

“Simple, Quick and Wrong”:  
Tuberculosis Control and Expansion of the Carceral State at the Turn of the 21<sup>st</sup> Century

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## ***I. Introduction***

The last four months of Ruby Washington's pregnancy were anything but peaceful. On May 19, 2005, Washington arrived at the Keenan Health Center Tuberculosis Health Clinic in Milwaukee, Wisconsin to take a test she had been through several times before. When, a month later, the results came back positive for latent pulmonary tuberculosis (TB)—a type of TB that, with proper treatment, would remain noninfectious—Washington was homeless and seven months pregnant. This was Washington's third bout with TB.

On August 22, 2005, Washington delivered her baby at the Aurora Sinai Medical Center, three miles from Keenan. Hours later, the Circuit Court of Milwaukee barred her from leaving the hospital with her new baby. The reason: Washington had failed to comply with the terms of her directly observed therapy (DOT), a highly regulated TB treatment that requires a patient to take medications under a healthcare worker's surveillance.<sup>1</sup> Washington had been ordered into DOT back in June after testing positive but had failed to appear for several appointments. Upon her admission to Aurora Sinai, a nurse informed the court of Washington's noncompliance. The court subsequently ordered that Washington be detained for mandatory treatment. After a month, the court permitted Washington and her baby to leave the hospital, provided that she reliably continue DOT.

When Washington missed her first treatment a few days later, Keenan Clinic Director Irmine Reitl called the Milwaukee Police Department. Following leads from Washington's friends, Reitl and several officers located Washington at a nearby parking lot on her way to a convenience store. More squad cars arrived, and police detained Washington, bringing her to the

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<sup>1</sup> J. Volmink and P. Garner, "Directly Observed Therapy for Treating Tuberculosis," *Cochrane Database Syst Rev*, no. 2 (2006).

police station, where she was held until a hearing that afternoon, at which the court ordered her confined to the county jail for the nine-month duration of her treatment.

Washington challenged her confinement with the help of the American Civil Liberties Union (ACLU). Because Wisconsin's TB control statute authorized involuntary confinement in hospitals, jails, and prisons following lack of compliance with antibiotic regimens and DOT, Washington did not petition for her release.<sup>2</sup> Instead, she requested to be confined in a hospital rather than a jail during her treatment. Rejecting her challenge, the court found that her noncompliance with DOT made her "a huge threat to the community."<sup>3</sup> The court further held that confinement in jail was permissible, in part because it was the cheapest option available to the city.<sup>4</sup>

Washington's 2006 case was the first published decision in the U.S. ordering a noncompliant TB patient to jail for medical treatment, but it was far from the only one. TB patients detained in jails and prisons, under guard in a hospital, or in solitary confinement in infectious disease control centers pursuant to laws like Wisconsin's TB control statute have challenged the terms of their detention in recent decades. Most plaintiffs failed to alter detention orders, let alone displace the underlying TB laws that reflected a half-century of public health policy shaped by fears of alleged patient "recalcitrance."

In the 1950s, during a period known as the "Wonder Drug Era" of medicine, the discovery of antibiotics, including those used to treat TB, generated a perception of drugs-as-panacea.<sup>5</sup> The excitement led physicians to overprescribe TB antibiotics and policymakers to defund all other

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<sup>2</sup> *Wis. Stat. § 252.07.*

<sup>3</sup> *City of Milwaukee V. Ruby Washington Wi 104, (Affirming 2006 Wi App 99), 304 Wis.2d 98 (2007).*

<sup>4</sup> *Ibid.*

<sup>5</sup> The "Wonder Drug Era" was a period of scientific and medical optimism in the early 1950s following the development of effective antibiotics and before well-publicized disasters involving prescription medication. This period is discussed in depth later in this paper. A. Tone, *The Age of Anxiety: A History of America's Turbulent Affair with Tranquilizers* (Basic Books, 2009). 81

existing forms of TB control. Congress converted funding earmarked for TB control into block grants that states could use for any purpose.<sup>6</sup> When antibiotic resistance began to arise, newspapers and their readers helped create a scapegoat, namely, the non-white, low-income, “recalcitrant” TB patient.<sup>7</sup>

In the decades that followed, policymakers broadly cut social welfare programs and expanded the carceral state, disproportionately disinvesting from low-income communities of color while simultaneously promoting narratives that cast inhabitants of these communities as violent and criminal. As a result, TB risk factors—including housing insecurity, poverty, HIV/AIDS, and incarceration—rose in these communities.<sup>8</sup> In the late 1980s and early 1990s, these risk factors coalesced to generate a new, more deadly form of tuberculosis: multi-drug-resistant tuberculosis (MDR-TB). MDR-TB spread rapidly in the communities that had faced the brunt of the disinvestment in previous decades.<sup>9</sup>

Inevitably, the airborne disease did not remain confined to low-income communities. As TB spread to whiter and wealthier neighborhoods, the image of the “recalcitrant” patient drove policies of containment and punishment. Fear, not science, prompted the creation of these policies. Dr. Thomas Frieden, director of the New York City Bureau of Tuberculosis Control in 1992 and one of the few public health officials who, early on, recognized the failure of TB

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<sup>6</sup> L. Reichman and J.H. Tanne, *Timebomb: The Global Epidemic of Multi-Drug Resistant Tuberculosis* (McGraw-Hill Education, 2002), 40.

<sup>7</sup> Throughout this paper, I use the phrase “non-white” given the spottiness of the data. These involuntary detentions clearly disproportionately impacted non-white communities, and more specifically, disproportionately impacted Black, LatinX, and Indigeneous communities. And yet, in most instances, there is insufficient evidence to conclude race and ethnicity beyond the phrase “non-white.”

<sup>8</sup> William Julius Wilson, *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy, Second Edition* (University of Chicago Press, 1987).

<sup>9</sup> TB is considered multidrug-resistant when it is resistant to at least two commonly prescribed drugs David P. Fidler, Lawrence O. Gostin, and Howard Markel, “Through the Quarantine Looking Glass: Drug-Resistant Tuberculosis and Public Health Governance, Law, and Ethics,” *The Journal of Law, Medicine & Ethics* 35, no. 4 (2007).

strategy explained: “[W]hen people are scared they grab for a simple answer. And locking sick people away is a simple answer. Simple, quick and wrong.”<sup>10</sup>

TB containment policies during this era were infused with carceral logic, *i.e.*, the reliance on a paradigm of control, punishment, and criminalization to solve a particular social problem.<sup>11</sup> As Washington’s story illustrates, in the case of TB control, carceral logic takes many forms. It may include involuntary detention of patients in correctional facilities, or in hospitals and other institutions under conditions similar to criminal confinement; panoptic interventions like DOT; and criminalization of disobedience during involuntary detention. This logic also fosters close relations between police and TB clinics and diverts funds into carceral machinery—that is, into police, jails, prisons, and surveillance programs—rather than into healthcare, social welfare, and community infrastructure.

The discretionary authority these policies vest in public officials, the stereotype of the “recalcitrant” patient, and the concentration of TB cases in historically disadvantaged communities meant that this carceral logic disproportionately impacted low-income, non-white TB patients living under conditions of systematic disadvantage.<sup>12</sup> Many had histories of substance use, homelessness, mental illness, incarceration, and migration. The application of these laws thereby reified the symbol of a “recalcitrant” and criminal non-white, low-income patient by incarcerating and quasi-incarcerating those who fit this image.

TB control policies embedded with carceral logic prioritized social control over effective public health policy. In contrast to long-accepted public health principles, TB policies pursued “tertiary” disease prevention, such as treatment and involuntary detention, neglecting “primary”

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<sup>10</sup> Michael Specter, "Tb Carriers See Clash of Liberty and Health," *New York Times* 1992.

<sup>11</sup> Michael J. Coyle and Mechthild Nagel, *Contesting Carceral Logic: Towards Abolitionist Futures* (New York: Routledge, 2021).

<sup>12</sup> Specter, "Tb Carriers See Clash of Liberty and Health."

prevention (*i.e.*, addressing the foundational causes of MDR-TB, such as structural inequality and large-scale disinvestment in low-income communities of color), as well as “secondary” prevention (*i.e.*, addressing the progression of the disease from latent to active cases through early screening and diagnosis).<sup>13</sup> In so doing, the carceral logic of the 1990s TB policies ignored the science underlying the disease itself: how disinvestment creates TB risk factors, how TB antibiotics accelerated the evolution of resistance, and how TB progresses from latent to active following social disruptions. Unlike primary and secondary prevention methods, these tertiary prevention strategies also expanded social control over low-income communities of color. Social control can inhibit effective disease control, or, worse, even further hasten the spread of disease. Activist Angela Davis explains that prison building projects “devour...public funds” which might otherwise be available to support community social programs.<sup>14</sup> Even if TB control policies shift in the future, the funds that officials invested into carceral machinery, namely, police, jails, detention centers, and prisons can never be retrieved.

