
DHS	U.S. Department of Homeland Security
HHS	U.S. Department of Health and Human Services
DOT	Directly Observed Therapy
DTBE	Division of Tuberculosis Elimination, CDC
ED	U.S. Department of Education
FERPA	Family Education Rights and Privacy Act
HIPAA	Health Insurance Portability and Accountability Act
ICE	Immigration and Customs Enforcement
IHR	International Health Regulations
IHS	Indian Health Service
LTBI	Latent Tuberculosis Infection
MMWR	Morbidity and Mortality Weekly Report
MDR TB	Multi Drug-Resistant Tuberculosis
NTCA	National Tuberculosis Controllers Association
PHEIC	Public Health Emergency of International Concern
PHLP	Public Health Law Program, CDC
PHSA	Public Health Service Act
SARS	Severe Acute Respiratory Syndrome
TB	Tuberculosis
Turning Point Act	Turning Point Model State Public Health Act
WHO	World Health Organization
XDR TB	Extensively Drug-Resistant Tuberculosis

## I. Introduction

Despite the inception of modern treatments and public health interventions, tuberculosis (TB) remains a significant public health threat in the U.S. and abroad in the twenty-first century. The challenge of controlling TB in its traditional and new multidrug-resistant forms requires public health agencies at the federal, tribal, state, and local levels to develop and apply new tools. Among these tools is the use of law in support of efforts to effectively control cases of TB.

The Centers for Disease Control and Prevention (CDC) – through its Division of Tuberculosis Elimination (DTBE) and its Public Health Law Program (PHLP) – has identified legal preparedness as a critical component in the control of many public health threats, including TB.<sup>1</sup> With support from CDC and guidance from the National Tuberculosis Controllers Association (NTCA), the *Centers for Law and the Public's Health: A Collaborative at Johns Hopkins and Georgetown Universities (Center)* created this Handbook for use by tribal, state, and local public health practitioners and their legal counsel to help improve their understanding and use of relevant laws to respond to challenges concerning TB control.

Some states and localities have already developed informative resources for the control of TB in their jurisdictions, as noted in **Table 1** (*Resources on Communicable Disease and TB Control Methods in Selected U.S. Jurisdictions*). Some of these materials, such as Virginia's *TB Control Laws Guidebook* and the California Public Health Institute's report, *TB Control Law*, focus specifically on legal preparedness for TB control. However, most of these resources examine public health practice issues concerning communicable diseases, including TB, but feature little or no discussion of legal issues. A number of federal resources on TB control are also available on CDC DTBE's website,<sup>2</sup> including a 1993 MMWR report on state TB control laws and recommendations developed by the Advisory Council for the Elimination of TB (ACET).<sup>3</sup>

The purpose of this Handbook is to provide a practical source of information on laws related to TB control to help public health practitioners and their legal counsel to: (1) understand the legal environment for the control of communicable diseases, including TB; (2) identify and explain legal issues in TB control; and (3) consider the use of tools for improving TB control. *The Handbook is not designed to provide specific legal guidance or advice, and does not represent the official legal positions of federal, state, tribal, or local governments. Users should contact their legal advisors for legal guidance concerning the scope and extent of public health laws in any jurisdiction.*

**Part II** (*Essentials of TB Control in Public Health Practice*) of the Handbook begins with a brief overview of some of the essential components of TB control, including a discussion of the international and national threats of the disease and modern public health interventions. This basic information is intended especially to inform public health practitioners and their legal counsel who are new to TB control efforts.

**Part III** (*General Legal Framework for Communicable Disease Control*) defines “public health law” and discusses the basic legal framework for communicable disease control for public health practitioners and others without legal training. Core constitutional structural principles – such as separation of powers and federalism – are briefly explained. Also discussed are

constitutional rights – including due process and equal protection – focused on protecting individuals. Respect for these (and other) constitutional principles helps ensure that individual and collective rights are properly balanced with the protection of the public’s health.

TB control measures may be legally authorized through general communicable disease laws or TB-specific laws at the tribal, state, or local level. **Part IV** (*Communicable Disease Control Law*) selectively examines traditional and modern communicable disease control laws. In the absence of specific (i.e., express) TB control laws, these laws may authorize various public health measures that are critical to TB control, including surveillance, reporting, screening, examination and testing, directly observed therapy (DOT), and isolation. Many jurisdictions at the tribal, state, and local levels rely on general communicable disease laws to control TB.

**Part V** (*Express TB Control Laws*) focuses on express TB control laws in selected state and local jurisdictions. Express TB control laws are defined as those laws (e.g., statutes, regulations, cases) that directly mention TB (or some derivative) in the body of the law, and whose main purpose is limited to the control of TB (and not the control of other communicable diseases). This section presents a summary of major findings and key facets of these laws based on the *Center’s* legal research and analysis of express TB control laws in 25 selected jurisdictions conducted in 2008 for CDC.<sup>4</sup>

Despite significant efforts in many jurisdictions to enhance legal preparedness for TB control, legal issues continue to arise. These issues may stem from the application of existing TB and other communicable disease control laws that are dated, incomplete, or vague.<sup>5</sup> In other instances, reliance on general communicable disease laws creates potential for litigation because they do not always provide sufficient guidance on how to balance individual rights with public health measures designed to control TB.<sup>5</sup> Legal issues may also arise in the use of coercive powers to control TB cases. At the center of these legal issues is often the need to balance individual rights and freedoms while protecting the health of the general public. **Part VI** (*Selected Legal Issues in TB Control Law*) addresses illustrative issues in law concerning TB screening practices, health information privacy, isolation of non-adherent TB patients, TB prevention among vulnerable populations, discrimination against persons with TB, immigration and removal of undocumented persons with TB disease, and interjurisdictional coordination in TB control.

Finally, **Part VII** (*Tools to Assess TB Control Laws in Practice*) of the Handbook provides a checklist for tribal, state, and local TB control laws as a tool to facilitate jurisdiction-specific assessments of relevant legal authorities in support of comprehensive TB control programs.

**Table 1: Resources on Communicable Disease and TB Control Methods in Selected U.S. Jurisdictions**

<b>Jurisdiction</b>	<b>Source, Title, and Web Link</b>
Alaska	Alaska Division of Public Health, <i>TB Control in Alaska</i> (Available at <a href="http://www.epi.hss.state.ak.us/pubs/webtb/tbjuly2001rev.pdf">http://www.epi.hss.state.ak.us/pubs/webtb/tbjuly2001rev.pdf</a> ).
California	California Public Health Institute, <i>California TB Control Law</i> (Available at <a href="http://www.phlaw.org/docs/tb_law_paper.pdf">http://www.phlaw.org/docs/tb_law_paper.pdf</a> )
	California TB Controllers Assoc. Guidelines, <i>California TB Controllers Assoc. Guidelines</i> (Available at <a href="http://www.ctca.org/guidelines/index.html">http://www.ctca.org/guidelines/index.html</a> )
	California Public Health Law Work Group, <i>Health Office Practice Guide for Communicable Disease Control in California</i> (Available at <a href="http://dhs.ca.gov/ps/dcdc/pdf/Practice%20Guide.pdf">http://dhs.ca.gov/ps/dcdc/pdf/Practice%20Guide.pdf</a> )
Indiana	Indiana State Department of Health, <i>TB Control and Prevention Manual</i> (Available at <a href="http://www.in.gov/isdh/programs/tb/tb_manual.pdf">http://www.in.gov/isdh/programs/tb/tb_manual.pdf</a> )
Louisiana	Louisiana Department of Health and Hospitals Office of Public Health, <i>Tuberculosis Control Manual</i> (Available at <a href="http://www.dhh.louisiana.gov/offices/publications/pubs-273/Louisiana%20Tuberculosis%20Manual.pdf">http://www.dhh.louisiana.gov/offices/publications/pubs-273/Louisiana%20Tuberculosis%20Manual.pdf</a> )
Los Angeles	County of Los Angeles Control Program, <i>TB Control Program Manual</i> (Available at <a href="http://www.lapublichealth.org/tb/TBManual/TBmanual.pdf">http://www.lapublichealth.org/tb/TBManual/TBmanual.pdf</a> )
Maine	Maine Center for Disease Control and Prevention, <i>Maine Correctional Facility TB Tool Kit</i> (Available at <a href="http://mainegov-images.informe.org/dhhs/boh/ddc/documents/pdf/webcorrectionsthinktbt.pdf">http://mainegov-images.informe.org/dhhs/boh/ddc/documents/pdf/webcorrectionsthinktbt.pdf</a> )
	Maine Department of Health and Human Services, <i>Maine TB Tool Kit for Shelters</i> (Available at <a href="http://mainegov-images.informe.org/dhhs/boh/ddc/documents/pdf/tool%20kit.pdf">http://mainegov-images.informe.org/dhhs/boh/ddc/documents/pdf/tool%20kit.pdf</a> )
Michigan	Michigan Department of Community Health, <i>MDCH Tuberculosis Program</i> (Available at <a href="http://www.michigan.gov/mdch/0,1607,7-132-2945_5104_5281_46528---,00.html#guidelines">http://www.michigan.gov/mdch/0,1607,7-132-2945_5104_5281_46528---,00.html#guidelines</a> )
Missouri	Missouri Department of Health and Senior Services, <i>Tuberculosis Case Management Manual</i> (Available at <a href="http://www.dhss.mo.gov/TBManual/Chap1.pdf">http://www.dhss.mo.gov/TBManual/Chap1.pdf</a> )
Montana	Montana Department of Health and Human Services, <i>Montana Tuberculosis Program Manual</i> (Available at <a href="http://www.dphhs.mt.gov/PHSD/epidemiology/documents/00_contents_042307F.pdf">http://www.dphhs.mt.gov/PHSD/epidemiology/documents/00_contents_042307F.pdf</a> )
North Carolina	North Carolina TB Control Program, <i>North Carolina Tuberculosis Policy Manual</i> (Available at <a href="http://www.epi.state.nc.us/epi/gcdc/tb/manual.html">http://www.epi.state.nc.us/epi/gcdc/tb/manual.html</a> )
New York City	New York City Department of Health and Mental Hygiene, <i>TB Information Kit for Health Care Providers</i> (Available at <a href="http://www.nyc.gov/html/doh/html/tb/tb-hcp.shtml">http://www.nyc.gov/html/doh/html/tb/tb-hcp.shtml</a> )
Pennsylvania	Pennsylvania Department of Health, <i>TB in the Commonwealth of Pennsylvania</i> (Available at <a href="http://www.dsf.health.state.pa.us/health/lib/health/tb/06TBRPT.pdf">http://www.dsf.health.state.pa.us/health/lib/health/tb/06TBRPT.pdf</a> )
San Antonio	San Antonio Public Health Team, <i>TB Prevention and Control Program</i> (Available at <a href="http://www.sanantonio.gov/health/TB-Main.html">http://www.sanantonio.gov/health/TB-Main.html</a> )
Virginia	Virginia Department of Health, <i>Virginia TB Control Laws Guidebook</i> (Available at <a href="http://www.vdh.state.va.us/epidemiology/DiseasePrevention/Programs/Tuberculosis/guidebook/documents/2001gdbk.pdf">http://www.vdh.state.va.us/epidemiology/DiseasePrevention/Programs/Tuberculosis/guidebook/documents/2001gdbk.pdf</a> )
Washington	Washington State Department of Health, <i>Washington State Tuberculosis Services Manual</i> (Available at <a href="http://www.doh.wa.gov/cfh/TB/Manual/Sections/CompleteManual.pdf">http://www.doh.wa.gov/cfh/TB/Manual/Sections/CompleteManual.pdf</a> )
Wisconsin	Wisconsin Department of Health and Family Services, <i>Wisconsin TB Program</i> (Available at <a href="http://dhfs.wisconsin.gov/tb/">http://dhfs.wisconsin.gov/tb/</a> )
West Virginia	West Virginia Department of Health and Human Resources, <i>West Virginia TB Control Program Manual</i> (Available at <a href="http://www.wvdhhr.org/idep/pdfs/TB/2005_TB_Annual_Report.pdf">http://www.wvdhhr.org/idep/pdfs/TB/2005_TB_Annual_Report.pdf</a> )



## II. Essentials of TB Control in Public Health Practice

TB is an airborne, communicable disease caused by infection with the bacterium *Mycobacterium tuberculosis*. Infection occurs typically when a person inhales microscopic droplet nuclei containing viable bacteria, usually acquired as a result of droplet nuclei spread through coughing or sneezing by persons who have infectious TB. An undiagnosed, untreated person with active pulmonary TB disease can infect an estimated 10-14 people in a year.<sup>6</sup> However, infection with *M. tuberculosis* does not necessarily result in TB disease. On average, only 5-10% of those infected with *M. tuberculosis* will eventually develop active disease; of these, about 5% develop active TB within the first two years after becoming infected. Persons who are infected with TB but in whom the bacteria are not actively reproducing or capable of being spread have what is known as latent TB infection (LTBI).<sup>7</sup> In certain population subgroups, discussed below, the risks of TB infection and progression from LTBI to active TB disease are considerably higher.

It is commonly believed that the historic threat of TB has diminished because of effective public health interventions and the availability of antibiotic treatments. However, TB remains a major global health problem. Approximately 2 billion people globally are infected with *M. tuberculosis*, and about 9 million people develop TB disease each year.<sup>8</sup> Many of these persons live in developing countries or low-income regions of the world where public health interventions and access to effective treatment are limited.

Multi drug-resistant TB (MDR TB) and extensively drug-resistant TB (XDR TB) present additional public health challenges. MDR TB is caused by bacteria resistant to the two most-effective first-line antibiotics (i.e., isoniazid and rifampin) used to treat drug-susceptible TB.<sup>9</sup> XDR TB is a rare, but often fatal, form of TB that is resistant to the two most effective first-line drugs and is also resistant to the best second-line medications: any fluoroquinolone and at least one of the three injectable drugs.<sup>10</sup> In general, the prevalence of MDR TB in the U.S. is low. In 2006, MDR TB represented 1.1% percent of all TB cases in the U.S.<sup>10</sup> However, public awareness of the threat and challenges associated with MDR TB has increased because of media and other attention concerning the treatment of persons with TB who are non-adherent to drug regimes, and case management of patients who are highly mobile (e.g., potentially infectious persons who travel internationally on airlines).<sup>10,11</sup>

### A. *TB Incidence in the United States*

Although TB is not as prevalent in the general U.S. population as it was in recent decades, its incidence among certain high risk populations is persistently disproportionate. TB disease rates in the U.S. declined consistently between 1953 (the earliest year for which national data are available) and 1986. During 1986-1992, however, TB disease rates increased annually, due in large part to (1) the emergence of HIV/AIDS (HIV weakens the immune system thereby increasing the likelihood of TB infection progressing to TB disease),<sup>12</sup> (2) continued immigration from countries with higher incidence of TB, (3) nosocomial transmission of *M. tuberculosis*, multi drug-resistant TB, and (4) deterioration of U.S. infrastructure for TB control.<sup>6</sup> While improved public health strategies and prevention resources have reduced TB disease rates since 1993, the rate of decline has slowed since 2000. From 1993-2000, the average annual percentage decline in the national TB incidence rate was 7.3%. From 2000-2007, this average rate was 3.8%.<sup>10</sup>

In 2007, there were 13,299 new cases of TB disease reported to CDC through state and local health departments in the U.S., which corresponds to an incidence rate of 4.4 cases per 100,000 people. In addition, between 9.6 and 14.9 million people in the U.S. may carry LTBI, which can progress to active TB disease in an individual at any time.<sup>13</sup>

## ***B. TB Infection among High-Risk Populations***

Some population subgroups in the U.S. are at greater risk of acquiring TB infection. Individuals in these high risk groups may be more likely to develop active TB disease. For example, persons in groups characterized by low socioeconomic status, especially some racial or ethnic minorities, have higher TB disease rates than the total population. In 2005, of the reported TB cases among persons born in the U.S., 45% were among African Americans.<sup>14</sup> In 2007, TB rates among African Americans were 7.8 times higher than the rates for U.S.-born whites.<sup>6</sup> TB rates are also disproportionately high in Hispanic populations.<sup>9</sup> Other groups at increased risk of TB include HIV/AIDS patients, injecting drug users, and the elderly. CDC estimates that individuals co-infected with HIV/AIDS and LTBI are more than 100 times more likely to progress to active TB disease than individuals with LTBI only; this is due to the immunosuppressive effects of HIV/AIDS.<sup>15</sup> In 2005, approximately 12.4% of TB patients who were tested for HIV tested positive. An additional 10.6% of patients had unknown HIV status.<sup>10</sup> In 2007, among TB patients whose HIV status was known, 11.3% of these individuals were infected with HIV (these data do not include related information from California which has a high incidence of TB compared to other states).<sup>10</sup>

Foreign-born persons living in the U.S. are also at significantly elevated risk for active TB compared to the total population. In 2007, the TB disease rate among foreign-born persons in the U.S. was 9.7 times higher than among U.S.-born persons.<sup>10</sup> Immigration of individuals from countries with high incidence of TB to the U.S. affects TB incidence domestically.<sup>10</sup> In 2007, persons born in Mexico, Philippines, Vietnam, and India accounted for over half of the U.S. TB cases among foreign-born persons.<sup>10</sup>

Others are at risk because they either work or reside in institutional or congregate settings where there is a heightened risk of transmission of *M. tuberculosis*, such as correctional institutions, drug treatment facilities, homeless shelters, and nursing homes. Hospital-acquired infections present another major challenge to TB control. Hospitals have been recommended to implement specific processes and procedures to ensure that droplet nuclei expelled from TB patients are not circulated in the institutional air supply.<sup>10</sup>

## ***C. Public Health Interventions***

Basic public health strategies in response to TB traditionally focus on testing, surveillance, prevention, and control, each of which has multiple dimensions. In 2005, the American Thoracic Society, CDC, and the Infectious Diseases Society of America outlined four basic principles integral to TB control in the U.S., which are specifically:

1. Promptly detect and report persons who have contracted TB.
2. Protect close contacts of patients with contagious TB from contracting TB infection and disease.

3. Take concerted action to prevent TB among the population of U.S. residents with LTBI by identifying those at highest risk for progression to TB disease through targeted testing and administration of a curative course of treatment.
4. Reduce the rising burden of TB from recent transmission of *M. tuberculosis* by identifying settings at high risk for transmission and applying effective infection-control measures to reduce the risk.<sup>13</sup>

These four strategies are the focus of TB control efforts by tribal, state, and local public health departments in collaboration with federal authorities and private sector partners. Implementation, however, is complicated because TB presents many challenges. For example, the variable latency period between infection and the progression to active TB disease can impede control efforts. Moreover, testing and screening programs must distinguish LTBI, which is asymptomatic and non-contagious, from active TB disease, which may be contagious. Individuals with LTBI may benefit from treatment to prevent disease progression.

The most widely utilized test for LTBI is the Mantoux tuberculin skin test, which involves injecting purified protein derivative under the skin and measuring any subsequent reaction. However, the test may not detect TB infection for up to ten weeks after exposure, and the results are subject to broad interpretations and false readings due to immunosuppression among TB patients with other chronic diseases or who are malnourished. An alternative test, the QuantiFERON test, approved for use in 2005, involves testing a patient's white blood cells for evidence of TB infection.<sup>16</sup> For patients displaying symptoms of active TB, screening and diagnostic measures may include sputum microscopy, bacterial culturing, and chest radiography.

Treatment regimens involving antibiotic therapies for LTBI and active TB can be extensive and complicated, lasting at least six months or possibly much longer (for cases of MDR TB or XDR TB). Patients with active TB may be isolated until they are no longer contagious – often a period of two weeks or more after the initiation of antibiotic therapy. Failure to ensure successful completion of antibiotic therapies can contribute to the development of resistant strains of TB (which may take longer to cure) and additional spread of disease.

### **III. Basic Legal Framework for Communicable Disease Control**

Although the field of medicine is important in the detection, prevention, and treatment of TB, communicable disease control policies in the U.S. are founded upon public health principles and governed by public health law. Public health law may be defined as “those laws (e.g., constitutional, statutory, regulatory, judicial, and policy) or legal processes at every level of government (e.g., federal, tribal, state, local) that are primarily designed to assure the conditions for people to be healthy.”<sup>17</sup> While laws authorize and obligate the government to protect and advance the public’s health, they also curtail government power through *structural* and *rights-based* limitations.<sup>17</sup> As discussed below, *structural* limits include the constitutional principles of separation of powers and federalism. Separation of powers delineates responsibilities among the legislative, executive, and judicial branches of government to create, enforce, and interpret laws, respectively. Federalism refers to the means through which powers are allocated among federal and state governments.<sup>17</sup> *Rights-based* limits, inherent in constitutional principles and other laws, include affirmative norms such as individual rights to free expression, freedom of religion, bodily integrity, health information privacy, equal protection, due process, and freedom from unlawful governmental searches. Public health law thus includes a wide array of laws that enable and limit public and private actors in their efforts to protect the public’s health.<sup>17</sup>

The U.S. Constitution is the starting point for any analysis concerning the distribution of governmental powers. Though the Constitution imposes no affirmative obligation on governments to act, provide services, or protect individuals and populations, it does: (1) divide power among the three branches of government (separation of powers); (2) allocate power among the federal government and the states (federalism); and (3) limit government power (as a means for protecting individual liberties).<sup>18</sup> Each of these functions is discussed below.

#### **A. Separation of Powers**

The Constitution separates government into three branches: (1) the legislative branch (which creates laws); (2) the executive branch (which implements laws); and (3) the judicial branch (which interprets laws). Principles of separation of powers help determine the domain and limits of power of each co-equal branch of government. These principles help ensure that no single branch of government has free or unchecked authority to wield law inappropriately. They also help each branch of government carry out specialized tasks for which it is best suited while minimally encroaching on the domain of other branches.

#### **B. Federalism and the Distribution of Governmental Powers**

In addition to separating powers among different branches of government, the Constitution also allocates public health authority and decision-making powers among the federal and state governments.<sup>19</sup> This allocation is based on a compromise: enumerated, supreme powers<sup>20</sup> are provided to the federal government while broad “police powers” are reserved to states. The Tenth Amendment<sup>21</sup> reserves to the states all powers that are not specifically enumerated in the Constitution for the federal government. Collectively known as police powers, they give states broad jurisdiction to regulate matters affecting the health, safety, and general welfare of the public.<sup>22,23</sup> Principles of federalism allocate and guide distributions of powers

among federal and state governments in key areas where their powers may collide, including the protection of the public's health.

Consistent with principles of federalism, each level of government in the U.S. is authorized to act to protect the public's health in different ways, as discussed below.

**Federal Powers.** The federal government's power to act in the interests of the public's health is conditioned on two basic questions: (1) does the Constitution affirmatively authorize the federal government to act, and (2) does the exercise of that power improperly interfere with any constitutionally-protected interest? In theory, the federal government has limited, defined powers. In reality, it may employ all means reasonably appropriate to achieve the objectives of its enumerated national powers.<sup>24</sup> For public health purposes, federal powers include the power to tax and spend, as well as to regulate interstate commerce. The powers to tax and spend allow Congress to raise revenue for public health services, and create incentives for tribal, state, and local governments to participate in federal public health programs or initiatives.

The Commerce Clause authorizes Congress to regulate "commerce with foreign nations, among the several states and with the Indian tribes."<sup>25</sup> Since the 1940s, the U.S. Supreme Court has interpreted the Commerce Clause as authorizing a broad spectrum of activities. Congress can thus regulate (1) the channels of interstate commerce (e.g., roads),<sup>26</sup> (2) persons and things in interstate commerce (e.g., trucks, roadside diners),<sup>27</sup> and (3) activities that *substantially affect* interstate commerce.<sup>28</sup> Congress' expansive interstate Commerce powers provide the basis for the federal government's regulatory authority in multiple areas, including public health.<sup>13</sup>

**State Powers.** Despite a broad federal presence in modern public health regulation, states have a predominant role in providing population-based health services,<sup>29</sup> and account for the majority of spending for public health services (not including personal medical services or the environment).<sup>30</sup> In accordance with their police powers, state governments can regulate and restrict public and private activities in the interest of public health, subject only to constitutional limits as discussed above. Police powers in the context of public health include all laws and regulations directly or indirectly intended to improve health and decrease morbidity and mortality in the population. Police powers underlie communicable disease laws authorizing disease surveillance, testing, screening, isolation, and quarantine,<sup>31</sup> among other subjects discussed in Part IV.

**Local Powers.** Public health officials in local governments - including counties, municipalities, and special districts - are often on the front line of public health practice. They may be directly responsible for assembling public health surveillance data, implementing federal and state programs, administering federal or state public health laws, operating public health clinics, and setting public health policies for their specific populations. Local governments derive their regulatory powers from state authorized charters or directly through delegations of authority by the state. Such powers, which may be narrow or broad, provide local governments with a limited realm of authority, or "home rule," over public health matters of local concern within their jurisdiction. In some jurisdictions, delegations of local power may be protected from significant intrusion by state constitutions; otherwise, states may modify, clarify, preempt, or remove powers previously delegated to local government.

***Tribal Powers.*** Tribal governments are unlike state and local governments concerning their legal status and relationship with the federal government. The federal government is in a trust relationship with formally-recognized tribal governments. In the mid-1800s, American Indians executed treaties with the federal government that turned over vast quantities of Indian land to federal control. In return, the federal government granted American Indians tracts of land (reservations), permission to form sovereign tribal governments, and the promise of direct federal assistance. As sovereign entities, tribal governments retain sovereign powers associated with state governments, including the power to protect the public's health. However, protecting the health of tribal populations has traditionally been a shared venture among federal, tribal, state, and local governments.

In accordance with the Snyder Act of 1921,<sup>32</sup> Congress directly assumed responsibility for the provision of health care to tribal governments. Such federal assistance continues today through long-term commitments for comprehensive health services administered by the Indian Health Service (IHS), a division of HHS, and the Bureau of Indian Affairs (BIA). Congress has legislatively strengthened its commitment to provide health care benefits to American Indians through the Indian Self-Determination and Education Assistance Act of 1975<sup>33</sup> and the Indian Health Care Improvement Act of 1976.<sup>34</sup> Together, these Acts clarified federal objectives for the provision of health-related services and encouraged the direct involvement of tribal governments in planning and operating health programs. In 1991, Congress began the IHS Tribal Self-Governance Demonstration Project.<sup>35</sup> This Project specifically authorized IHS and BIA to execute agreements (or compacts) with American Indians to provide federal funds for health programs and facilities without significant federal oversight. Under this law, general management and supervision of such programs and facilities are left to tribal governments. As a result, the setting of public health goals and objectives is increasingly the responsibility of tribal governments. This movement toward self-governance was further solidified with the Congressional enactment of the Tribal Self-Governance Act of 1994.<sup>36</sup>

### ***C. Limitations on Governmental Powers***

A third function of the Constitution is to limit the ability of the government to violate individual rights, freedoms, and liberties, even when attempting to protect the public's health. Tensions arise when government actions to protect the public's health infringe on individual interests and autonomy. Resolving the tension between population-based regulations and individual rights requires trade-offs.