Scholars have previously linked public health policy with state control of marginalized communities. Perhaps most famously, 20<sup>th</sup> century French critical theorist Michel Foucault discusses how practices of detention developed in times of plague produced a more disciplinarian society. Plague, Foucault explains, forced individuals to remain separate, surveyable, and immobile, or else risk infection and death. These circumstances demanded an “[increased] depth of surveillance and control, [and] an intensification and a ramification of power.”<sup>15</sup> Those infected were treated through “rituals of exclusion” that combined discipline,

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<sup>13</sup> National Center for Environmental Health, "Prevention," in *Picture of America: Our Health And Environment* (Centers for Disease Control and Prevention, 2017).

<sup>14</sup> A.Y. Davis, *Are Prisons Obsolete?* (Seven Stories Press, 2003), 88.; (“For the state,” Wacquant explains, this penalization is “financially ruinous, as it competes with, and eventually consumes, the funds and staff needed to sustain essential public services such as schooling, health, transportation, and social protection.”) Loïc Wacquant, "Class, Race & Hyperincarceration in Revanchist America," *Daedalus* 139, no. 3 (2010).

<sup>15</sup> M. Foucault, *Discipline and Punish: The Birth of the Prison* (Knopf Doubleday Publishing Group, 1975), 195,98.

internment, and individualized blame.<sup>16</sup> During a health crisis, then, specific methods of state power were refined to contain and surveil bodies. Such power persisted and evolved after the plague ended.<sup>17</sup>

Writing at the same time as Foucault, social psychologist Erving Goffman linked medical facilities and medical isolation with incarceration. Goffman describes asylums, mental hospitals, and prisons as “total institutions,” that, among other professed purposes, allowed the State to “organize” targeted groups of people.<sup>18</sup> Goffman explains that medical institutions can become “prison-like,” and offer another mechanism of state social control by formally administering the lives of individuals who have not broken laws.<sup>19</sup>

Beyond public health, activists and scholars describe the role of containment and surveillance in social control. While attempting to expand “state capacity devoted to managing dispossessed and dishonored populations,” sociologist Loïc Wacquant explains, the United States uses seemingly different but functionally similar sites of exclusion to control and contain dishonored” and “dispossessed” communities.<sup>20</sup> Prisons and racially segregated neighborhoods, for instance, function as “frontline dams of social disorder,” that is, sites that contain both individuals and perceived social ills.<sup>21</sup> Davis posits: “the prison... functions ideologically as an abstract site into which undesirables are deposited, relieving us of the responsibility of thinking about... the problems of our society[.]”<sup>22</sup> In other words, correctional facilities and other institutions of

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<sup>16</sup> Foucault, *Discipline and Punish*, 199

<sup>17</sup> Foucault believed that this kind of disciplinary power based on policies developed during times of plague and methods of quarantines operated in psychiatric asylums, penitentiaries, juvenile detention centers, schools, and even hospitals. Foucault, *Discipline and Punish: The Birth of the Prison*, 199.

<sup>18</sup> Erving Goffman, *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates* (Taylor & Francis, 1961).

<sup>19</sup> *Ibid.*

<sup>20</sup> Wacquant, "Class, Race & Hyperincarceration in Revanchist America."

<sup>21</sup> *ibid.*

<sup>22</sup> Davis, *Are Prisons Obsolete?*, 16.

confinement contain and obscure the individuals involved, as well as the larger societal problems that, to the State, these individuals represent. Thus, the carceral logic of containment allows the State to elevate goals of social control and to avoid confronting, let alone addressing, the larger social issues afflicting society.

Theories of what is widely termed the “Carceral State” argue that the goal of crime prevention in the latter half of the 20<sup>th</sup> century might obscure, or at least coincide with, an overriding state goal of maintaining social control of communities of color.<sup>23</sup> Public health policies, too, became a discursive tool to subjugate and stereotype poor and non-white communities—especially in connection with the MDR-TB outbreak in the 1990s. Regardless of any purportedly public-spirited intention (namely, reducing disease incidence), TB control laws nationwide operated in practice to perpetuate social control of the same low-income communities of color that had been made vulnerable to TB by decades of disinvestment. The symbol of the poor, non-white, “recalcitrant” individual first drove the creation of these carceral logic-based TB control policies in the 1990s.<sup>24</sup> The policies were then applied primarily to TB patients who fit the image of this stereotype, which thereby reproduced that symbol while failing to address the root cause of tuberculosis and MDR-TB.

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<sup>23</sup> E. Hinton, *From the War on Poverty to the War on Crime: The Making of Mass Incarceration in America* (Harvard University Press, 2016); Liat Ben-Moshe et al., *Disability Incarcerated: Imprisonment and Disability in the United States and Canada* (Palgrave Macmillan US, 2014); M. Alexander, *The New Jim Crow: Mass Incarceration in the Age of Colorblindness* (New Press, 2012).

<sup>24</sup> My observations here are informed by the semiotic theory of Ferdinand de Saussure. See Ferdinand. de Saussure, *Course in General Linguistics*, trans. Roy Harris (Open Court Classics, 1986).



## II. 1840-1940: A “Romantic Affliction” or a “Disease of Poverty”?

More people have died from TB infection than any other infection in history.<sup>25</sup> The disease is caused by *mycobacterium tuberculosis*, a canonical, rod-shaped bacteria.<sup>26</sup> Only a small number of TB bacilli need to be inhaled to cause an infection, and respiratory droplets can survive in the air for hours, especially in poorly ventilated, dark, cramped spaces.<sup>27</sup>

Unlike most bacterial infections, *M. tuberculosis* infection does not mean an individual will spread the infection to others.<sup>28</sup> First, not all individuals with “active” tuberculosis are infectious, as some have TB that affects bones or joints such that the bacilli cannot be expelled to infect others.<sup>29</sup> Second, patients can also have latent TB infection (LTBI). Those with LTBI experience a persistent immune response to *M. tuberculosis* while remaining asymptomatic and, unlike those with asymptomatic COVID-19, without being infectious.<sup>30</sup> For example, if tuberculosis succeeds in entering the body, but immune cells launch an effective defense, the immune system walls off latent bacteria, dead bacteria, and immune cells with a thick waxy coat, creating encapsulated and calcified lesions called “tubercles.”<sup>31</sup> These lesions can lie dormant for years or even a lifetime, and prevent bacterial reproduction, even though an individual with LTBI will still test

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<sup>25</sup> Reichman and Tanne, *Timebomb*, xii. Wendy E. Parmet, "Legal Power and Legal Rights — Isolation and Quarantine in the Case of Drug-Resistant Tuberculosis," *New England Journal of Medicine* 357, no. 5 (2007).

<sup>26</sup> M. Gandy and A. Zumla, *The Return of the White Plague: Global Poverty and the New Tuberculosis* (Verso Books, 2003), 41.

<sup>27</sup> Reichman and Tanne, *Timebomb*, 12.; Gandy and Zumla, *The Return of the White Plague*, Introduction.

<sup>28</sup> Other viruses, such as HIV/AIDS and Herpes have a latent period, but most bacteria do not. Anthony J. St Leger et al., "Local Immune Control of Latent Herpes Simplex Virus Type 1 in Ganglia of Mice and Man," *Frontiers in immunology* 12 (2021).

<sup>29</sup> Gabriel Feldman et al., "Detention until Cure as a Last Resort: New York City's Experience with Involuntary in-Hospital Civil Detention of Persistently Nonadherent Tuberculosis Patients," *Semin Respir Crit Care Med* 18, no. 05 (1997); Centers for Disease Control and Prevention, "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Settings, 2005," in *Morbidity and Mortality Weekly Report* (Atlanta, GA2005). Reichman and Tanne, *Timebomb*, 3.

<sup>30</sup> S. Kiazzyk and T. B. Ball, "Latent Tuberculosis Infection: An Overview," *Canada communicable disease report = Releve des maladies transmissibles au Canada* 43, no. 3-4 (2017).

<sup>31</sup> Reichman and Tanne, *Timebomb*.

positive for TB.<sup>32</sup> People with LTBI can be treated to prevent the development of active TB, but such treatment is not universally necessary. Only 5-10% of untreated LTBI patients go on to develop active TB.<sup>33</sup>

LTBI, however, means bacteria remain viable in the body. Stress, social disruptions, or a weakened immune system can cause the infection to progress to an active state.<sup>34</sup> This disease progression means that structural discrimination renders individuals particularly vulnerable to active TB. An individual with LTBI who is evicted, migrates without proper arrival support, experiences incarceration, or is co-infected with another disease, like HIV, is more likely to shift to an active case than someone shielded from these triggers.<sup>35</sup>

In the nineteenth century, TB was widely considered a “romantic” disease, perhaps because of the prominent, wealthy and “glamorous” young people who died from it.<sup>36</sup> Writers during the Romantic movement considered the “consuming of the body” a “metaphor for spiritual transcendence,” as TB patients experienced “individual sensitivity which dissolved the gross body, etherealized the personality, [and] expanded consciousness.”<sup>37</sup> Dying TB patients acquired a distinctive and romanticized physique, and were depicted in paintings, opera, and novels as pale, fragile, and thin.<sup>38</sup> These portrayals not only trivialized suffering, but also constructed an image of TB patients as wealthy, beautiful, and desirable.<sup>39</sup>

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<sup>32</sup> Gandy and Zumla, *The Return of the White Plague*, Introduction; Prevention, "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Settings, 2005."

<sup>33</sup> "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Settings, 2005."

<sup>34</sup> Gandy and Zumla, *The Return of the White Plague*, Introduction; Prevention, "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Settings, 2005."

<sup>35</sup> This progression is one way in which immigration has been linked with MDR-TB. Gandy and Zumla, *The Return of the White Plague*, Introduction; Prevention, "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Settings, 2005."

<sup>36</sup> Reichman and Tanne, *Timebomb*, 18.

<sup>37</sup> Gandy and Zumla, *The Return of the White Plague*, 18-20.

<sup>38</sup> Reichman and Tanne, *Timebomb*, 18.

<sup>39</sup> Gandy and Zumla, *The Return of the White Plague*, 18-20.

Even before scientists understood the bacteria that caused TB or discovered drugs to treat it, doctors and patients widely understood there to be a relationship between TB infection, suffering, and climate. Patients found that their disease was exacerbated by cold and wet weather and cramped living conditions.<sup>40</sup> Patients who could afford to do so traveled to milder climates and to the countryside. Patients who could not afford such trips sought fresh air in other ways, sleeping outside in tents or informally constructed shelters on tenement roofs and vacant lots, even in the middle of the winter.<sup>41</sup>

In 1854 in Germany, Doctor Hermann Brehmer established the first TB sanatorium, a retreat for TB patients to return to health, after finding that being outdoors and away from cities improved his own case of TB.<sup>42</sup> In the U.S., Dr. Edward L. Trudeau followed suit.<sup>43</sup> Sanatoriums were initially part of a “back to nature” reaction to the dirt and chaos of urban environments, and prioritized rest, fresh air, and exercise.<sup>44</sup> They quickly gained popularity, offering a mix of a health retreat, vacation, and luxury spa experience. In this initial instantiation of the sanatorium, one newspaper reported, sanatoriums “did not welcome the poor, the black, or the really sick.”<sup>45</sup>

As TB spread rapidly among lower socioeconomic classes at the turn of the 20<sup>th</sup> century, however, sanatoria were no longer viewed with “sentimentalism” but with “fear and disgust,” and the disease came to be considered a “menacing and disgusting stigma of poverty.”<sup>46</sup> These fears were bolstered by a realization that TB was contagious, and would not remain confined in

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<sup>40</sup> Reichman and Tanne, *Timebomb*, 20.

<sup>41</sup> *Ibid.*, 21; “They Pitch Their Tents in the City,” *Chicago Daily Tribune*, December 05 1909; “Malden Man Lives in Tent,” *Boston Daily Globe* 1902. “Tents to Be Pitched on Top of Building,” *The Atlanta Constitution* 1907.

<sup>42</sup> Reichman and Tanne, *Timebomb*, 20; Gandy and Zumla, *The Return of the White Plague*, 20; Annabel Kanabus, “Sanatorium: From the First to the Last,” Global Health Education, [tbfacts.org/sanatorium/](http://tbfacts.org/sanatorium/).

<sup>43</sup> Reichman and Tanne, *Timebomb*.

<sup>44</sup> Gandy and Zumla, *The Return of the White Plague*, 20. “Tuberculosis Is Put in Pillory,” *Chicago Daily Tribune* December 10 1905.

<sup>45</sup> Walter Goodman, “From the Sanitarium to Streptomycin: How Tb, a Public-Health Priority, Was Vanquished but Then Returned,” *New York Times*, Oct 02 1995.

<sup>46</sup> Gandy and Zumla, *The Return of the White Plague*, 20,22.

the communities in which it was concentrated.<sup>47</sup> Doctors no longer used romantic language to describe TB patients, and instead came to describe them as “homeless, friendless, dependent, dissipated and vicious consumptives.”<sup>48</sup> As the United States became more industrial, more people worked in factories, and tuberculosis, alongside poverty, spread among low-income classes.<sup>49</sup> As public health scholar Richard Coker writes:

As this popular awareness of the class associations of the disease became clearer... tuberculosis began to lose its romantic attachments...provoking...a fear that not only one might catch the disease but also... that one might become infected with the same ‘flaws’—alcoholism, drug-dependency, poverty—that those with the disease seem predisposed to.<sup>50</sup>

Thus, in the popular imagination, the risks of TB changed along with the patient population.

As the (visible) population impacted by TB changed, treatment strategy changed too.

Sanitariums came to resemble prisons and jails more than vacation destinations. Many people were committed involuntarily, often brought in handcuffs to local sanitariums by police.<sup>51</sup> Public health scholar Sheila Rothman writes: “Clearly there was uncertainty over whether such institutions were hospitals or prisons.”<sup>52</sup> These institutions grew dramatically.<sup>53</sup> Sanitariums also began to incorporate a different philosophy about how to treat TB. Geographer Matthew Gandy explains: “The development of the modern sanatorium reflected a shift in prevailing conceptions of TB from a constitutional affliction to be countered with a ‘change of air’ towards a contagionist emphasis on...institutional segregation[.]”<sup>54</sup> As the patient population changed,

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<sup>47</sup> Paul J. Draus, *Consumed in the City: Observing Tuberculosis at Century's End* (Temple University Press, 2004), 38.

<sup>48</sup> Feldman et al., "Detention until Cure as a Last Resort."

<sup>49</sup> R.J. Coker, *From Chaos to Coercion: Detention and the Control of Tuberculosis* (St. Martin's Press, 2000), 5.

<sup>50</sup> *Ibid.*, 6.

<sup>51</sup> Specter, "Tb Carriers See Clash of Liberty and Health."

<sup>52</sup> Barron H. Lerner, *Contagion and Confinement: Controlling Tuberculosis Along the Skid Road* (Johns Hopkins University Press, 1998), 41. S.M. Rothman, *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in America* (Basic Books, 1994).

<sup>53</sup> While in 1900 there were fewer than 40 institutions with a total of 5,000 beds, by 1923, there were 534 sanitariums and more than 63,000 TB patients. Specter, "Tb Carriers See Clash of Liberty and Health."

<sup>54</sup> Gandy and Zumla, *The Return of the White Plague*, 22.

policy, too, shifted. Rather than prescribing fresh air and vacation, public health policy turned to containment.

While some sanitariums at the turn of the 20<sup>th</sup> century were well-maintained, many deteriorated quickly thereafter.<sup>55</sup> One doctor described the conditions at the Cincinnati Branch Tuberculosis Hospital in 1916, for instance, as “disgraceful,” explaining that nurses preferred to sleep in “election booths abandoned by the city,”—*i.e.* “dilapidated prison-like corrugated structures” left on city streets after polls closed—than in the rooms the hospital provided.<sup>56</sup> A legislative committee visited the Georgia Tuberculosis Sanitarium after family members reported concerns about crowding and quality of care.<sup>57</sup> The Chicago Municipal Tuberculosis Sanitarium also deteriorated rapidly, as an attending doctor explained: “until eight years ago there were no complaints...and there couldn’t very well be for conditions were all right. Since then it has been different...[T]he recent accusations...are valid.”<sup>58</sup>

In some instances, the inadequacy of TB sanitariums led to their closure. The TB sanitarium in Cincinnati, for instance, was ultimately sold by the city, after officials decided the cost to improve conditions was exorbitant.<sup>59</sup> The cost of sanatoriums was indeed high, even before repairs. Treating a single patient in 1952 could cost around \$3,500, between \$37,000-\$70,000 in

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<sup>55</sup> See *e.g.*: “Dunning Hospital Called Disgrace,” *Chicago Daily Tribune*, August 3 1913.

<sup>56</sup> “Prisoners Cook Patients’ Food at Tuberculosis Sanitarium,” *Cincinnati Enquirer*, November 9 1916. “Election Booths Finally Discharged,” *Philadelphia Inquirer*, January 28 1894.

<sup>57</sup> “Georgia Sanitarium at Alto Is Praised: Committee Declares State Institution Was Found in Splendid Condition,” *The Atlanta Constitution*, August 12 1919.