Courts have struggled to determine when government authority to promote the population's health justifies encroaching upon established individual rights. A seminal case dealing with this tension is the 1905 opinion, *Jacobson v. Massachusetts*.<sup>37</sup> In *Jacobson*, the U.S. Supreme Court considered a constitutional challenge to a local regulation in Cambridge, Massachusetts that required smallpox vaccinations in response to an outbreak. The defendant was convicted by a local court for refusing the vaccination and required to pay a \$5 fine. On appeal, he argued that the compulsory vaccination law was unreasonable, arbitrary, and oppressive, and therefore unlawful according to principles of liberty inherent in substantive due process.<sup>38</sup> Rejecting his appeal, the Court held that:

[T]he liberty secured by the Constitution of the United States . . . does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good. On any other basis organized society could not exist with safety to its members . . . .<sup>39</sup>

In *Jacobson*, the Court affirms that government may circumscribe – within reasonable limits – certain individual rights in implementing scientifically-established interventions when acting to protect the public’s health. Determining reasonable limits on state power requires balancing individual rights and public health objectives as well as assessing the scientific basis for the proposed means of achieving those objectives.

Many individual rights grounded in federal (and state) constitutional provisions may limit government authority to act to protect communal health. These include rights to:

- Freedom of expression and assembly under the First Amendment;
- Freedom from religious persecution also under the First Amendment;
- Bear arms via the Second Amendment;
- Avoid unwarranted searches or seizures via the Fourth Amendment;
- Avoid cruel and unusual punishment under the Eighth Amendment; and
- Privacy pursuant to the Fourth, Ninth, and Fourteenth Amendments.

Three foundational constitutional norms invoked often in defending individual interests against potential infringement by government are principles of substantive due process, procedural due process, and equal protection, discussed below.

***Substantive Due Process.*** The Due Process Clauses of the Fifth and Fourteenth Amendments prohibit government from depriving individuals of “life, liberty, or property without due process of law.” As referred to in the *Jacobson* case, above, principles of substantive due process require governments to avoid acting in an arbitrary, capricious, or vague manner. As a result, government must be able to justify its actions to avoid infringements of individual interests in life, liberty, or property. Concerning powers to control TB and other communicable diseases, public health authorities must balance the magnitude of the public health risk against the rights of the individuals or groups. Where government action minimally intrudes on non-fundamental individual rights, courts have typically upheld the action so long as there is some “rational basis” for it. Courts have upheld many types of public health regulations under this minimal standard, including infectious disease screening.<sup>40</sup>

In other cases, however, it may be necessary for government to significantly restrict individual liberty to protect the public’s health. Under one state’s law, for example, a TB patient may be required to undergo outpatient examination and treatment, DOT, hospitalization, or residential isolation to prevent the spread of the disease.<sup>41</sup> When public health authorities seek to use powers that restrict individual freedoms, fundamental rights of due process, travel, or association may be implicated. In such cases, courts may seek to determine whether (1) government’s action advances a compelling state interest that is narrowly tailored, and (2) there are other less restrictive alternatives available to protect the public’s health and the individual. Generally, liberty principles allow individuals (or their legal guardians) to decide whether to treat

an illness, regardless of its severity,<sup>42</sup> consistent with traditional notions of informed consent. The U.S. Supreme Court has recognized a right to bodily integrity that includes a right to refuse medical treatment,<sup>43</sup> except in limited cases (e.g., treatment of prisoners with infectious diseases).<sup>44</sup>

***Procedural Due Process.*** Due process encompasses an additional, procedural component. Government must provide fair process before (or in close proximity to) depriving an individual of life, liberty, or property. Therefore, if liberty or other individual interests may be negatively impacted by government action, an individual must be offered adequate notice, an opportunity to be heard and to object, and other constitutionally-guaranteed process requirements.<sup>45</sup> Specific procedural requirements vary depending on the nature and degree of the deprivation. In assessing procedural due process rights, courts tend to balance the private interests of the individual, the potential for governmental errors or abuse, and the expense and burden of the process on the government.<sup>46</sup>

The U.S. Supreme Court has not specifically addressed the question of what due process procedures are owed to individuals isolated for purposes of TB treatment. However, it has determined that procedural due process is required for involuntary detainment of individuals with mental illness.<sup>47</sup> In *Greene v. Edwards*,<sup>48</sup> the West Virginia Supreme Court held that detention of persons with TB (such as confinement of individuals with mental illness) requires extensive due process safeguards. In *Greene*, a West Virginia statute permitted judges to civilly confine persons with active TB based upon testimony by the state board of health that (1) a person has communicable TB and (2) his/her physical condition endangers the health of others. The court held, however, that persons with infectious disease have a due process right to notice and representation as part of isolation proceedings. Such persons should also be afforded an opportunity to present opposing evidence and cross-examine witnesses.<sup>45</sup>

***Equal Protection.*** The Equal Protection Clause of the Fourteenth Amendment requires that government treat similarly situated people in an equal manner. Concerning communicable diseases, principles of equal protection suggest that people who pose similar risks of transmitting disease must be treated similarly.<sup>49</sup> In the historic case, *Jew Ho v. Williamson* (1900),<sup>50</sup> San Francisco health officials quarantined a 12-block area with more than 10,000 residents for the expressed purpose of containing an epidemic of bubonic plague. While the quarantine order on its face applied to all residents, only individuals of Chinese descent were subject to its enforcement. The Circuit Court for the Northern District of California struck down the quarantine law as inconsistent with principles of equal protection.

In general, courts are deferential to government actions to protect the public's health. In most cases, equal protection analysis only requires the government to show its actions bear a rational relationship to a legitimate public health interest. However, courts look more closely at public health laws that target a "suspect classification" (e.g., race, national origin, or immigrant status), burden fundamental rights (e.g., procreation, marriage, interstate travel, voting), or are irrational or arbitrary (under principles of substantive due process). In these cases, government must demonstrate that its actions are narrowly tailored to address a compelling public health interest.<sup>51</sup>



## IV. Communicable Disease Control Law

Through the exercise of their public health powers, and subject to constitutional limits discussed in Part III, state and local governments have promulgated a variety of general and disease-specific statutes and regulations aimed at controlling communicable disease. This Part discusses general communicable disease laws that do not specifically refer to TB, but may be applied to control TB cases at the tribal, state, or local level. Express TB control laws are examined in Part V, based on a characterization of these laws in selected jurisdictions.

Every state possesses general public health legal authority that may be invoked to control communicable diseases. In Illinois, for example, the State Department of Public Health is statutorily authorized to “take means to restrict and suppress” infectious diseases, and whenever a disease “becomes, or threatens to become epidemic, . . . may enforce such measures as it deems necessary to protect the public health. . . .”<sup>52</sup> In Maryland, the State Secretary of Health and Mental Hygiene is statutorily authorized to “[a]ct properly to prevent the spread of disease” when he or she “has reason to believe that an infectious or contagious disease . . . that endangers the public health exists within the State. . . .”<sup>53</sup> These examples illustrate the sort of broad public health authority that may allow government to respond to public health threats like TB.<sup>54</sup> Section A, below, provides a brief description of general legal authorities at the tribal, state, or local level to control communicable diseases. Section B briefly discusses federal communicable disease control laws, including those that may apply to TB. International communicable disease control laws are reviewed in Section C.

### A. *State and Local General Communicable Disease Control Law*

A host of public health laws encompass essential components of public health practice concerning communicable disease control, as discussed below.

**Surveillance.** CDC has defined surveillance as “. . . the ongoing systematic collection, analysis and interpretation of health data . . . closely integrated with the timely dissemination of these data to those who need to know.”<sup>55</sup> Public health laws at the tribal, state, and local levels specifically authorize public health authorities to conduct public health surveillance for communicable or chronic diseases, including TB. Each state and many tribal governments operate or oversee disease surveillance systems that seek to protect population health through collection of disease-specific data and assessment of trends in disease incidence and prevalence.<sup>55</sup> For example, North Carolina law specifically authorizes surveillance activities in which emergency room data are collected to detect among others things, “an epidemic or infectious, communicable, or other disease.”<sup>56</sup> Subject to public health data privacy laws, surveillance data may be shared with other public health authorities, including CDC or other federal agencies, to coordinate prevention and control activities.

**Reporting.** Tribal, state, and local laws may also require health care providers and facilities, labs, pharmacists, patients, and others to report specified notifiable or infectious conditions. For example, a law in Alaska (based in part on the Turning Point Act)<sup>54</sup> requires the Department of Health and Social Services to maintain a list of reportable diseases or other conditions of public health importance,<sup>57</sup> including TB.<sup>58</sup> Typically, reporting begins at the local level, with various data shared at the tribal/state level, and eventually with CDC (in non-

identifiable format). Some diseases are reportable in only a few states. Other diseases, like TB, are reportable in every state and at the federal level. CDC has summarized the categories of health information that are typically reported among states.<sup>59,60</sup>

***Testing and Screening.*** Testing refers to the application of a medical test to an individual. Many states' public health laws require testing for communicable diseases as a condition of treatment, employment, or other privileges or benefits. Screening refers to the "systematic application of a medical test to a defined population."<sup>61</sup> Screening programs are authorized by state and local communicable disease laws in many jurisdictions, and used extensively to help identify and detect disease prevalence within the population. In California, for example, no person may be employed initially in connection with a park, playground, recreational center, recreational beach, or certain other occupations unless the person has a certificate from within the last two years showing that the individual does not have communicable TB.<sup>62</sup>

As tools to protect the public's health, testing and screening can be controversial because they involve government-authorized efforts to detect sensitive health conditions in an individually identifiable manner. Individuals may view government requirements for testing and screening as intrusive. Concerns regarding privacy and racial, ethnic, and gender discrimination affect public perceptions of various testing requirements or screening programs. In very limited circumstances, public health officials may compel citizens to submit to nonconsensual screening. For example, California law appears to require TB screening for all prison employees who interact with inmates.<sup>63</sup>

***Vaccination.*** Public health laws in the U.S. authorize a host of vaccination programs and requirements for conditions other than TB. A vaccine for TB (Bacille Calmette-Guerin or BCG) is used in many countries that have a high prevalence of TB to prevent childhood TB, TB meningitis, and miliary disease. However, the BCG vaccine is seldom used in the U.S. because of the variable effectiveness of the vaccine against adult pulmonary TB and the vaccine's potential interference with tuberculin skin test reactivity. Rather, CDC recommends that the BCG vaccine be considered only for select persons who meet specific criteria and in consultation with TB experts.<sup>64</sup>

***Medical Examination and Treatment.*** In the interest of protecting communal health, public health authorities are legally authorized in many jurisdictions to require physical examination and treatment, in a reasonable, safe, and proper manner, of persons who are known to be, or suspected of being, infected with a communicable disease.<sup>45</sup> These public health powers are often used in cases involving children, persons with mental disabilities, or prisoners, or when any autonomous person presents a danger to the public or violates a valid rule or order pertaining to controlling infectious disease. Three fundamental interests support a state's use of compulsory examination or treatment in cases involving TB disease: (1) preserving an individual's own health or life; (2) preventing harm to others; and (3) avoiding the possible development of drug resistance (especially related to MDR TB and XDR TB).<sup>45</sup> In one state, for example, it appears that the State Board of Health may petition a probate court to order commitment of a non-adherent individual with TB disease for compulsory treatment.<sup>65</sup> Even in such instances, forcible administration of examinations or treatments may not be permissible. If a patient refuses treatment, he/she may be ordered by a court to remain isolated until no longer considered a threat to public health.<sup>65</sup>

***Directly Observed Therapy.*** Directly observed therapy (DOT) is a widely used public health strategy for ensuring completion of medical treatment. Through DOT, an individual's ingestion of medication is observed by a designated person, usually a public health worker or medical professional, and sometimes a family member. DOT can be voluntary or compulsory. If compulsory, intrusions of individual liberty arise. DOT can often, however, be an effective substitute for detention in cases involving noninfectious conditions, including some cases of TB. While CDC recommends DOT concerning TB treatment for some patients,<sup>66</sup> not all states (as discussed in Part V) specifically authorize it by law. When a resurgence of MDR-TB swept across major metropolitan areas in the 1990s, some state statutes did not specifically allow for DOT, which impaired control efforts.<sup>67</sup>

***Detention.*** Public health laws may also authorize public health authorities to confine persons with contagious diseases to protect the community. Through detention laws, authorities may confine an individual to a health or other facility appropriate for his/her medical condition. Since detention presents a significant restriction on individual liberty, courts may generally require that procedural due process be satisfied regardless of whether existing detention statutes specifically delineate such due process.<sup>47,48</sup> Though compulsory treatment is often thought to accompany detention, this is not always the case. For example, in New Jersey, a court ordered the detention of a homeless person with TB, but upheld the patient's right to refuse testing and treatment.<sup>68</sup>

***Quarantine and Isolation.*** Public health laws at the tribal, state, and local levels generally authorize: (1) the quarantine of persons who have been exposed to certain communicable diseases during the relevant incubation period; and (2) the isolation of individuals confirmed to have a communicable disease for the period of communicability – to prevent further disease transmission. Some jurisdictions empower public health authorities to isolate individuals with a communicable disease based on disease status alone;<sup>69</sup> others may authorize isolation only of those who engage in “dangerous” behaviors.<sup>45</sup> Regardless, the powers to quarantine and isolate exposed and infectious persons, respectively, are long-standing, non-pharmaceutical interventions to limit the spread of serious, communicable diseases. The use of quarantine and isolation powers can impinge on an individual's constitutional right to travel, freedom of association, and other constitutionally-protected liberty interests.<sup>45</sup> As a result, these and other powers must be carefully balanced with constitutional protections (discussed above in Part III). The Turning Point Act offers extensive model language on due process and other protections related to quarantine and isolation to help ensure that individual rights and interests are respected.<sup>54</sup>

## ***B. Federal Communicable Disease Control Law***

Although tribal, state, and local governments have extensive powers to prevent and control communicable diseases, the federal government is vested as well with powers to control certain communicable diseases, including TB, in limited circumstances. Authority for these functions flows primarily from two Constitutional sources: the Commerce Clause and the Migration and Naturalization Clauses.