<sup>58</sup> “Action Urged on Complaints at Tb Hospital: Sanitarium Doctor Says Charges Are True,” *Chicago Daily Tribune*, October 13 1945.

<sup>59</sup> “Disposal,” *Cincinnati Enquirer*, 1926 Jun 22 1926.

today's dollars.<sup>60</sup> Thus, excitement sparked when a new touted "cure" for TB promised to treat a case for just \$100 a patient.<sup>61</sup>

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<sup>60</sup> The estimated inflation rate depends on the year of treatment (particularly whether it was during WWII or after). This price comes from a newspaper published in 1952, but could be referring to the average cost of treatment at any point over the previous decade. William L. Laurence, "New Tb Wonder Drug May Offer Cure for \$100," *The Atlanta Constitution*, Feb 22 1952.

<sup>61</sup> (between \$1000-2000 today)

### III. *The 1950s: The Wonder Drug Era and the “Recalcitrant” Patient*<sup>62</sup>

Waning reliance on sanatoriums accelerated with the discovery of “wonder drugs,” including anti-TB antibiotics like isoniazid during the “golden age” of science.<sup>63</sup> In the mid-century era of scientific optimism, between the invention of malaria-destroying DDT and World-War-ending atomic bombs, and before well-publicized tragedies involving prescription medications, faith in scientific research seemed unending.<sup>64</sup> Against this backdrop, the idea that TB could be treated with a pharmaceutical “magic bullet,” or a medicine that could treat the illness without harming the patient, seemed both credible and alluring.<sup>65</sup>

“[H]ullabaloo” followed the discovery of isoniazid. Newspapers ran photos and descriptions of “patients dancing in the hospital corridors, glad to be alive” and drew on the credibility that mid-century medical professionals carried, including by listing names and medical titles of authors and interviewees.<sup>66</sup> Following World War II, newspapers employed military language,

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<sup>62</sup> John H. Warner, “The Doctor in Early Cold War America,” *Lancet* 381, no. 9876 (2013). Some research from this section from author’s unpublished manuscript, “Hasty Heralds: Over-confidence and Over-prescription in the Age of Wonder Drugs” produced in Professor Marco Ramos’s course, *The History of Drugs and Addicition*, HSHM 488, Spring 2022.

<sup>63</sup> Gandy and Zumla, *The Return of the White Plague*, 22; Tone, *The Age of Anxiety*, 81; William L. Laurence, “New Tb Drugs Are Revealed as Cheap Coal-Tar Synthetics,” *New York Times*, Feb 22 1952; “Results Dramatic: New Wonder Drugs Seen Hope for Tb Victims,” *The Globe and Mail*, Feb 22 1952; Nate Haseltine, “Some of Deadliest Ills Defeated by Antibiotics,” *The Washington Post and Times Herald* Oct 19 1956; Laurence, “New Tb Wonder Drug May Offer Cure for \$100.”

<sup>64</sup> Tone, *The Age of Anxiety*, 81-82.

<sup>65</sup> A.M. Brandt, *No Magic Bullet: A Social History of Venereal Disease in the United States since 1880* (Oxford University Press, 1985), 4,161.

<sup>66</sup> After the introduction of isoniazid, images of “joyful, robust young men and women who only yesterday had been judged incurably ill” swept across the country. Earl Ubell, “The Anti-Tb Drugs 2 Years Later,” *New York Herald Tribune*, Feb 07 1954; John Geiger, “The Truth About Tb,” *New Journal and Guide*, Mar 28 1953; Walter Goodman, “Wonder Drugs: How Much Can You Believe?,” *Redbook* 1960; Laurence, “New Tb Wonder Drug May Offer Cure for \$100.”; C. B. Allen, “Rocket Fuel Production Is Cut to Get Chemical for Tb Drugs,” *New York Herald Tribune*, Mar 13 1952; W.K., “The Year in the Field of Medicine,” *New York Times*, Dec 28 1952. One article included a photo of four white men in suits and ties at a desk, all looking at one paper with great consideration, captioned: “Research experts conferring on find that raised hopes of eradicating tuberculosis.” Laurence, “New Tb Drugs Are Revealed as Cheap Coal-Tar Synthetics.”; Walter C. Alvarez, “Dr. Alvarez Says: New Drug Is Only Partial Success,” *Los Angeles Times*, Sep 28 1952; T.R. Van Dellen, “How to Keep Well,” *Cincinnati Enquirer*, October 20 1953; Glen Shepherd, “No Miracle Cure for Tuberculosis,” *The Washington Post* 1953. These articles also included photos of serious, professionally-dressed men. Laurence, “Results Dramatic.”; Natalie Davis Spingarn, “A Mother Asks About Tuberculosis,” *Parents’ Magazine & Family Home Guide*, Jun 1954 1954.

and images of combat, struggle, and ultimate victory.<sup>67</sup> These descriptions likened antibiotics to brave soldiers, or advanced military technology overcoming uncertainty: “the guided missiles are chemical molecules that go unerringly through the mysterious biochemical mazes of the body to the source of a disease and destroy the germ[.]”<sup>68</sup> Such descriptions strayed from fact. In most cases, isoniazid eased symptoms, but did not “destroy” bacteria or cure patients.

These exaggerated characterizations of isoniazid’s impact were not harmless. Over-eager and un-restrained promotion of TB antibiotics created an unregulated climate of celebration that drowned calls for caution. Small warnings printed amidst pages of celebrations were less eye-catching than the abundant praise.<sup>69</sup> Doctors cautioned that antibiotics could stop infection spread, but that damage already wrought by TB would still require other treatments, like surgery

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<sup>67</sup> (“powerful new weapons”; “triumphs” to “add...to the medical arsenal for the fight against mankind’s greatest infectious scourge”; “guided missiles that...carry...destruction [and] can be used...in the warfare against disease.”) “Powerful New Weapons Found in Fight on Disease, Death,” *Daily Boston Globe*, Dec 31 1952; Laurence, “New Tb Wonder Drug May Offer Cure for \$100.”; Earl Ubell, “It’s ‘Now or Never’ for War to End Tb,” *New York Herald Tribune*, Mar 2 1960; Robert Clark, “Some Tb Strains Now Resist ‘Miracle Drugs’,” *The Courier-Journal* 1961.; Haseltine, “Some of Deadliest Ills Defeated by Antibiotics.”; John JO Neill, “Guided Missiles to Fight Tuberculosis,” *New York Herald Tribune*, Sep 14 1952. (“some of the deadliest ill[s] [are] defeated by antibiotics.”) These stories about the “War to End TB” read as though following an ongoing battle. For instance, in a *New York Times* piece, “When Wonder Drug meets Wonder Bug” photos showed doctors preparing antibiotics captioned “counter-attack” and describing “formidable enemies,” that is, TB. Lawrence Galton, “When Wonder Drug Meets Wonder Bug,” *New York Times*, Apr 08 1962. (“The new drugs are made up of two...factors: one that...has the drive to...enter the tuberculosis germ, and the other that has the power to blast out the collected debris and toxic materials...at the site of a tubercular infection.”) Neill, “Guided Missiles to Fight Tuberculosis.”

<sup>68</sup> “Guided Missiles to Fight Tuberculosis.”

<sup>69</sup> Haseltine, “Some of Deadliest Ills Defeated by Antibiotics.”; While praising the low cost of isoniazid, journalists cautioned “the drug is still in the experimental phase.” In “TB Wonder Drug Has Drawback,” rather than beginning with the titular topic, the majority of the article praised cost-effectiveness, easy delivery, and symptom relief, before mentioning “patients usually stop responding after...10 to 12 weeks.” William S. Barton, “Careful Test Urged before Giving Antibiotics,” *Los Angeles Times*, Dec 07 1955. See also: “results...were still far from conclusive” or “further clinical work was yet to be carried out [.]” Laurence, “New Tb Drugs Are Revealed as Cheap Coal-Tar Synthetics.”; “New Tb Wonder Drug May Offer Cure for \$100.”; Carl Rowan, “Tb Wonder Drug Has Drawback,” *Minneapolis Morning Tribune*, July 11 1952; Roy Gibbons, “‘Miracle’ Drug Fails to Prove It’s Cure in Tb,” *Chicago Daily Tribune*, Jul 18 1952; Van Dellen, “How to Keep Well.”



and therapy.<sup>70</sup> Such warnings went unheeded.<sup>71</sup> As evidence mounted that isoniazid fell short of its initial fanfare, reporters delivered disappointing stories gently.<sup>72</sup> Headlines like “Restrained Hopes on TB drugs Urged” emphasized that excitement should be “tempered,” not abandoned.<sup>73</sup> Some predicted the harm before it happened: In 1952, Dr. James Perkins, director of the National Tuberculosis Association, advised that “premature and irresponsible publicity” might make isoniazid “a step backward,” if cities “[cut] funds to fight tuberculosis control.”<sup>74</sup>