***Commerce Clause.*** Concerning TB control, the Commerce Clause provides the legal basis for a provision within the Public Health Service Act (PHSA)<sup>70</sup> that authorizes the Secretary

of Health and Human Services to make and enforce regulations necessary “to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession.”<sup>70</sup> This authority was subsequently delegated to CDC by the Secretary. CDC may also apprehend, detain, examine, and conditionally release persons reasonably believed to be infected with, or exposed to, specific, enumerated communicable diseases, including infectious TB.<sup>71</sup> Under this authority, CDC’s Division of Global Migration and Quarantine can isolate or quarantine<sup>70,72</sup> people arriving into the U.S. who have infectious TB.<sup>73</sup> CDC may as well isolate and quarantine persons moving between states or likely to infect others moving between states if they are: (1) in a communicable stage of an enumerated communicable disease (including TB); or (2) pre-communicable, but the communicable disease would likely cause a public health emergency. CDC is also generally authorized to prevent the spread of communicable diseases across state lines if state or local health authorities are not taking adequate measures to do the same or if they request federal assistance.<sup>74</sup>

***Migration and Naturalization Clauses.*** The federal government’s power to regulate immigration is derived from two clauses in the U.S. Constitution, namely, the Migration Clause<sup>75</sup> and the Naturalization Clause.<sup>76</sup> The U.S. Supreme Court has consistently held that these provisions grant the federal government wide and exclusive jurisdiction over immigration policy.<sup>77,78</sup> Congress invoked these powers in granting federal agencies the power to prevent certain identified communicable diseases (e.g., infectious TB)<sup>79</sup> from entering the nation’s territorial boundaries.<sup>80</sup> As a result, federal agencies have established via regulation extensive screening programs for persons seeking permanent legal residency status in the country.<sup>81</sup> These screening programs may require individuals to undergo a comprehensive medical examination that includes a chest radiograph and follow-up sputum TB cultures when the radiograph suggests the presence of TB.<sup>81</sup>

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 TB<sup>80</sup> and (2) remove any undocumented person who entered the country with TB (such individual is ineligible by law for admission into the U.S.).<sup>82</sup> 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 into, or existence within, U.S. borders.<sup>83</sup> Concerning undocumented persons with TB who already reside in the U.S., some commentators have suggested that their unplanned removal can negatively impact individual and communal health. Removal tends to disrupt TB treatment, which can lead to prolonged infectiousness and the development of drug-resistant strains of TB.<sup>84</sup> As discussed in Section F, this may harm not only the health of the affected individual, but also their native communities and potentially others in the U.S. (if the individual re-enters without having obtained effective treatment).

### ***C. International Communicable Disease Control Law***

While a description of the many international laws that concern communicable disease controls is beyond the scope of this Handbook, the revised International Health Regulations (IHR), adopted by the World Health Organization (WHO) in 2005, create a legal framework among nations for collaboration in response to international public health emergencies. The broad objective of the IHR, which has been accepted by 194 member states, including the U.S.,

is to improve the ability of all countries to detect and respond to public health threats like SARS, pandemic influenza, or other conditions that have the potential to threaten populations worldwide. The IHR requires signatory nations to notify WHO of (1) any event that may constitute a *public health emergency of international concern* (PHEIC); or (2) any significant evidence of public health risks outside their territory that may lead to or cause the international spread of disease.<sup>85</sup> The IHR also requires nations to expand their national health surveillance capacities and implement certain measures for regulating international traffic at airports and other entry points.<sup>86</sup>

Whether the IHR can or should be used to control TB globally is unresolved principally because it is not clear whether cases of TB, MDR TB, or XDR TB may ever constitute a PHEIC.<sup>87</sup> WHO's Global Task Force on XDR TB has suggested that XDR TB should not be considered a PHEIC because its origins are attributed to internal state policies and it is not as much of an acute threat as other diseases like SARS.<sup>87</sup> There is, however, precedent for considering MDR and XDR TB as potential PHEICs. The U.S. has previously notified WHO of one person with drug-resistant TB who travelled internationally by commercial aircraft in 2007 as a potential PHEIC.<sup>88</sup>

## V. Express TB Control Laws

Many states have authorized communicable disease control provisions through the enactment of statutes or promulgation of regulations that expressly relate to TB. These express TB control laws offer specific legal authority and guidance for the control of TB that may supplement jurisdictions' general public health legal authorities for communicable disease control.

As part of a set of CDC-sponsored projects, the *Center* conducted legal research and analysis to characterize states' express TB control laws. The *Center's* report, "[\*Express Tuberculosis Control Laws in Selected U.S. Jurisdictions\*](#),"<sup>4</sup> characterizes patterns of express TB control laws in 25 U.S. jurisdictions selected for study.<sup>89</sup> Express TB control laws are defined as those jurisdiction-specific laws (e.g., statutes, regulations, cases) that directly mention TB (or some derivative) in the body of the law, and whose main purpose is limited to the control of TB (and not the control of other communicable diseases). For more information about the scope, methodology, and limitations of the analysis, as well as to review specific findings for each jurisdiction, please consult the report (See also Table 3).<sup>4</sup>

For the purposes of this Handbook, a synopsis of the report's principal findings is provided below. This information is organized within each of the six major categories of express TB control laws used to characterize express TB control laws: (a) Prevention of TB Cases (TB Control Programs); (b) Identification of TB Cases; (c) Management of TB Cases; (d) Safeguarding Rights; (e) Considerations for Special Populations; and (f) Interjurisdictional and other TB Provisions. The findings are based on the *Center's* legal research of express TB control laws as of May 1, 2008. While a draft of the report was vetted with public health and legal practitioners in many of the selected jurisdictions, the findings discussed below largely represent the authors' analyses and inferences (and not legal counsel representing each jurisdiction) regarding the extent of legal authority concerning TB control.

### A. *Prevention of TB Cases (TB Control Programs)*

In 21 (84%) of the selected jurisdictions, express TB control laws seem to authorize various levels of government to regulate and establish TB control programs. In many jurisdictions, this obligation is assigned to state government (e.g., AZ, CO, IN, KS), although the scope of these laws varies considerably. For instance, some jurisdictions' laws appear to designate a specific agency or state/local official to design, implement, or regulate TB control programs (e.g., AZ, CO, FL, SC). Other jurisdictions seem only to establish a general government obligation to establish a TB control program (e.g., CA, KY, LA, MT, NY).

Express TB control laws also vary concerning the specific characteristics and objectives of the TB control programs. Some jurisdictions feature TB control programs targeting specific groups, such as persons living in high-risk settings (e.g., IL, MD, TN) or prisoners (e.g., TX, VA). Other jurisdictions refer to programs addressing TB control measures for the general population without specifying certain groups (e.g., CA, FL, LA, MT).

## **B. Identification of TB Cases**

Twenty-four (96%) jurisdictions appear to have express TB control laws authorizing measures to detect and confirm TB cases, specifically screening, examination, testing, and reporting provisions. All 25 (100%) of the selected jurisdictions seem to have express TB control laws addressing screening as a TB control measure. Most of the jurisdictions' laws identify specific groups or classes of individuals subject to TB screenings. Examples include close contacts of suspected or confirmed TB cases (e.g., IL, OK); school employees (e.g., CA, IL, MT, NYC, SC, TN, VA, WI); employees of healthcare facilities (e.g., CA, IL, IN, KS); minors (e.g., CA, NY) and employees (e.g., CA, KS, MD, OK) in juvenile detention facilities; prison employees (e.g., MS, TX); and inmates (e.g., CA, LA, MA, MI, TN).

Express TB control laws in 22 (88%) jurisdictions appear to authorize different levels of government to subject individuals to examination and testing for TB diagnostic purposes. In some jurisdictions, such as Arizona, court orders are apparently required. In contrast, Oklahoma health authorities may apparently order examinations without court approval.

Reporting requirements for TB appear to be expressly authorized in all 25 (100%) jurisdictions. In some cases, health care providers and allied professionals who diagnose, treat, or care for TB patients seem to be obligated to report confirmed or suspected TB cases to appropriate health agencies. Health care professionals (e.g., IL, KY, MI) and laboratories (e.g., CA, FL, KS) seem to be required to report confirmed or suspected cases of TB to appropriate health authorities, typically local and state health authorities (e.g., FL, GA, KY).

## **C. Management of TB Cases**

Express TB control laws also address public health measures to manage confirmed TB cases, including investigations, treatment, DOT, emergency detention, quarantine, isolation, and restriction of activities.

**Investigation.** Investigating persons with reported or suspected TB is an important component of case management. This includes investigation of (a) persons undergoing treatment for TB and (b) persons who have had contact with individuals with TB (contact investigation or contact tracing). Express TB control laws in 17 (68%) jurisdictions appear to address aspects of TB investigations. In Arizona, health officials appear to be authorized to investigate reported cases of TB. In Colorado, broad investigative powers appear to include the ability to order examination, quarantine, or isolation as needed for investigative purposes. In Kansas, health authorities are apparently required to periodically investigate whether TB patients are following precautions and treatment.

In 24 (96%) jurisdictions, express TB control laws appear to authorize health authorities to prescribe appropriate treatments for TB patients. For example, express TB control laws in California and Kansas appear to authorize local health officials to order TB patients to follow specific treatments. However, only 13 (52%) jurisdictions appear to have express TB control laws authorizing DOT. In some jurisdictions it appears that health authorities are required to obtain a court order to implement DOT (e.g., AZ, MT). In California, health authorities can

apparently order DOT without seeking advance court approval. In other jurisdictions, DOT appears to be considered the standard of care for persons with TB (e.g., CO, IN, OK).

***Specific Interventions.*** Express TB control laws aimed at controlling the spread of TB include powers of emergency detention, quarantine, isolation, and restriction of personal activities. In 17 (68%) jurisdictions, express TB control laws seem to authorize emergency detention of individuals with suspected or confirmed TB disease. In some states (e.g., AZ, FL, LA), emergency detention may be ordered as a precautionary measure when individuals have suspected or confirmed TB disease and pose risks to others. Emergency detention can also be used as an enforcement measure when TB patients fail to adhere to treatment or other public health orders (e.g., AZ, CA, LA). In some states, express TB control laws appear to directly authorize health authorities to order emergency detention. In other jurisdictions, court orders are required (e.g., GA, MT, SC).

Express TB control law in 1 (4%) jurisdiction (MI) refers specifically to the power to quarantine persons. In 22 (88%) jurisdictions, these laws appear to authorize the use of isolation. Express TB control laws in Indiana and Massachusetts appear to grant health authorities general powers to isolate individuals. In other jurisdictions (e.g., FL, AZ, NY), isolation must apparently be ordered by the courts. Some jurisdictions' laws use the term "quarantine" even though "isolation" is likely the intended intervention. As noted in the *Center's* report, laws that conflate the meanings of "isolation" and "quarantine" do not reflect definitions and application of these interventions in modern public health practice, which may lead to confusion.<sup>1</sup>

In 20 (80%) jurisdictions, express TB control laws appear to restrict persons with suspected or confirmed TB disease from taking part in specific activities, including employment generally (e.g., CA, NYC, TN, WI) or employment in schools specifically (e.g., CA, MD, MS, VA, WI). Licensed optometrists in Texas and midwives in Georgia apparently may not practice if such individuals have TB disease. Georgia law also seems to exclude private home-care providers with TB disease from working directly with clients. Oregon law seems to prohibit persons with TB in a communicable stage from working in any occupation in which they provide personal care to or have direct contact with patients in health-care facilities.

Concerning enforcement, 19 (76%) jurisdictions' express TB control laws appear to compel observance of TB orders and provide health authorities with enforcement mechanisms. These enforcement mechanisms generally seem to be triggered when TB patients fail to voluntarily adhere to health authorities' orders related to examination, testing, treatment, and isolation. In some jurisdictions, failure to adhere to orders of health officers (e.g., AZ, CA, CO, SC) or courts (e.g., AZ) constitutes a misdemeanor. In Florida, TB patients who fail to follow treatment plans or who do not adhere to court orders may be punished through contempt proceedings and penalties. In Louisiana, criminal charges may be filed against a TB patient who does not adhere to court orders for quarantine or isolation. In California and Colorado, health officials must apparently notify the district attorney when TB control orders have been violated. Detention is apparently used as an enforcement mechanism in Montana.

#### ***D. Safeguarding Rights***

Some jurisdictions' express TB control laws protect or safeguard TB patients' interests through explicit recognition of due process rights; confidentiality, privacy, and



antidiscrimination protections; and religious exemptions. In 17 (68%) jurisdictions, express TB control laws address procedural rights of persons with TB disease when the government seeks to implement public health measures. Some of these provisions are very detailed and require public health authorities to obtain court orders before implementing restrictive public health measures. In Arizona, individuals with TB disease must be provided with (1) written information on patient's rights and (2) legal counsel to represent their rights (if the individual cannot afford an attorney).

In Wisconsin, confinement orders that exceed 72 hours must be granted by courts pursuant to health authorities' ability to demonstrate that: (i) the individual has infectious TB, the individual has noninfectious TB but is at high risk of developing infectious TB, or the individual has suspect TB; (ii) the individual has failed to comply with treatment or any TB-related rules promulgated by the department of health, or the individual's TB disease is resistant to prescribed medications; (iii) all reasonable means of achieving voluntary compliance with treatment have been exhausted and there are no "less restrictive alternatives" available; and (iv) the individual poses an imminent and substantial threat to him/herself or to the public's health. Persons subject to court proceedings in Wisconsin seem to have the right to appear at the hearing, defend themselves, present evidence, and cross-examine witnesses, among other explicit protections.

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.

In 9 (36%) jurisdictions, express TB control laws seem to take religious beliefs into consideration when implementing public health interventions for TB control. In Arizona, a TB patient may be exempted from court-ordered TB treatment when the patient claims a religious exemption. In California, waiving treatment and examination based on the person's religious beliefs appears to be possible only if the person is subject to quarantine or isolation. Illinois law seems to explicitly forbid inmates from claiming a statutory right to refuse treatment for TB based on religious exemptions.

### ***E. Considerations for Special Populations***

Express TB control laws in 11 (44%) jurisdictions appear to target specific groups or populations. Legal provisions focused on special populations appear to extend to people with visual or hearing impairments in California and Arizona, including consideration for language barriers and provision of translation services. Laws in some jurisdictions (e.g., CA, FL, GA, MA, MI, SC) seem to consider special circumstances of prisoners or incarcerated persons. In Texas, express TB control laws appear to authorize health officials to establish a separate school for the education and care of children with TB, although this may not be currently practiced. In Arizona, required notification explaining TB patients' rights must be written in the person's primary

language. In Massachusetts, prison inmates apparently must receive TB treatment and, if necessary, be isolated. Before releasing inmates, Massachusetts' corrections facilities apparently must notify the Department of Public Welfare and keep inmates in treatment at the correction facility until the Department provides for their care and treatment.

#### ***F. Interjurisdictional and Other TB Provisions***

Express TB control laws in 8 (32%) jurisdictions (AZ, CO, IN, KS, NY, OK, TN, TX) refer to the coordination of TB control activities across jurisdictional lines. As in Arizona, these provisions seem to provide guidance on how public health officials can cooperate with officials from other jurisdictions and other levels of government (e.g., federal, tribal, state, and local). For example, a Tennessee provision seems to authorize state officials to notify public health officers in other jurisdictions when a person with TB in Tennessee moves to another jurisdiction to ensure that the person completes treatment. New York's express TB control laws appear to offer criteria for when and how persons with TB may cross jurisdictional lines, including that (1) family members are willing to care for the patient in the jurisdiction in which the patient is to reside, and (2) a nurse may be appointed to supervise the patient's travel. Indiana apparently requires local health officers to notify the state department of health whenever a person with TB moves into or out of the local jurisdiction.

Additional subjects of express TB control laws include issues concerning civil liability, health education, duty to warn, visitation rights, disposal of corpses of decedents who had TB, insurance, and abuse services. In Georgia, for example, health care professionals who admit or discharge persons with TB appear to be immune from civil liability when acting in good faith. Massachusetts law appears to require instruction on TB in the health curriculum of all students. Express TB control laws in Michigan and Missouri refer to the visitation rights of nursing home patients. A few states (e.g., MS, OR) provide legal guidance concerning the treatment and handling of corpses of decedents who had TB. Finally, five (20%) jurisdictions have laws specifically mentioning MDR TB: (AZ, CA, CO, GA, and IL). Of these, Arizona and Colorado appear to provide specific measures for control, treatment, and isolation of MDR TB cases. None of the selected jurisdiction's express TB control laws mention XDR TB.

## **VI. Selected Legal Issues in TB Control Law**

Under federal, tribal, state, and local general and express laws, public health practitioners are authorized to detect, manage, and control cases of TB. However, legal issues regarding these legal authorities may arise in multiple contexts. Some jurisdictions may attempt to follow or apply existing TB control laws that may be dated, incomplete, or ambiguous, which may lead to legal disputes. Even with clear legal authority, legal issues may arise whenever public health practitioners must use coercive powers to manage persons with TB and protect the public's health.

At the nexus of these issues is the balance between respecting individual rights and freedoms, and protecting communal health against a communicable disease threat. This Part addresses some illustrative issues in law regarding TB screening practices, health information privacy, isolation of non-adherent persons with TB, TB prevention among vulnerable populations, discrimination, immigration and removal of TB patients, and interjurisdictional coordination.

### **A. TB Screening**

As with other areas of TB policy, TB screening programs require practitioners to develop programs that narrowly achieve public health goals without overly burdening personal liberties. Mandatory TB screening programs have the potential to infringe on constitutional freedoms as a result of (1) unreasonable searches under the Fourth Amendment or (2) privacy invasions and discrimination under the Fifth, Ninth, and Fourteenth Amendments. Courts have acknowledged the public health importance of screening certain populations (e.g., institutionalized persons) and upheld these programs as constitutional exercises of state power. For example, New York courts have upheld a New York City Board of Health regulation requiring teachers and other school employees to provide medical certificates of their freedom from active TB.<sup>90</sup> A New York Board of Health rule requiring school teachers and employees who come in contact with students to have a chest radiograph for TB also has been upheld. The court ruled that no constitutional rights were unreasonably infringed, stating that where “. . . the choice must be made between the individual rights of the teacher, on the one hand, and the health of school children generally on the other, . . . the teacher's rights must yield to the common good.”<sup>90</sup>

As with other public health powers, the power to create and implement screening programs is subject to potential abuse. At least one state limits the ability of officials to create TB screening programs to those efforts that target persons who are at higher risk of infection.<sup>91</sup> Screening programs that target specific groups for purposes which are not based on individuals' heightened risk of infection may be challenged on constitutional, statutory, or other legal grounds.

### **B. Health Information Privacy**

Controlling cases of TB involves the acquisition, use, and disclosure of sensitive, individually-identifiable health information concerning a patient's TB status by health care workers, public health officials, and potentially schools, prisons, employers, and others. The sharing of identifiable health information, especially concerning communicable diseases like TB,

implicates individual privacy concerns. Legal privacy protections help assure that data are handled confidentially and individuals are not subject to unwarranted discrimination, but they can also impede needed data exchanges.<sup>92</sup> Health information privacy laws at every level of government in the U.S. may be invoked in various settings to limit the amount or types of data provided for the control of TB. For example, a treating physician may seek to deny access to a patient's TB diagnosis to local public health authorities under the perception that federal (or state) privacy laws (e.g., the HIPAA Privacy Rule<sup>93</sup>) prohibit the disclosure of health data without written authorization to public health authorities. In reality, the HIPAA Privacy Rule, and most other medical data privacy laws, allows disclosure of identifiable data from health care workers, data clearinghouses, and insurers to public health authorities without individual written authorization.<sup>94</sup>

Other privacy concerns may arise in specific settings. For example, the federal Family Educational Rights and Privacy Act (FERPA)<sup>95</sup> sets forth privacy standards for the protection of identifiable data in education records, including elementary and secondary schools, and higher education institutions. FERPA protects the privacy of student educational records by generally requiring advance written consent from the eligible student or parent/guardian for the disclosure of identifiable information (including health data if contained within the education record) from education records to non-educational authorities. Efforts to control cases of TB may invoke FERPA considerations, including resistance among school officials to share identifiable student health information within education records with public health authorities.

Unlike the HIPAA Privacy Rule, FERPA does not include a broad exception for disclosures of identifiable health data to state and local public health authorities for public health purposes. However, there are exceptions to FERPA's proscription against non-consensual disclosures. These exceptions include non-consensual disclosures made "in connection with an emergency," to "appropriate persons if the knowledge of such information is necessary to protect the health or safety of the student or other persons."<sup>95</sup> This "health and safety" exception may permit limited disclosures of student health data from educational authorities to public health authorities (and others) to protect the health or safety of students or others in exigent circumstances, including cases of TB exposure.<sup>96</sup> This exception is strictly interpreted by the U.S. Department of Education (ED), which implements FERPA, as discussed below.

Subject to ongoing interpretation, ED has determined that such non-consensual disclosures to public health authorities or others are only authorized in response to "a *specific situation* that presents *imminent danger* to students or other members of the community, or that requires an *immediate need* for information in order to avert or diffuse serious threats to the safety or health of a student or other individuals."<sup>96</sup> This interpretation of FERPA may limit the types of disclosures that public health authorities may obtain from educational authorities pursuant to TB reporting requirements. However, specific disclosures of data to protect the health of student populations arising from known cases of infectious TB in school settings are likely possible, if the criteria of the FERPA exception are met. Thus, while education authorities may not be authorized via FERPA to disclose TB cases in response to general reporting requirements, they may be authorized to disclose identifiable information to facilitate the provision of health services to at-risk students or other members of the community.

### ***C. Isolation of TB Patients Who Do Not Adhere to Treatment***

As noted in Parts IV.A and V.C, general communicable disease laws or express TB control laws may authorize compulsory medical treatment of persons with infectious TB in limited circumstances and, typically, under court orders. U.S. courts and policy-makers have grappled with the issue of mandatory or forced medical treatment for decades.<sup>97</sup> Under the U.S. Supreme Court's modern interpretation of the First, Fifth, and Fourteenth Amendments, it may be unconstitutional to physically force a citizen (or other person in the U.S.) to undergo treatment without consent<sup>98</sup> except in cases involving minors, persons with mental disabilities, or prisoners.<sup>44</sup> This interpretation is consistent with ethical principles of autonomy and societal views of personal liberty. The tension between protecting the public's health and respecting personal decisions concerning medical care is heightened concerning TB control because of the contagious nature of TB and the potential for MDR and XDR TB to develop in patients who may not adhere to treatment regimens.

Some jurisdictions have resolved this tension through compromise: TB patients cannot be forced to undergo treatment, but they may be isolated or detained if they refuse treatment.<sup>99,100</sup> While this approach has been challenged, courts have almost always upheld isolation or detention as long as basic procedural safeguards are provided. For example, in the seminal 1966 case, *In re Halko*, the defendant challenged his involuntary isolation in a California hospital after being detained as a non-adherent TB patient.<sup>101</sup> The California Court of Appeals upheld the isolation and detention order as a valid exercise of state police power. While similar detentions continue to be challenged and are routinely upheld,<sup>102,103</sup> there are constitutional limits. Detention and isolation severely curtail liberties and necessitate stringent examination.<sup>68</sup> As previously noted, the court in *Greene v. Edwards*<sup>48</sup> found that an involuntary detainment hearing of a patient with TB had failed to comply with due process requirements. The court granted the patient's petition of habeas corpus, but ordered his discharge delayed to permit a new hearing.<sup>48</sup>

In other jurisdictions, court orders may be sought to mandate treatment through DOT or other measures for persons with infectious TB disease who pose risks to others.<sup>104,105</sup> Still, attainment of such court orders may be viewed by treating physicians and public health practitioners as a last resort. Court interventions can sometimes be slow, uncertain, expensive, and a source of unwanted media scrutiny. Seeking court approval for treatment may be viewed by some health-care providers as contrary to contemporary principles of medical ethics (even though principles of public health ethics may support such orders). Even when court orders requiring treatment are granted, health care providers may still perceive that they are ethically or legally obligated to obtain the informed consent of their patient (or guardian) before implementing various treatment options.<sup>97</sup>

Resolution of such complex legal and ethical issues requires consideration of multiple factors. Public health authorities and courts are obligated to require treatment of TB pursuant to laws designed to protect the public's health. Health care workers are obliged to respect their patient's autonomy, even when treatment is otherwise required. Constitutionally, government may be challenged when it seeks to physically compel autonomous persons to receive treatment, even though government may restrict such patients' activities, or isolate them, as needed to protect communal health.

#### ***D. TB Prevention and Care among Populations under State Control***

Public health law not only grants government actors general powers to detect, prevent, and treat TB, but also obligates them to take reasonable steps to prevent TB and provide access to treatment for persons who are wards of the state or otherwise held under state control. These include individuals who are detained under criminal sanctions (i.e., prisoners) and those who are civilly detained under isolation orders or detention for mental disability (as dangers to themselves or others). From the perspective of disease prevention, for example, courts have held that prisons must isolate prisoners with infectious TB from the total prison population.<sup>106, 107</sup>

With respect to access to treatment and the appropriateness of detention methods, authorities who isolate non-adherent patients must also provide treatment and suitable accommodations. Recent cases involving the detention of vulnerable persons illustrate these considerations. For example, a man with dual Russian-U.S. citizenship was diagnosed with a drug-resistant strain of TB. The patient failed to adhere to a treatment regimen and was held for nine months in the prison wing of a metropolitan hospital.<sup>108</sup> According to a lawsuit filed on his behalf, the patient slept in a permanently lit room, had no access to internet or TV, and had little access to telephones to remain in contact with his family.<sup>109</sup> Seven weeks after his lawsuit was filed, he was transferred to an out-of-state health care facility that provides specialized care for individuals with TB disease.<sup>110</sup>

In a second example, a citizen of Laotian descent residing in California who spoke little English was detained in a county jail under an order of isolation after failing to adhere to treatment. The detention order, which would have extended for two years, did not state any specific reason for the detention nor provide any statement of her rights under TB control laws (e.g., to request release, a hearing, and court appointed representation). The order also authorized her placement in a county jail where she lived among and was subject to the same rules as other inmates. A California court of appeals held that it was legally impermissible to detain non-adherent patients in county prisons.<sup>111</sup>

Case management and treatment of individuals with infectious TB disease or the potential to develop MDR TB who may come under state control should consider their socioeconomic status, ethnic background, or other vulnerabilities to help ensure that public health actions comport with constitutional or other legal norms. Adherence to due process and other legal protections is paramount in handling these cases and also may assist in avoiding litigation or undesired media scrutiny.