Responding to the preponderance of glowing reports, overconfident cities closed sanatoriums, eliminated reserved hospital beds, and reduced TB control budgets.<sup>75</sup> For the 1952-3 fiscal year, the U.S. House Appropriations Committee even suggested a reduced budget for the national Public Health Service.<sup>76</sup>

Similarly captivated by unfounded optimism, physicians overprescribed TB antibiotics, extending their use to a wide variety of other conditions ranging from serious to trivial—including viral infections that had no possibility of responding to antibiotics, such as the

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<sup>70</sup> "Group Warns on Tb Cures," *Arizona Republic*, Feb 25 1952; Lucy Freeman, "Restrained Hopes on Tb Drugs Urged," *New York Times*, April 22 1952; Gandy and Zumla, *The Return of the White Plague*, 180. ("[I]soniazid cannot replace bed rest, go[o]d food, and time,"; "the new drugs did not diminish the need for increased research and hospital beds" ) Gibbons, "'Miracle' Drug Fails to Prove It's Cure in Tb."; Shepherd, "No Miracle Cure."; Barton, "Careful Test Urged before Giving Antibiotics."; William L. Laurence, "New Drug Hailed as Gain in Tb Fight," *New York Times*, Dec 28 1952.

<sup>71</sup> Freeman, "Restrained Hopes on Tb Drugs Urged." "House May Cut on Every Item," *The Atlanta Constitution*, Nov 29 1952. For the 1952-3 fiscal year, the U.S. House Appropriations Committee even suggested a reduced budget for the national Public Health Service.

<sup>72</sup> W.K., "The Year in the Field of Medicine." ("After months...physicians...decline to accept [isoniazid] as the miracle-worker it was thought to be at first."; "the substance...is not the wonder medicine it originally was reported to be[.]"; Improvements are "slight or moderate.") Gibbons, "'Miracle' Drug Fails to Prove It's Cure in Tb." ("The reports are coming in and I am sorry to say they are not as exciting as the first ones[.]") Alvarez, "Dr. Alvarez Says."; Van Dellen, "How to Keep Well."

<sup>73</sup> Freeman, "Restrained Hopes on Tb Drugs Urged."; Gibbons, "'Miracle' Drug Fails to Prove It's Cure in Tb." ("the early dramatic promise of... isoniazid has been tempered.") Morris Kaplan, "Doctors Reassess Tb 'Miracle' Drug," *New York Times*, Feb 22 1962; Alvarez, "Dr. Alvarez Says."; Van Dellen, "How to Keep Well."

<sup>74</sup> Freeman, "Restrained Hopes on Tb Drugs Urged."

<sup>75</sup> Ubell, "The Anti-Tb Drugs 2 Years Later." L. O. Gostin, S. Burris, and Z. Lazzarini, "The Law and the Public's Health: A Study of Infectious Disease Law in the United States," *Columbia Law Rev* 99, no. 1 (1999).

<sup>76</sup> "House May Cut on Every Item."

common cold.<sup>77</sup> Indeed, one study in 1993 found physician prescription errors in over 80% of patient cases.<sup>78</sup> Newspapers commented on this overuse, expressing concern over the “too-prolonged use” of antibiotics.<sup>79</sup>

Over- and non-specific use is—and even was back then—a well-established contributing factor to the rise of antibiotic resistance. Amid the over-exuberant prescription of antibiotics, reports steadily emerged suggesting that TB was becoming resistant to “wonder drugs.” But, again, these reports used soothing strategies similar to those minimizing other limitations of magic bullet drugs.<sup>80</sup> Some of the articles simultaneously questioned, minimized, or denied drug resistance.<sup>81</sup> Comments like “medical men...have had to learn a new respect for bugs as formidable enemies,” made antibiotic resistance seem like a game, rather than a dangerous failure to control a deadly disease.<sup>82</sup>

Antibiotic resistant TB is in no sense a game. Antibiotic resistant strains of TB—called “multidrug-resistant” (MDR-TB) or “extensively-drug resistant” (XDR-TB)—are serious. MDR-TB resists treatment by streptomycin or isoniazid and rifampin, while XDR-TB resists all of these plus fluoroquinolone, and at least one of three injectable second-line drugs, drugs developed specifically in response to the acceleration of antibiotic resistant TB.<sup>83</sup> MDR-TB

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<sup>77</sup> Barton, "Careful Test Urged before Giving Antibiotics."; Galton, "When Wonder Drug Meets Wonder Bug."; Alvarez, "Dr. Alvarez Says."

<sup>78</sup> K. Ott, *Fevered Lives: Tuberculosis in American Culture since 1870* (Harvard University Press, 1996), 167.

<sup>79</sup> Alvarez, "Dr. Alvarez Says."

<sup>80</sup> For instance, these articles often explained the development of resistant strains of TB in passive ways, rather than with the dramatic military language that had characterized initial declarations of the antibiotics' success: “some of the tubercle germs get used to living in the presence of this chemical treatment...some of the germs become resistant...[and] continue to grow.” Kaplan, "Doctors Reassess Tb 'Miracle' Drug."; Shepherd, "No Miracle Cure."; Laurence, "New Drug Hailed as Gain in Tb Fight."

<sup>81</sup> Galton, "When Wonder Drug Meets Wonder Bug."; Goodman, "Wonder Drugs: How Much Can You Believe?."

<sup>82</sup> Galton, "When Wonder Drug Meets Wonder Bug."

<sup>83</sup> Gandy and Zumla, *The Return of the White Plague*, Chapter 1; Fidler, Gostin, and Markel, "Through the Quarantine Looking Glass."; P. Sensi, "History of the Development of Rifampin," *Reviews of Infectious Diseases* 5, no. Supplement 3 (1983). Rifampin and Fluoroquinolone are other antibiotics used to treat TB. "Fluoroquinolones," in *Livertox: Clinical and Research Information on Drug-Induced Liver Injury* (Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases, 2012). “Second line injectable drugs,” such as aminoglycosides and

strains can infect individuals directly or can develop if infected individuals experience inadequate, unnecessary, or interrupted TB treatment.<sup>84</sup> In the latter case, an individual takes enough antibiotic to strengthen the infection, eliminating individual bacilli that were vulnerable to the antibiotics while enabling those that resist treatment to survive and reproduce resistant traits. While TB treatment is on average 83% effective, those infected by MDR-TB have only a 52% success rate.<sup>85</sup> In addition, second-line drugs, developed to treat resistant TB, are even more toxic to the patient than first-line antibiotics.<sup>86</sup> In some cases, MDR-TB cannot be treated successfully, and kills the patient.<sup>87</sup>

In the 1950s, when MDR-TB began to emerge in the wonder drug era, however, the physicians who had over- and mis-prescribed antibiotics were not deemed culpable. Instead, papers rhetorically localized development of MDR-TB as an individual failing. Public health officials and reporters blamed “uncooperative” and “recalcitrant” patients foremost, relegating “deteriorating public health infrastructure” and the relationship between TB and poverty as a distant afterthought.<sup>88</sup> Doctors described patients who did not take prescribed medications to completion as “difficult,” “anti-rational,” “nonadherent,” or “noncompliant.” They often extrapolated from individual patients to whole communities, particularly in the case of individuals experiencing homelessness or poverty.<sup>89</sup> Such descriptions transformed the

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capreomycin, are used specifically to treat resistant TB.F. Quenard et al., "Role of Second-Line Injectable Antituberculosis Drugs in the Treatment of Mdr/Xdr Tuberculosis," *Int J Antimicrob Agents* 50, no. 2 (2017).

<sup>84</sup> Gandy and Zumla, *The Return of the White Plague*, 186; Advisory Council for the Elimination of Tuberculosis, "Prevention and Control of Tuberculosis in Correctional Facilities Recommendations of the Advisory Council for the Elimination of Tuberculosis " in *Morbidity and Mortality Weekly Report (MMWR)* (Atlanta, GA: Centers for Disease Control and Prevention, 1995).

<sup>85</sup> Gandy and Zumla, *The Return of the White Plague*, 18-20.

<sup>86</sup> *Ibid.*, Chapter 5.

<sup>87</sup> Reichman and Tanne, *Timebomb*, 4.

<sup>88</sup> Gandy and Zumla, *The Return of the White Plague*, 35.; Janice Hopkins Tanne, "Q & a About Tb," *New York*, 1992 Mar 23 1992. "Cdc: Recalcitrant Tb Patients Should Be Forcibly Committed," *The Washington Post*, December 17 1993.