#### ***E. Discrimination Against Persons with TB***

As noted in *School Board of Nassau County, Fla. v. Arline*, a landmark decision by the U.S. Supreme Court in 1987 dealing directly with TB and employment discrimination, few conditions elicit as much stigma and discrimination as communicable diseases.<sup>112</sup> Although individuals with certain contagious diseases and other disabilities may not be qualified for certain occupations, there is potential for employers to unfairly discriminate against prospective employees with certain infectious diseases or previously treated disease because of ignorance or unfounded fear. Although U.S. constitutional law does not provide significant protection of individuals with disease and other disabilities from such discrimination,<sup>113</sup> federal and state

statutes have been enacted to ensure that persons with disabilities “are not denied jobs or other benefits because of the prejudiced attitudes or the ignorance of others.”<sup>112</sup>

The federal Americans with Disabilities Act (ADA)<sup>114</sup> provides protections against discrimination for persons with disabilities in many settings. The ADA, however, does not “erect an impenetrable barrier around the disabled employee, preventing the employer from taking any employment actions vis-à-vis the employee.”<sup>115</sup> Moreover, the application of ADA is limited by the definition and interpretation of what constitutes a disability. For an individual to be considered “disabled” under the ADA, that individual must (1) have a physical or mental impairment which substantially limits one or more of the major life activities; (2) have a record of such impairment; or (3) must be regarded as disabled.<sup>116,117</sup> Not only must the impairment limit a major life activity, it must do so on a chronic and long-term basis.<sup>118</sup>

Whether an individual with active TB can be considered disabled in every case is a question that courts have grappled with. In *Arline*, the U.S. Supreme Court determined that a teacher with active TB disease could be considered disabled (under a similar standard of the federal Rehabilitation Act). However, in the 1997 Illinois decision, *Lester v. Trans World Airlines, Inc.*, an airline employee’s TB was considered to be a non-chronic condition and hence not a disability under the ADA.<sup>119</sup> The U.S. Supreme Court has yet to face the issue of whether persons with LTBI may be viewed as disabled because of the potential for LTBI to (1) substantially limit a major life activity if there is progression to TB disease, or (2) be regarded as a disability under the ADA.<sup>120</sup>

## ***F. Immigration and Removal of Undocumented TB Patients***

As noted in Part II, undocumented persons are subject to a disproportionately high incidence of TB. Given their traditional socioeconomic status and propensity toward frequent travel, they may go long periods without adequate health care and may serve as significant vectors of TB and MDR TB transmission in the U.S. and abroad. ICE is legally authorized to deny entry of undocumented persons into the country<sup>80,121</sup> and to remove any foreign national who enters the U.S. with TB (though it is the policy of ICE and other agencies not to invoke this authority).<sup>122</sup> However, as CDC has recently noted, removal prior to completion of TB treatment can contribute to the emergence and spread of drug-resistant strains.<sup>123</sup> 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.<sup>124</sup> Therefore, CDC and other organizations have sought to coordinate treatment for these individuals before, during, and after their removal.<sup>84</sup>

Coordination in the removal of undocumented individuals with communicable diseases such as TB have led to bi-national TB control and treatment programs involving U.S. states and Mexico. Southwestern states (e.g., CA, AZ, TX) have created programs to facilitate TB case management prior to, during, and after removal proceedings. Although Congress has not statutorily codified these programs, CDC has assisted in their establishment<sup>125</sup> through funding, technical assistance, conferences, and meetings.<sup>126</sup> While some legal issues are associated with these programs and their functions, they are an emerging component of TB control.

## ***G. Interjurisdictional Coordination of TB Control***

As a communicable disease that can be readily transported across state and national borders, TB requires interjurisdictional coordination in control and prevention efforts. Such coordination implicates many legal issues which were illustrated in a 2007 case involving a U.S. citizen with TB who travelled internationally by commercial airline. In such situations, CDC and the Department of Homeland Security (DHS) have developed special tools to prevent individuals reasonably suspected of being infected with a communicable disease of public health significance from entering the U.S. through international air, land, and sea ports of entry. International and domestic public health officials at the national, state, and local levels may contact DHS through CDC's Division of Global Migration and Quarantine if they suspect an individual meets the following criteria. First, public health officials must reasonably believe that the individual is infectious or likely to become infectious with a communicable disease (like MDR TB or XDR TB) that would constitute a public health threat should the individual be permitted to use mass transit. Second, there must be a reason to believe that the individual is unaware of or will not adhere to recommendations against mass transit. Typical supporting evidence includes: disregard for an isolation recommendation; violation of order or signed treatment contract; or the individual has compelling reasons to travel prior to receiving clearance by public health authorities.<sup>127</sup>

In addition to problems associated with the movement of non-adherent TB patients, legal issues can arise in the movement of people with TB across state and other jurisdictional lines. The scarcity of appropriate treatment facilities in many jurisdictions sometimes requires transferring TB patients to facilities that can provide long-term treatment and specialized care.<sup>128</sup> Some states,<sup>129</sup> and non-profit<sup>130</sup> and for-profit institutions<sup>131</sup> have created specialized TB treatment facilities. However, state and municipal laws may restrict or burden the movement of patients with TB or other communicable diseases to ensure the patient's and public's health. Some states have responded to these impediments by legally authorizing transfers under specially delineated procedures. For example, Maryland regulations appear to authorize the intra- and inter-state transfers of TB patients.<sup>132</sup> In other jurisdictions, coordination of TB patients across state or local boundaries is not addressed legally, leaving considerable discretion to public health and health care personnel as to how to address these cases. With broad discretion, however, comes uncertainty as to who is responsible for ongoing TB case management.



## VII. Tools to Assess TB Control Laws

As discussed throughout this Handbook, many laws of every type (e.g., constitutional, statutory, regulatory, judicial) and at every level of government are relevant to controlling TB. Knowing the immediate sources of legal authority for various TB control measures at tribal, state, or local levels can be essential to addressing TB effectively.

Existing public health laws are sufficiently flexible to allow varying practices to control cases of TB across jurisdictions. This flexibility, however, can lead to differences in public health practices. Some of the resources noted in **Table 1** (*Resources on Communicable Disease and TB Control Methods in Selected U.S. Jurisdictions*) provide specific guidance for TB control practices, including examples or templates for various court orders or other legal documents typically used in a given jurisdiction to facilitate TB control efforts in individual cases. Public health practitioners may seek to assess their legal authority to address TB cases with the assistance of knowledgeable legal counsel.

**Table 2** (*TB Control Law Checklist*), below, is designed to assist public health practitioners and their legal counsel at tribal, state, and local levels in identifying, assessing, and clarifying relevant legal and regulatory issues related to TB prevention and control.

The Checklist presents a series of questions within six broad subject categories (prevention, identification, management, safeguarding rights, special populations, and interjurisdictional coordination) that encompass the primary legal issues related to TB control within a specific jurisdiction as presented in the characterization of express TB control laws discussed in Part V.<sup>4</sup> Questions are presented as guides to key legal issues within each topical area. Additional questions may arise from the exploration of these issues within each jurisdiction. Users may benefit from a deliberative group or committee-oriented process to respond to each of the various questions in a way that provides greater opportunities for information sharing, relationship building, and comprehension.

*Please note that the Checklist is not meant to provide specific legal guidance or advice. Users of this Checklist, including state and local officials, should consult with their state and local attorneys and legal advisors for specific legal guidance concerning the scope and extent of public health laws in their jurisdiction.*

**Table 2. TB Control Law Checklist**

Checklist Question	Yes/No	Legal Authority
<b>I. Prevention of TB Cases</b>		
1. Are public health practitioners required to establish, maintain, or operate a TB prevention and control program?		
2. Is TB control and prevention a shared state and local responsibility?		
3. If so, what are the responsibilities between state and local entities as delineated through law?		
<b>II. Identification of TB Cases</b>		
<b>A. Screening, Examination, Testing</b>		
4. Is screening, examination, or testing for TB legally authorized in general?		
5. Do laws require generally that certain population groups (e.g., employees, staff, patients, students, or others) be screened, examined, or tested prior to employment or admittance?		
6. If so, are subsequent periodic tests required?		
7. Is there legal authority to establish voluntary screening, examination, or testing programs?		
8. Is there legal authority to order compulsory screening, examination, or testing?		
9. If so, under what circumstances can officials legally order compulsory screening, examinations, or testing?		
10. If so, what legal limits are explicitly set forth concerning the use of compulsory screening, examination, or testing?		
<b>B. Reporting</b>		
11. Are health care providers, laboratories, or others legally required to report suspected or confirmed cases of TB, MDR TB, or XDR TB infection?		
12. Are public health officials (in state or non-state agencies) legally required to further report such information to any other entity at the local, state, or tribal levels?		
<b>III. Management of TB Cases</b>		
<b>A. Investigation</b>		
13. Are public health practitioners authorized by law to investigate suspected or confirmed cases of TB disease?		
14. If so, are public health practitioners legally authorized to conduct contact tracing, partner notification, or other similar services to identify exposed persons?		
15. Must the results of these investigations be reported to other local, state, tribal or federal officials?		
<b>B. Treatment, Therapy, &amp; DOT</b>		
16. Are public health practitioners legally responsible for ensuring that TB patients receive medication and treatment (including inmates or other wards of the state)?		
17. If so, is this responsibility shared with other governmental or private sector entities?		
18. Is there a legally-established standard therapy or standard of care for TB, MDR TB, or XDR TB?		
19. Is there legal authority requiring an entity to establish, review, or monitor treatment regimens of TB, MDR TB, or XDR TB patients?		
20. Is compulsory treatment legally authorized on an emergency basis without a court order?		

Checklist Question	Yes/No	Legal Authority
21. What process or information is legally necessary in non-emergency cases to obtain a court order requiring compulsory treatment?		
22. Is directly observed therapy (DOT) legally authorized for cases of TB?		
23. What process or information is legally necessary to obtain a court order requiring DOT?		
24. Is compulsory DOT possible without a court order?		
25. Do laws specify whether persons with TB must submit to medical treatment?		
26. If so, must treatment and medication be legally provided, without cost, to TB patients who are unable to pay for care?		
<b>C. Specific Measures</b>		
<b>1. Detention</b>		
27. Do laws allow public health authorities to issue emergency detention/emergency custody orders?		
28. If so, is a court order legally required in all cases?		
29. If so, what process or information is legally necessary to obtain a court order requiring emergency detention/custody?		
<b>2. Isolation</b>		
30. Is there legal authority for public health practitioners to isolate individuals with suspected or confirmed TB?		
31. If so, do laws sufficiently distinguish between the power to isolate individuals with suspected or confirmed TB?		
32. Do laws authorize public health authorities to isolate TB patients without a court order?		
33. What process or information is legally necessary to obtain a court order concerning isolation?		
<b>3. Restricted Activities</b>		
34. Are public health practitioners legally empowered to restrict activities of individuals with suspected or confirmed TB?		
35. If so, are these laws limited in their enforcement to persons with TB who are or may be infectious?		
36. Do these laws apply to persons who have been in contact with individuals with infectious TB?		
37. Can individuals with infectious TB (and their contacts) be legally excluded from the workplace or school?		
38. Can individuals with infectious TB (and their contacts) be legally required to engage in specific conduct (like wearing protective masks) or refrain from specific conduct or behaviors that pose a health threat to others?		
39. Do laws require approval from public health authorities or others for infectious patients to move from one dwelling to another?		
<b>D. Enforcement</b>		
40. Are public health practitioners legally empowered to take action against those who fail to comply with communicable disease laws or health department rules or orders?		
41. If so, what actions are officials empowered to undertake?		
42. Is failure to comply with communicable disease laws or health department rules or orders a criminal offense?		

Checklist Question	Yes/No	Legal Authority
43. Can public health authorities legally request assistance from law enforcement or other governmental actors?		
44. Is there legal authority to seek a court order to enforce communicable diseases laws or health department rules or orders?		
45. What process or information is legally necessary to obtain a court order concerning enforcement of communicable diseases laws or health department rules or orders?		
<b>IV. Safeguarding Rights</b>		
<b>A. Due Process</b>		
46. Do laws provide persons subject to TB control measures that restrict personal freedoms the following due process protections: Written notice? Written delineation of rights? Prior hearing or post-deprivation hearing? Access to representation? Right to culturally-appropriate translations for non-English speaking persons? Decision from an impartial tribunal or court of law? Right to present and cross-examine witnesses? Right to review the record? Right to appeal? Other specific due process guarantees?		
<b>B. Confidentiality and Privacy</b>		
47. Do laws limit the acquisition, use, or disclosure of identifiable data by public health authorities concerning the identities, health status, or health records of persons with suspected or confirmed TB?		
48. Do laws limit the sharing of identifiable data by public health authorities in other jurisdictions concerning the identities, health status, or health records of persons with suspected or confirmed TB?		
<b>C. Anti-discrimination</b>		
49. Do laws protect persons with suspected or confirmed TB from unwarranted discrimination via governmental or private sector entities?		
50. Do laws require that TB services be provided on a non-discriminatory basis?		
51. Do laws require that special provisions be made for persons with suspected or confirmed TB and have vision, hearing, or other impairments or disabilities?		
52. Do laws require that special provisions be made for persons with suspected or confirmed TB and are non-English speakers?		
<b>D. Religious Exemption</b>		
53. Do laws recognize exemptions from TB prevention and control measures based on individual religious or other beliefs?		
<b>V. Special Populations</b>		
54. Concerning minors in custody, inmates, or other wards, do laws require specific measures or protections for persons with suspected or confirmed TB?		
55. If so, is responsibility for TB control and prevention shared with non-public health authorities?		