<sup>89</sup> Gandy and Zumla, *The Return of the White Plague*, 32; Tanne, "Q & a About Tb."; "Cdc: Recalcitrant Tb Patients Should Be Forcibly Committed."; Human Resources and Intergovernmental Relations Subcommittee of the

biological infection into a sign of an individual's criminal nature, and localized antibiotic resistance as an individual patient failing, rather than a problem with the drug itself.<sup>90</sup> As anthropologist Paul Farmer explains, however, the language of cooperation and adherence deployed in these articles was inherently limited and deeply paternalistic:

Compliance is a problematic concept, not only because it implies docility and subservience of patients relative to providers, but also, and even more insidiously, because it assumes that all patients are equally able to comply—or to refuse to comply—with anti TB therapies.<sup>91</sup>

Thus, language of noncompliance suggests that patients always know less about medical conditions that impact their own lives than do doctors, and simultaneously fails to account for the vast array of social factors that prevent a patient from completing treatment.

Physicians and reporters were selective in how they used these labels of noncompliance. Doctors used words like “obstinance” and “defiance” more often when describing TB patients (who were more likely to be patients with overlapping experiences of systemic discrimination) than when describing patients suffering from diseases less-associated with poverty, but equally likely to be treated with antibiotics, such as strep throat.<sup>92</sup> Standard tropes that patients of “minority races” were more likely to be noncompliant and “troublesome” sprung up, despite studies that found white patients (and particularly white patients with histories of high alcohol consumption) disproportionately disobeyed medical advice.<sup>93</sup> Rather than identifying and acknowledging medical and institutional failures—specifically, over-prescription and defunding of non-antibiotic-based TB treatments—together, policymakers, physicians, reporters, and much

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Committee on Government Operations, *Tuberculosis: The Federal Failure*, Second, April 2 1992; Feldman et al., "Detention until Cure as a Last Resort."

<sup>90</sup> See: “some persons treated with wonder drugs...become public health menaces[.]” “Wonder Drugs May Widen Tb, Expert Warns,” *Chicago Daily Tribune*, Nov 11 1955.

<sup>91</sup> Gandy and Zumla, *The Return of the White Plague*, 198-99.

<sup>92</sup> Barron H. Lerner, "From Careless Consumptives to Recalcitrant Patients: The Historical Construction of Noncompliance," *Social Science & Medicine* 45, no. 9 (1997).

<sup>93</sup> *Contagion and Confinement*, 67.

of the public created a scapegoat: the non-white “recalcitrant” patient who could be blamed for antibiotic resistance and the resulting ineffectiveness of the magic bullet treatments.<sup>94</sup>

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<sup>94</sup> Gandy and Zumla, *The Return of the White Plague*, Introduction.

#### *IV. 1960s-1990s: Structural Disadvantage and Demographic-Specific Spread*

Between the Magic Bullet era and the 1990s, the narrative of drug-resistant TB as singularly caused by “recalcitrant,” low-income, and non-white patients became the standard account. The association of noncompliance with this demographic was likely a result of both overt discrimination by physicians, pharmacists, and reporters—who may have been more likely to label low-income non-white patients “noncompliant” than their wealthier and whiter counterparts—and of broader public policy, which dramatically and disproportionately increased risk factors for TB in poor communities of color. Thus, TB more generally became associated with this demographic, which filtered back into discussions of compliance.

TB is both “a disease of poverty” and “a disease that *causes* poverty.”<sup>95</sup> TB flourishes in settings where immune systems have been weakened by malnutrition, drug use, and limited healthcare.<sup>96</sup> TB destabilizes families, consumes community resources deployed to control it, and incapacitates patients.<sup>97</sup> Housing insecurity, institutionalization (in hospitals, shelters, and detention facilities such as prisons and refugee camps), and co-infection with immune-system weakening illnesses like Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) all increase rates of TB. Consequently, as public policy in the second half of the twentieth century increased risk factors and decreased protections, TB and MDR-TB rose steadily within low-income communities of color, while setting the stage for an explosion of MDR-TB more widely in the 1990s.<sup>98</sup>

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<sup>95</sup> Gandy and Zumla, *The Return of the White Plague*, 200.

<sup>96</sup> Ibid., 19,43. D. Sarkar, M. K. Jung, and H. J. Wang, “Alcohol and the Immune System,” *Alcohol Res* 37, no. 2 (2015).

<sup>97</sup> Gandy and Zumla, *The Return of the White Plague*, “The Role of Science”, 220.

<sup>98</sup> Brandt observed similar patterns in his studies of venereal disease, noting that infection rates were “[f]airly direct[ly] correlat[ed] to government spending.” Brandt, *No Magic Bullet: A Social History of Venereal Disease in the United States since 1880*.

TB spreads in overcrowded and poorly ventilated housing. Thus, housing quality and homelessness—both shaped by investment, fires, landlord abandonment, deinstitutionalization of mental healthcare, and substance use—drive TB infection.<sup>99</sup> Living beyond capacity in apartments, sleeping in crowded shelters, and physical mixing of communities due to local movement promote TB spread. These circumstances also cause stress, which acts through neurophysiologic mechanisms to reduce immunity.<sup>100</sup>

Beginning in the 1960s, public policy drastically increased such housing-related TB risk factors. Using tactics of “benign neglect” and “planned shrinkage,” policymakers chose to abstain from repairing housing stock while attempting to “brand...poor communities of color as bad beyond salvation” or as “pathological and criminal.”<sup>101</sup> Such techniques allowed cities to disinvest in non-white and low-income neighborhoods, disproportionately increasing the risk of TB. Simultaneously, the broader public narrative of such neighborhoods as “criminal” suggested that rising TB in such areas was the fault of “recalcitrant” residents, not public policy decisions.

In New York City, for example, officials cut fire control budgets, particularly those that operated in poor neighborhoods.<sup>102</sup> The resulting housing destruction from fire led to extreme overcrowding.<sup>103</sup> Public health researchers Deborah Wallace and Roderick Wallace’s 1990 TB mapping project reveals that burned areas of NYC coincide directly with districts that suffered

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<sup>99</sup> The US Census Bureau describes housing overcrowding as 2 or more people living in a room. Gandy and Zumla, *The Return of the White Plague*, Chapter 7. Washington abandons the cities,

<sup>100</sup> D. Wallace and R. Wallace, *A Plague on Your Houses: How New York Was Burned Down and National Public Health Crumbled* (Verso Books, 1998), 90.

<sup>101</sup> Daniel Patrick Moynihan, in his role as Urban Affairs counselor to President Richard Nixon in 1970, was the first to use the phrase “benign neglect” Peter Kihss, “Benign Neglect’ on Race Is Proposed by Moynihan,” *The New York Times* 1970. Gandy and Zumla, *The Return of the White Plague*, 139-40.)

<sup>102</sup> *The Return of the White Plague*, 140.

<sup>103</sup> Fire-related housing destruction uprooted more than 600,000 individuals in the 1970s alone. *Ibid.*, Chapter 7.

from “very-high-incidence” of TB.<sup>104</sup> These policies subjected geographically confined populations to increasingly impoverished and epidemiologically risky living conditions.

Incarceration also contributed to MDR-TB infection. TB is 100 times more common in incarcerated individuals than those living outside prison.<sup>105</sup> Correctional institutions are often overcrowded and regularly operate above their capacity.<sup>106</sup> Incarcerated individuals also have limited access to healthcare.<sup>107</sup> Regardless of how well-equipped a jail is to deal with an infectious patient, it cannot match the expertise and medical resources of a hospital, and often requires patients to travel to local hospitals (under armed guard) to receive parts of their treatment.<sup>108</sup> Abundant studies have shown the specific health consequences of incarceration on individuals and their communities.<sup>109</sup> In addition, incarceration increases downstream community instability, as many of those with criminal records are unable to secure employment upon release.<sup>110</sup> Community instability, as well as interacting with the carceral state first-hand, causes stress that can weaken immune systems or aggravate health conditions, rendering individuals more vulnerable to infection as well as disease progression from latent to active

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<sup>104</sup> Ibid.; Wallace and Wallace, *A Plague on Your Houses*, 88. Referencing John Snow’s famous removal of a pump responsible for a significant portion of the 1854 London cholera epidemic, Wallace and Wallace explain how defunding of fire companies contributed to vulnerability to TB: “taking the fire companies away from the ghettos...is the fire equivalent of making people drink the cholera-tainted water from the Broad Street pump.” Just as public health experts have pointed to the Broad Street pump as a cause of cholera, so too, researchers have linked policies that “[took] away fire companies” with a surge of TB. Gandy and Zumla, *The Return of the White Plague*, 140.

<sup>105</sup> *The Return of the White Plague*, 179-85.

<sup>106</sup> In the 1994 Annual Survey of Jails, for instance, jails on average were operating at 97% of their full capacity, state prisons were operating between 17-29% above capacity, and federal facilities were operating 25% above capacity. Advisory Council for the Elimination of Tuberculosis, “Prevention and Control of Tuberculosis in Correctional Facilities Recommendations of the Advisory Council for the Elimination of Tuberculosis ”.