Checklist Question	Yes/No	Legal Authority
<b>VI. Interjurisdictional Coordination</b>		
56. Do laws require that persons with suspected or confirmed TB notify public health authorities upon travelling or moving <i>into</i> the local jurisdiction?		
57. Do laws require that persons with suspected or confirmed TB notify public health authorities prior to travelling or moving <i>out of</i> the local jurisdiction into different jurisdiction: 1) within the same state? 2) in another state? 3) in another country?		
58. Are intra- and inter-state transfers of institutionalized TB patients from one treatment facility to another permitted by local law?		
59. Do laws permit the coordination across state or other jurisdictional lines of TB control, treatment, and prevention activities, including treatment through DOT?		
60. Do laws permit or limit the sharing of identifiable health information to facilitate interjurisdictional coordination of TB cases?		
61. Do laws direct state or local health officials to contact federal public health authorities regarding persons who have or are suspected of having active TB and who intend to travel internationally in a manner that may impact the health of others?		

## **Table 3: Characterizing Express Laws Regarding the Control of Tuberculosis in Selected U.S. Jurisdictions: Summary of Findings**

The table below provides a brief summary of the findings from Table 1 in the Center’s report, “[Express Tuberculosis Control Laws in Selected U.S. Jurisdictions](#)” as of May 1, 2008. Marking a specific category with an ‘x’ implies that the jurisdiction appears to feature express TB control laws for that public health intervention or sub-category.

---

***Disclaimer** – Information in this document does not represent the official legal positions of the U.S. Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention/HHS, or state or local governments, and is not meant to provide specific legal guidance or advice. Thus, users of this report, including state and local officials, should consult with their state and local attorneys and legal advisors for a more complete review of laws and policies pertaining to tuberculosis control.*

Objective	PH Intervention	States																									TOTAL	
		AZ	CA	CO	FL	GA	IL	IN	KS	KY	LA	MA	MD	MI	MO	MS	MT	NY	NYC	OK	OR	SC	TN	TX	VA	WI		
Prevention of TB Cases	TB Control Programs	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X		X	X	X	X	X	21 (84%)		
Identification of TB Cases	Screening	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	25 (100%)	
	Examination & Testing	X	X	X	X	X	X	X	X	X	X	X		X	X	X			X	X		X	X	X	X	X	22 (88%)	
Management of TB Cases	Reporting	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	25 (100%)	
	Investigation	X	X	X	X	X	X	X	X	X								X	X	X	X	X	X		X	X	17 (68%)	
	Treatment	Treatment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	24 (96%)
		DOT	X	X	X	X	X	X	X			X	X				X		X	X							X	13 (52%)
	Specific Measures	Emergency Detention	X	X		X	X			X	X	X	X		X	X	X		X	X		X	X		X	X	17 (68%)	
		Quarantine														X												1 (4%)
		Isolation	X	X	X	X	X	X	X	X	X	X	X			X	X	X		X	X	X	X	X	X	X	X	22 (88%)
Safeguarding Rights	Activities Restricted	X	X		X	X		X		X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	20 (80%)	
	Enforcement	X	X	X	X	X	X	X	X	X	X	X			X	X			X		X	X		X	X	19 (76%)		
	Due Process	X	X	X	X	X	X			X	X	X		X	X	X	X	X			X	X			X	17 (68%)		
	Confidentiality and Privacy	X		X	X	X	X					X	X		X			X			X	X	X				11 (44%)	
Special Populations	Anti-Discrimination			X																				X			2 (8%)	
	Religious Exemptions	X	X	X			X		X	X		X						X	X								9 (36%)	
	Considerations for Certain Populations	X	X		X	X	X				X		X	X				X			X		X				11 (44%)	
Additional TB Provisions		X		X		X		X	X		X	X	X	X	X		X		X	X		X	X		X	16 (64%)		
<b>TOTAL</b>		16	14	14	14	15	13	11	11	12	11	13	11	6	10	11	11	9	11	13	7	13	14	10	10	13		

## References and Notes

- <sup>1</sup> Benjamin GC and Moulton AD. Public Health Legal Preparedness: A Framework for Action. *Journal of Law, Medicine & Ethics* 2008; 36(S1): 13-17.
- <sup>2</sup> CDC Division of Tuberculosis Elimination. [www.cdc.gov/tb](http://www.cdc.gov/tb). Accessed October 1, 2008.
- <sup>3</sup> CDC. Tuberculosis Control Laws – United States, 1993: Recommendations of the Advisory Council for the Elimination of TB. *MMWR* 1993; 42(R-15): 1-15.
- <sup>4</sup> Cabrera, OA, Hodge, JG, Gostin, LO. *Express Tuberculosis Control Laws in Selected U.S. Jurisdictions* Centers for Law and the Public's Health, Draft as of August 26, 2008: 1-55.
- <sup>5</sup> Gostin LO, Burris S, Lazzarini Z. The Law and the Public's Health: a study of infectious disease law in the United States. *Colum. L. Rev.* 1999;99:59-128.
- <sup>6</sup> Kaye K and Friedan TR. Tuberculosis control: the relevance of classic principles in an era of Acquired Immunodeficiency Syndrome and multidrug resistance. *Epidemiol. Rev.* 1996;18(1):52-63.
- <sup>7</sup> CDC Division of Tuberculosis Elimination. Questions and Answers about TB, 2007. [http://www.cdc.gov/tb/faqs/qa\\_introduction.htm#Intro4](http://www.cdc.gov/tb/faqs/qa_introduction.htm#Intro4). Accessed October 1, 2008.
- <sup>8</sup> The Global Fund to Fight AIDS, Tuberculosis, and Malaria. Fighting Tuberculosis. <http://www.theglobalfund.org/en/about/tuberculosis/default.asp>. Accessed August 24, 2008.
- <sup>9</sup> In 2007, 7.4% of reported TB cases in the U.S. were resistant to isoniazid, and 1.1% of cases were resistant to both isoniazid and rifampin. CDC. Reported Tuberculosis in the United States, 2007. Atlanta, GA: Department of Health and Human Services, CDC, September 2006. <http://www.cdc.gov/tb/statistics/reports/2007/pdf/fullreport.pdf>. Accessed June 10, 2009.
- <sup>10</sup> CDC. Trends in Tuberculosis—United States, 2007. *MMWR* 2008;57(11):281-285. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5711a2.htm>. Accessed August 24, 2008.
- <sup>11</sup> Michelle Daubert. Pandemic Fears and Contemporary Quarantine: Protecting Liberty Through a Continuum of Due Process Rights. *54 Buff. L. Rev.* 2007; 54:1299.
- <sup>12</sup> CDC Division of Tuberculosis Elimination. Self-Study Modules on Tuberculosis. Module 1, Page 20. <http://www.cdc.gov/tb/education/ssmodules/pdfs/Module1.pdf>. Accessed June 10, 2009.
- <sup>13</sup> American Thoracic Society, Centers for Disease Control and Prevention, and Infectious Diseases Society of America. Controlling Tuberculosis in the United States. *Am. J. Respir. Crit. Care Med.* 2005;172:1169-1227.
- <sup>14</sup> CDC. Trends in Tuberculosis - - United States, 2005. *MMWR* 2006; 55(11): 305-306
- <sup>15</sup> CDC Division of Tuberculosis Elimination. Self-Study Modules on Tuberculosis. Module 1, Page 20. <http://www.cdc.gov/tb/education/ssmodules/pdfs/Module1.pdf>. Accessed June 10, 2009.
- <sup>16</sup> CDC Division of Tuberculosis Elimination. Fact Sheet: QuantiFERON-TB Gold Test. <http://www.cdc.gov/tb/pubs/tbfactsheets/QFT.htm>. Accessed August 24, 2008.
- <sup>17</sup> Hodge JG. Law as a tool for improving the health of children and adolescents in schools. *J. Sch. Health.* 2006;76(9):442-445.
- <sup>18</sup> Chemerinsky E. *Constitutional Law: Principles and Policies*. New York, NY: Aspen Law and Business; 1997: 1-6.
- <sup>19</sup> *Texas v. White*, 7 Wall 700, 725 (1869) quoting *Lane County v. Oregon*, 7 Wall. 71, 76 (1869) ("The Constitution, in all its provisions, looks to an indestructible Union, composed of indestructible States").
- <sup>20</sup> U.S. CONST. art. VI, par. 2 ("[t]his Constitution, and the Laws of the United States which shall be made in Pursuance thereof; . . . shall be the supreme Law of the Land;").
- <sup>21</sup> U.S. CONST. amend. X ("The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.").
- <sup>22</sup> Freund E. *The Police Power: Public Policy and Constitutional Rights*. Chicago, IL: Callaghan & Company; 1904: 3-4.
- <sup>23</sup> Hodge JG. The Role of New Federalism and Public Health Law. *J. Law and Health.* 1998;12:318-320.
- <sup>24</sup> *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316 (1819).
- <sup>25</sup> U.S. CONST. art I, § 8.
- <sup>26</sup> *United States v. Darby*, 312 U.S. 100, 114 (1941).
- <sup>27</sup> *Shreveport Rate Cases*, 234 U.S. 342 (1914).
- <sup>28</sup> *Wickard v. Filburn*, 317 U.S. 111, 128-129 (1942).



- <sup>29</sup> Gostin LO, Hodge JG; Turning Point Public Health Statute Modernization National Excellence Collaborative. State Public Health Law Assessment Report. [http://www.turningpointprogram.org/toolkit/pdf/phsm\\_lawassessmen.pdf](http://www.turningpointprogram.org/toolkit/pdf/phsm_lawassessmen.pdf). Accessed September 2, 2008.
- <sup>30</sup> Public Health Institute, California Tuberculosis Control Law. [http://www.phlpnet.org/docs/tb\\_law\\_paper.pdf](http://www.phlpnet.org/docs/tb_law_paper.pdf). Accessed August 24, 2008.
- <sup>31</sup> *Leisy v. Hardin*, 135 U.S. 100 (1890).
- <sup>32</sup> 25 U.S.C. § 13.
- <sup>33</sup> 25 U.S.C. 450 *et. seq.*
- <sup>34</sup> 25 U.S.C. §§ 458aa *et. seq.*
- <sup>35</sup> 25 U.S.C. § 450f.
- <sup>36</sup> 25 U.S.C. § 450.
- <sup>37</sup> 197 U.S. 11 (1905).
- <sup>38</sup> 197 U.S. at 15-16, 26.
- <sup>39</sup> 197 U.S. at 26-27 (*citing Commonwealth v. Alger*, 7 Cush. 53, 84 (Mass. 1851)).
- <sup>40</sup> *Local 1812, American Fed'n of Gov't Employees v. U.S. Dep't of State*, 662 F.Supp 50 (D.D.C.1987).
- <sup>41</sup> DEL. CODE ANN. tit. 16, §§ 525-526.
- <sup>42</sup> *Campion EW. Liberty and the Control of Tuberculosis. N. Engl. J. Med.* 1999;340(5):385.
- <sup>43</sup> *Cruzan v. Director, Mo. Dep't. of Health*, 497 U.S. 261 (1990) (holding that the family of a patient in a persistent vegetative state could not remove the patient from life support without clear and convincing evidence that the patient would not wish to prolong life).
- <sup>44</sup> *Washington v. Harper*, 494 U.S. 210, 227, 110 S. Ct. 1028, 1039-40, 108 L.Ed.2d 178 (1990)(a prison inmate may be subjected to forced administration of psychotropic drugs to alleviate mental illness if the inmate posed a danger to himself or others and the treatment was in the inmate's medical interest).
- <sup>45</sup> Gostin LO. *Public Health Law: Power, Duty, Restraint*. Berkley, CA: University of Cal. Press; 2000.
- <sup>46</sup> Lopez, W, Parmet WE, Schmitz, F, Benor D. Due process and public health. *J. Law Med. Eth. Special Supp.* 2007;35(S4):33-38.
- <sup>47</sup> *Addington v. Texas*, 441 U.S. 418 (1979).
- <sup>48</sup> *Greene v. Edwards*, 263 S.E.2d 661 (W.Va. 1980).
- <sup>49</sup> Doyle S.C. HIV-Positive, Equal Protection Negative. *Geo. L.J.* 1992;81(2):375-408.
- <sup>50</sup> *Jew Ho v. Williamson*, 103 F. 10 (C.C. Cal. 1900).
- <sup>51</sup> Parmet WE. AIDS, police powers, and individual liberty. *J. Health Polit., Health Pol. Law* 1989;14:741-771.
- <sup>52</sup> 20 ILL. COMP STAT. 2305/2-2(a).
- <sup>53</sup> MD. CODE ANN., Health-Gen., § 18-102(b).
- <sup>54</sup> Hodge, JG, Gostin, LO, Gebbie, K, Erickson, DL. Transforming public health law: The Turning Point Model State Public Health Act. *J. of Law, Med., and Ethics.* 2006;34:1:77-84. A copy of the Turning Point Act is available online through the *Centers for Law and the Public's Health* website at <http://www.publichealthlaw.net/ModelLaws/MSPHA.php>.
- <sup>55</sup> Thacker S, Berkelman R. Public health surveillance in the United States, *Epidemio Rev.* 1988;10:164.
- <sup>56</sup> N.C. GEN. STAT .ANN. §130A-480.
- <sup>57</sup> ALASKA STAT. §18.15.370.
- <sup>58</sup> Alaska Department of Health and Social Services. State of Alaska Epidemiology. Infectious Diseases Reportable to Alaska Division of Public Health: Update 2007. [http://www.epi.hss.state.ak.us/bulletins/docs/rr2007\\_01.pdf](http://www.epi.hss.state.ak.us/bulletins/docs/rr2007_01.pdf). Accessed August 22, 2008.
- <sup>59</sup> CDC, Mandatory Reporting of Infectious Disease by Clinicians, *MMWR* 1990;39(RR-9):1-11.
- <sup>60</sup> Council for State and Territorial Epidemiologists, State Reportable Conditions Websites, <http://www.cste.org/dnn/ProgramsandActivities/PublicHealthInformatics/PHIStateReportableWebsites/tabid/136/Default.aspx>. Accessed September 10, 2008
- <sup>61</sup> Black WC, Welch G. Screening for Disease. *Am. J. Roentgenology.* 1997;168(1):3.
- <sup>62</sup> CAL. PUB. RES. CODE § 5163.
- <sup>63</sup> CAL. PENAL CODE § 6007.
- <sup>64</sup> CDC. Fact Sheet: BCG Vaccine. <http://www.cdc.gov/tb/pubs/tbfactsheets/BCG.htm>. Accessed on September 10, 2008.