<sup>107</sup> Gandy and Zumla, *The Return of the White Plague*, 185. Some individuals, who receive no care in communities, do in fact receive care that is better than the absence of care that they receive in communities. This, however, is typically the case for chronic conditions, not infectious disease.

<sup>108</sup> *Souvannarath V. Hadden* 95 Cal. App. 4th 7 (2002).

<sup>109</sup> For research about impact of incarceration on health, see: C. Wildeman and E. A. Wang, “Mass Incarceration, Public Health, and Widening Inequality in the USA,” *Lancet* 389, no. 10077 (2017).; Elizabeth J. Gifford, “How Incarceration Affects the Health of Communities and Families,” *North Carolina Medical Journal* 80, no. 6 (2019).

<sup>110</sup> Wallace and Wallace, *A Plague on Your Houses*, 189.



infection.<sup>111</sup> In brief, TB and other infectious diseases are both “concentrated and amplified” in correctional settings and in justice-involved communities.<sup>112</sup>

As jails and prisons are not wholly contained institutions, infectious disease spreads easily from correctional settings into surrounding communities, via correctional staff, arrest and release cycles, and volunteers and visitors.<sup>113</sup> Prison outbreaks of MDR-TB therefore contribute to community spread. One incarcerated individual explained: “[T]he TB epidemic in...prisons is not just a far-away humanitarian disaster. It is a threat to us all since the infection does not stop at fences and borders.”<sup>114</sup> In other words, high rates of incarceration and outbreaks of MDR-TB in correctional settings put both community members and incarcerated individuals at risk of contracting MDR-TB.

Unsurprisingly, then, when the U.S. entered a new era of “mass incarceration” in the 1960s, TB followed. In 1965, the apparent rise in crime rates fueled by new methods of reporting sparked concerns about public safety.<sup>115</sup> Presidents prioritized law enforcement, branded welfare policies as crime fighting initiatives, and turned to punitive rather than rehabilitative policies in response to social problems.<sup>116</sup> Incarceration rates exploded in the US in the following decades,

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<sup>111</sup> See Gandy and Zumla, *The Return of the White Plague*, 144.: healthy, happy people fight off infection consequent on exposure and, if faced with a heavy infecting exposure, quickly reminder the infection latent and avoid active disease until stressed.” See also: Courtney E. Boen, "Criminal Justice Contacts and Psychophysiological Functioning in Early Adulthood: Health Inequality in the Carceral State," *Journal of Health and Social Behavior* 61, no. 3 (2020). S. Cohen and G. M. Williamson, "Stress and Infectious Disease in Humans," *Psychol Bull* 109, no. 1 (1991).

<sup>112</sup> More broadly, the relationship between infectious disease spread and incarceration has been long-lived and well-documented. In 1750, for instance, a Gaol fever outbreak killed multiple Old Bailey judges and prompted discussions about ventilation, cleaning, and healthcare in London’s Newgate Prison. In 1790, ironically, a prison health reformer died after contracting typhus in a Ukrainian prison. Gandy and Zumla, *The Return of the White Plague*, 178.

<sup>113</sup> E. Reinhart and D. L. Chen, "Incarceration and Its Disseminations: Covid-19 Pandemic Lessons from Chicago's Cook County Jail," *Health Aff (Millwood)* 39, no. 8 (2020).

<sup>114</sup> Gandy and Zumla, *The Return of the White Plague*, 185.

<sup>115</sup> Hinton, *From the War on Poverty to the War on Crime: The Making of Mass Incarceration in America*, 6.

<sup>116</sup> *ibid.*, 8. While LBJ is colloquially less associated with such measures, Elizabeth Hinton’s account reveals that his “War on Poverty” policies often employed strategies that expanded the Carceral State.

and notions of low-income, non-white individuals as being “non-compliant” or “criminal” became commonplace, in both medical and non-medical contexts.<sup>117</sup>

During this period, money flowed away from social welfare programs to construct and operate new correctional institutions.<sup>118</sup> As correctional settings grew, individuals came to prisons and jails already burdened with more risk factors—prior histories of malnutrition, HIV, substance use, previous injection of drugs, and low socioeconomic status—for the development of active TB if infected.<sup>119</sup> Historian Susan Reverby explains that as fiscal conservatism eliminated social welfare and community health programs, “the incarcerated sometimes came to prisons sicker than they did before mass incarceration.”<sup>120</sup> As incarceration increased, public policy left hyper-incarcerated communities more prone to disease.

A surge in HIV/AIDS in the 1980s, too, propelled TB.<sup>121</sup> HIV weakens the immune system, which can leave both individuals more vulnerable to infection by TB and induce the progression of latent to active TB.<sup>122</sup> In this way, AIDS contributes to 10% of TB cases worldwide.<sup>123</sup> By 1990, public health officials attributed 315,000 cases of TB worldwide to HIV infection. By 1997, this number was 640,000.<sup>124</sup>

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<sup>117</sup> See, for example: Alexander, *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*; Hinton, *From the War on Poverty to the War on Crime: The Making of Mass Incarceration in America*; Heather Ann Thompson, "Why Mass Incarceration Matters: Rethinking Crisis, Decline, and Transformation in Postwar American History," *Journal of American History* 97, no. 3 (2010); George Karandinos and Philippe Bourgois, "The Structural Violence of Hyperincarceration — a 44-Year-Old Man with Back Pain," *New England Journal of Medicine* 380, no. 3 (2019).

<sup>118</sup> Anu Asnaani et al., "A Cross-Ethnic Comparison of Lifetime Prevalence Rates of Anxiety Disorders," *J Nerv Ment Dis* 198, no. 8 (2010); Davis, *Are Prisons Obsolete?*, 91; Demetrios Caraley, "Washington Abandons the Cities," *Political Science Quarterly* 107, no. 1 (1992).

<sup>119</sup> Advisory Council for the Elimination of Tuberculosis, "Prevention and Control of Tuberculosis in Correctional Facilities Recommendations of the Advisory Council for the Elimination of Tuberculosis".

<sup>120</sup> Susan M. Reverby, "Can There Be Acceptable Prison Health Care? Looking Back on the 1970s," *Public Health Reports* 134, no. 1 (2018).

<sup>121</sup> *Morbidity and Mortality Weekly Report, Vol. 30, No. 21, June 5, 1981.*

<sup>122</sup> Gandy and Zumla, *The Return of the White Plague*, 36. *Aids and Tuberculosis: A Deadly Liason*, Infection Biology Handbook Series (Wiley-VCH Verlag, 2009).

<sup>123</sup> Gandy and Zumla, *The Return of the White Plague*, 36.

<sup>124</sup> *Ibid.*, Chapter 5.

The hysteria and stigma associated with HIV shaped discussions about health policy and discrimination in the context of TB over the next decades.<sup>125</sup> Given the disproportionate prevalence of HIV in homosexual men and IV drug users, stigma and a lack of information about how HIV spread created early quarantine rules and protocols that were unnecessarily dehumanizing and anti-scientific.<sup>126</sup> The prejudice against HIV patients, furthermore, delayed funding for research, acknowledgement, and treatment of HIV.

With time, public opinion, shifted, recognizing, for the most part, that discrimination had unduly shaped the initial response to the HIV epidemic. Parallels to conversations about MDR-TB outbreaks emerged. One *New York Times* article explained:

[I]t [is]...impossible to discuss the issue of detaining TB patients without also discussing AIDS and the unfounded fear of contagion.... AIDS has forever altered...rights...sick people are entitled to.... Throughout the AIDS epidemic there have been frequent attempts—often hysterical and unjust—at quarantine and discrimination.<sup>127</sup>

During the HIV/AIDS epidemic, the tension between public health goals and individual freedom in the context of isolation and quarantine policy sparked some productive debate. These discussions concluded, for example, that human rights should coincide with good public health policy.<sup>128</sup> Still, these new priorities did not fully prevent fear-based unjust attempts to detain patients with MDR-TB. In addition, stigma associated with simultaneous TB and HIV/AIDS infection persisted, hindering cooperation between patients, healthcare workers, and local communities.<sup>129</sup>

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<sup>125</sup> Specter, "Tb Carriers See Clash of Liberty and Health."

<sup>126</sup> Gregory M. Herek and John P. Capitanio, "Aids Stigma and Sexual Prejudice," *American Behavioral Scientist* 42, no. 7 (1999). Gregg Gonsalves and Peter Staley, "Panic, Paranoia, and Public Health — the Aids Epidemic's Lessons for Ebola," *New England Journal of Medicine* 371, no. 25 (2014).

<sup>127</sup> Specter, "Tb Carriers See Clash of Liberty and Health."