- 
- <sup>65</sup> ALA. CODE § 22-11A-10 (1975).
- <sup>66</sup> CDC. Questions & Answers About TB. 2007. [http://www.cdc.gov/tb/faqs/qa\\_TBdisease.htm#Active5](http://www.cdc.gov/tb/faqs/qa_TBdisease.htm#Active5). Accessed September 10, 2008.
- <sup>67</sup> Institute of Medicine. *Ending Neglect: The Elimination of Tuberculosis in the United States*. Washington, D.C.: National Academy Press; 2000.
- <sup>68</sup> *City of Newark v. J.S.*, 652 A.2d 265 (N.J. Super. Ct. Law Div. 1993) (city sought involuntary commitment of a homeless person suffering from TB. After holding a hearing which met due process requirements the court determined that the individual was a danger to others. The court further determined that hospital confinement was the least restrictive mode of isolation and issued a commitment order to that effect. The court did not order compulsory testing or treatment).
- <sup>69</sup> Public Health Law Work Group. Health Officer Practice Guide for Communicable Disease Control in California. 2007. <http://ww2.cdph.ca.gov/programs/dcdc/Documents/Health-Officer-Practice-Guide-DCDC.pdf>. Accessed September 10, 2008.
- <sup>70</sup> 42 U.S.C. § 264.
- <sup>71</sup> Exec. Order No. 13295, *as amended by* Exec. Order No. 13375, 3 C.F.R. 13375(2006). [http://edocket.access.gpo.gov/cfr\\_2006/janqtr/3CFR13375.htm](http://edocket.access.gpo.gov/cfr_2006/janqtr/3CFR13375.htm). Accessed September 2, 2008 (In addition to TB, the communicable diseases which may be targeted by federal efforts under the PHSA includes cholera, diphtheria, plague, smallpox, yellow fever, viral hemorrhagic fevers, SARS, and influenza caused by novel or reemergent influenza viruses that are causing or have the potential to cause a pandemic).
- <sup>72</sup> 42 C.F.R. § 70.6.
- <sup>73</sup> 42 C.F.R. § 71.21.
- <sup>74</sup> 42 C.F.R. § 70.2.
- <sup>75</sup> U.S. CONST., art. I, § 9, cl. 1.
- <sup>76</sup> U.S. CONST., art. I, § 8, cl. 4.
- <sup>77</sup> *Chae Chan Ping v. U.S.*, 130 U.S. 581 (1889).
- <sup>78</sup> *Fong Yue Ting v. U.S.*, 149 U.S. 698, 711 (1893).
- <sup>79</sup> 42 C.F.R. § 34.2 (noting that TB is a communicable disease of public health significance).
- <sup>80</sup> 8 U.S.C.A. § 1182(a)(1)(A)(noting that undocumented persons are ineligible to be admitted to the U.S. if determined to have a communicable disease of public health significance).
- <sup>81</sup> 42 C.F.R. part 34.
- <sup>82</sup> 8 U.S.C.A. § 1227 (power to deport any undocumented person who was ineligible for entrance at the time entered country).
- <sup>83</sup> 8 U.S.C.A. § 1229(a)(C)(2)(B).
- <sup>84</sup> Schneider DL, Lobato MN. Tuberculosis Control Among People in U.S. Immigration and Customs Enforcement Custody. *Am. J. Prev. Medicine*. 2007;33(1):9-14 (noting how deportees with TB often return to the U.S. and may carry back resistant strains of the disease).
- <sup>85</sup> World Health Organization, International Health Regulations (rev.) Arts. 6-8 (2007). <http://www.who.int/csr/ihr/WHA58-en.pdf>. Accessed August 25, 2008.
- <sup>86</sup> World Health Organization, International Health Regulations (rev.) Art. 5 (2007). <http://www.who.int/csr/ihr/WHA58-en.pdf>. Accessed August 25, 2008.
- <sup>87</sup> Calian P, Fidler DP. XDR Tuberculosis, The New International Health Regulations and Human Rights. *Global Health Governance*. 2007;1(1).
- <sup>88</sup> Extensively Drug-Resistant Tuberculosis (XDR-TB) in United States of America air passenger. [news release]. Geneva, Switzerland: World Health Organization. May 30, 2007. [http://www.who.int/csr/don/2007\\_05\\_30a/en/index.html](http://www.who.int/csr/don/2007_05_30a/en/index.html). Accessed September 2, 2008.
- <sup>89</sup> The selected jurisdictions are: AZ, CA, CO, FL, GA, IL, IN, KS, KY, LA, MA, MD, MI, MO, MS, MT, NY, NYC, OK, OR, SC, TN, TX, VA, and WI.
- <sup>90</sup> *Conlon v. Marshall*, 59 N.Y.S.2d 52 (N.Y. Sup. Ct. 1945).
- <sup>91</sup> 6 COLO. CODE REGS. § 1009- 4 (K) (1).
- <sup>92</sup> Hodge, JG. Health information privacy and public health. *J. Law Med. Eth.* 2003; 31(4):663-671.
- <sup>93</sup> 45 C.F.R. Parts 160 and 164.

- 
- <sup>94</sup> CDC. HIPAA Privacy Rule and Public Health: Guidance from the Centers for Disease Control and the Department of Health and Human Services. *MMWR* 2003;52 (S-1):1-12. <http://www.cdc.gov/mmwr/preview/mmwrhtml/su5201a1.htm>. Accessed August 28, 2008.
- <sup>95</sup> 20 U.S.C. 1232g.
- <sup>96</sup> Letter from LeRoy S. Rooker, Director, Family Compliance Policy Office, U.S. Department of Education, to Melanie P. Baise, Associate University Counsel, The University of New Mexico, dated November 29, 2004.
- <sup>97</sup> Bayer R, Dupuis L. Tuberculosis, Public Health and Civil Liberties. *Annu. Rev. Pub. Health.* 1995. 16:307-26.
- <sup>98</sup> *Cruzan v. Director, Missouri Dept. of Health*, 497 U.S. 261, 278 (“the principle that a competent person has a Constitutionally protected liberty interest in refusing unwanted medical treatment may be inferred from our prior decisions.”).
- <sup>99</sup> ARIZ. REV. STAT. § 36-726.
- <sup>100</sup> GA. COMP R & REGS. 290-5-16.03.
- <sup>101</sup> *In re Halko*, 54 Cal. Rptr. 661, 664 (Ct. App. 1966) (upholding forced hospitalization of TB patient who repeatedly left hospital without permission).
- <sup>102</sup> *In re Washington*, 304 Wis.2d 98, 735 N.W.2d 111 (Wis. 2007) (upholding the long-term detention of a non-compliant TB patient in a jail).
- <sup>103</sup> *Ventura County Public Health Officer v. Adalberto*, 156 Cal. App. 4<sup>th</sup> 288 (2007)(upholding detention of tuberculosis patient despite delay in appointment of representation).
- <sup>104</sup> CAL. HEALTH & SAFETY CODE § 121365(C).
- <sup>105</sup> FLA. STAT. § 392.64.
- <sup>106</sup> *DeGidio v. Pung*, 920 F.2d 525 (1990)(finding that prison officials did not do enough to prevent and treat TB and that consequently a consistent pattern of reckless or negligent conduct was sufficient to establish deliberate indifference to the serious medical needs of inmates, a constitutional violation).
- <sup>107</sup> *Holt v Hutto*, 363 F Supp 194, 200 (E D Ark 1973)(it "goes without saying that (tubercular inmates) must be segregated.").
- <sup>108</sup> Finn P. Virulent New Strain of TB Raising Fears of Pandemic: Bug Is Resistant to Most Available Drugs. *Washington Post*. May 3, 2007:A01. [http://www.washingtonpost.com/wp-dyn/content/article/2007/05/02/AR2007050202831\\_pf.html](http://www.washingtonpost.com/wp-dyn/content/article/2007/05/02/AR2007050202831_pf.html). Accessed September 10, 2008.
- <sup>109</sup> ACLU of Arizona. Complaint. [www.acluaz.org/News/PressReleases/PDFs/20070531\\_complaint\\_file.pdf](http://www.acluaz.org/News/PressReleases/PDFs/20070531_complaint_file.pdf). Accessed September 14, 2008.
- <sup>110</sup> ACLU of Arizona. ACLU of Arizona Lawsuit Triggers Transfer of TB Patient to Denver Hospital [news release] <http://www.aclu.org/prison/gen/30618prs20070717.html>. Accessed September 20, 2008.
- <sup>111</sup> *Souvannarath v. Hadden*, 95 Cal.App.4th 1115, 1120 (2002).
- <sup>112</sup> *School Bd. of Nassau County, Fla. v. Arline*, 480 U.S. 273, 284 (1987).
- <sup>113</sup> Chemerinsky E. *Constitutional Law: Principles and Policies*. New York, NY: Aspen Law and Business; 1997: 693.(noting that only rational basis review exists for discrimination based on disability).
- <sup>114</sup> 42 U.S.C. § 12101 et seq.
- <sup>115</sup> *Siefken v. Village of Arlington Heights*, 65 F.3d 664, 666 (7th Cir.1995).
- <sup>116</sup> 42 U.S.C. §12101.
- <sup>117</sup> *Roth v. Lutheran Gen. Hosp.*, 57 F.3d 1446, 1454 (7th Cir.1995).
- <sup>118</sup> *Gonzalez v. Perfect Carton Corp.*, 1996 WL 89058, at \*2 (ND.Ill.1996).
- <sup>119</sup> *Lester v. Trans World Airlines, Inc.*, 1997 WL 417814, at 7 N.D.Ill. (1997).
- <sup>120</sup> *Bragdon v. Abbot*, 524 U.S. 624 (1998).
- <sup>121</sup> 8 U.S.C.A. § 1182(a)(1)(A)(“Except as otherwise provided in this chapter, aliens who are inadmissible under the following paragraphs are ineligible to receive visas and ineligible to be admitted to the United States...In general...any alien who is determined (in accordance with regulations prescribed by the Secretary of Health and Human Services) to have a communicable disease of public health significance”).
- <sup>122</sup> 8 U.S.C.A. § 1227 (stating the broad power to document undocumented persons).

- 
- <sup>123</sup> Post-Detention Completion of Tuberculosis Treatment for Persons Deported or Released from the Custody of the Immigration and Naturalization Service --- United States, 2003, <http://www.cdc.gov/MMWR/preview/mmwrhtml/mm5219a3.htm>. Accessed on September 11, 2008.
- <sup>124</sup> CDC. Post-detention completion of tuberculosis treatment for persons deported or released from the custody of the Immigration and Naturalization Service—United States, 2003. *MMWR* 2003;52(19):438–441.
- <sup>125</sup> CDC. Trends in Tuberculosis Morbidity - United States, 1992 – 2002. *MMWR* 52(11):217-222, 2003. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5211a2.htm>. Accessed September 3, 2008.
- <sup>126</sup> CDC. TB Notes Newsletter, No. 1. [http://www.cdc.gov/tb/notes/TBN\\_1\\_08/Highlights.htm](http://www.cdc.gov/tb/notes/TBN_1_08/Highlights.htm). Accessed September 3, 2008. (describing a day long legal forum in which various legal and public health officials from the CDC as well as various states convened to discuss bi-national case management).
- <sup>127</sup> CDC. Federal Air Travel Restrictions for Public Health Purposes – United States, June 2007—May 2008, *MMWR* 2008, 57(37);1009-1012.
- <sup>128</sup> Advisory Council for the Elimination of Tuberculosis. Progressing Toward Tuberculosis Elimination in Low-Incidence Areas of the United States. *MMWR* 2002;51(RR05):1-16.
- <sup>129</sup> Texas Center for Infectious Disease, San Antonio, Texas, [www.dshs.state.tx.us](http://www.dshs.state.tx.us). Accessed October 2, 2008.
- <sup>130</sup> National Jewish Medical and Research Facility, Denver, Colorado, [www.nationaljewish.org](http://www.nationaljewish.org). Accessed October 2, 2008.
- <sup>131</sup> LifeCare Hospital of Plano, Plano, Texas [www.lifecare-hospitals.com/hospitals-plano.htm](http://www.lifecare-hospitals.com/hospitals-plano.htm). Accessed October 2, 2008.
- <sup>132</sup> Maryland Division of Tuberculosis Control. Refugee and Migrant Health Procedures for Maryland Interjurisdictional Tuberculosis Transfers. [http://www.cha.state.md.us/edcp/tb/pdf/1\\_Maryland%20Interjurisdictional%20Procedures\\_rev0505.pdf](http://www.cha.state.md.us/edcp/tb/pdf/1_Maryland%20Interjurisdictional%20Procedures_rev0505.pdf). Accessed on August 27, 2008.