<sup>128</sup> ("Society achieved a precarious understanding...that respect for human rights was required *in order to protect public health.*") Lawrence O. Gostin, "Controlling the Resurgent Tuberculosis Epidemic: A 50-State Survey of Tb Statutes and Proposals for Reform," *JAMA* 269, no. 2 (1993).

<sup>129</sup> Gandy and Zumla, *The Return of the White Plague*, 36.

Immigration and migration, too, are linked with the development of active TB. The suggestion that immigrants bring TB from their home countries has focused attention on how individuals cross international borders, and fueled policies to increase policing of borders and immigration. In reality, while some individuals come the U.S. from countries with higher levels of TB, most do not bring TB with them. Those who are infected often have LTBI, not active TB.<sup>130</sup> More importantly, the culprit is not migration itself, but the stress of moving: “Immigrants do not transport active cases of TB, but rather develop active cases...after their arrival.”<sup>131</sup> In other words, the transition from latent to active TB in migrant populations is largely due to stress and poor support available to many people arriving in the U.S.. Moreover, the spread of TB from immigrants to U.S.-born citizens tends to be very low. Therefore, the fear that migrants may bring TB to the U.S. is “epidemiologically unsound,” and often rooted in xenophobia, as opposed to public health.<sup>132</sup>

These factors—housing instability, incarceration, co-infection with HIV/AIDS, and migration—disproportionately place some individuals at higher risk for being infected with TB and for progressing from latent to active TB cases. These risk factors are over-represented and compounded in historically-disadvantaged communities. Since the early 1970s, researchers have noted racial and ethnic disparities in TB morbidity and mortality, with a higher prevalence of TB among poor non-white communities.<sup>133</sup> In 1990, close to 70% of cases overall and 86% of cases among children in the U.S. occurred in non-white individuals.<sup>134</sup> TB disease burden is also

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<sup>130</sup> Lerner, *Contagion and Confinement*, 166.

<sup>131</sup> Gandy and Zumla, *The Return of the White Plague*, 58.

<sup>132</sup> *Ibid.*, 48-49.

<sup>133</sup> *Ibid.*, 28,49.

<sup>134</sup> Gostin, "Controlling the Resurgent Tuberculosis Epidemic." Centers for Disease Control, "Prevention and Control of Tuberculosis in U.S. Communities with at-Risk Minority Populations: Recommendations of the Advisory Council for the Elimination of Tuberculosis and Prevention and Control of Tuberculosis among Homeless Persons: Recommendations of the Advisory Council for the Elimination of Tuberculosis," Department of Health and Human Services, <https://www.cdc.gov/mmwr/preview/mmwrhtml/00019922.htm>.

gendered. Gender power relations are closely linked with other structural factors that contribute to TB. For instance, beauty standards create extreme diets that tend to impact women more than men, and TB is transmitted indoors, where women typically fulfill traditional gender roles.<sup>135</sup>

This disproportionate disease burden has long been linked to structural inequality. Back in 1920, George Bushnell, director of the National Tuberculosis Association, for instance, explained that when Black Americans were discriminatorily denied jobs, they were left with minimal disposable income and relegated to terrible working and living conditions.<sup>136</sup> These conditions of poverty, in turn, left them vulnerable to TB infection.

Others, however, have viewed the disproportionate disease burden as evidence of eugenic and racialized theories of differential disease susceptibility. For instance, also in the 1920s, pathologist Lyle Cummins considered the high rates of TB—which he called a “disease of civilization”—evidence of increased susceptibility to TB among a group of “biologically inferior and culturally backward” people.<sup>137</sup> In the U.S., such essentialist theories morphed into claims that higher TB rates among Black populations came from altered lifestyles post-emancipation. Under slavery, these theories perversely claimed, individuals had been “protected” by their “healthy” outdoor life on plantations. After emancipation, these theories decided, this protection purportedly vanished.<sup>138</sup>

These racialized visions of susceptibility enabled reporters and politicians to localize TB onto “outsiders,” or people seen as geographically and biologically separate from the “general population.”<sup>139</sup> As TB sprung up in these communities, newspapers and public opinion presented

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<sup>135</sup> Gandy and Zumla, *The Return of the White Plague*, 61.

<sup>136</sup> *Ibid.*

<sup>137</sup> *Ibid.*, 29.

<sup>138</sup> *Ibid.*

<sup>139</sup> *Ibid.*, 41.

those disproportionately affected as the cause or source of the disease. Some called TB “[a] Jewish disease” or “negro consumption.”<sup>140</sup> Indeed, these ideas were so well established that one judge used supposed differential TB susceptibility to ban interracial marriage.<sup>141</sup>

Such essentialist visions neglected the structural causes of TB, fueling support for control policies emphasizing containment, rather than investment in social welfare programs. Eugenicists, for instance, argued for strict immigration restrictions and selective breeding practices.<sup>142</sup> Perhaps unsurprisingly, when MDR-TB surged in the 1990s, people again looked for reasons why low-income, non-white individuals disproportionately suffered. And again, instead of recognizing structural and social causes, public opinion turned to racialized theories of criminality and “recalcitrance.”

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<sup>140</sup> C.H. Jordan, "Thoughts on Cachexia Africana or Negro Consumption," *Transylvania Journal of Medicine* 5 (1832). Gandy and Zumla, *The Return of the White Plague*, 52.

<sup>141</sup> *Perez V. Lippold*, 32 Cal. 2d 711 (1948).

<sup>142</sup> Gandy and Zumla, *The Return of the White Plague*, 42.

### V. *The 1990s: The MDR-TB surge & The Carceral Response*

In the last decade of the 20<sup>th</sup> century, MDR-TB surged in “a classic epidemic upward curve,” increasing across the U.S..<sup>143</sup> By 1993, the World Health Organization (WHO) declared TB a global emergency.<sup>144</sup> Low-income communities of color that public policy had left vulnerable to TB became epicenters of MDR-TB, which then fanned out to whiter and wealthier areas. This directionality of TB spread—with communities whom essentialists had cast as disproportionately “susceptible” and whom the “wonder drug” enthusiasts had called “noncompliant”—shaped the public health response.

Elite fears of the disease in connection with the initial case spike were delayed, in part because officials and wealthy citizens were largely unaffected by that first surge of MDR-TB. While many had considered TB close to eradicated by the end of the Wonder Drug Era, endemic rates of TB continued in historically underfunded communities, and were ignored by officials with the power to address them. As public policy rendered these areas more prone to outbreaks, cases rose. For these communities, in turn, MDR-TB seemed more of a continuation of an existing problem than a surge of something new. And, just as public officials had ignored the endemic rates of TB in underfunded communities, these officials continued to ignore rising cases of MDR-TB in those communities in the early 1990s.

Wallace and Wallace connect this indifference to MDR-TB to the policies of disinvestment that increased risk factors in these neighborhoods. Because TB epicenters were neighborhoods that had been subject to policies of neglect and planned shrinkage, “authorities looked the other way” when it came to TB as well.<sup>145</sup> Policymakers had been consistently defunding these

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<sup>143</sup> In some cities, the spike began as early as 1979, but across the country, the MDR-TB resurgence is generally localized between 1985-1993. Gandy and Zumla, *The Return of the White Plague*, 104, 23

<sup>144</sup> *Ibid.*, 36

<sup>145</sup> Wallace and Wallace, *A Plague on Your Houses*, 81.

communities, so they had no interest in providing infrastructure and funding to alleviate the burgeoning TB epidemic. Even more insidious, rising TB cases in such neighborhoods may have bolstered claims that such neighborhoods were beyond salvation. In 1992, New York congressman Ted Weiss looked back on the first signs of the MDR-TB outbreak:

[T]here were reports...highlighting the resurgence of [TB].... [but] nobody seemed to want to pay attention to what was going on....[T]he people who...are paying for it [are] the most vulnerable in our society. Ultimately, because of the nature of this disease, everybody is at risk. Everyone becomes vulnerable. Not just the poor and the homeless and the drug addicts....[I]f you don't attend to it, you have the general populace at risk.<sup>146</sup>

Authorities had no incentive to address TB while it was confined in historically disadvantaged communities. In some cases, cities even covered up reports of outbreaks. In 1990, for instance, New York City Mayor David Dinkins ordered a tropical disease expert off the Board of Health Commissioners after the expert announced a TB health emergency.

As Weiss predicted, however, everyone ultimately became vulnerable to TB, and the failure to respond to the early resurgence left municipalities with fewer options for containment.<sup>147</sup>

When TB began to “leak” from low-income neighborhoods, crossing lines of race, class, and municipalities, public officials were forced to take action.<sup>148</sup> Cities applied for federal funding for screening and treatment.<sup>149</sup> This delayed response made containment measures more expensive than initial preventative measures would have been.<sup>150</sup> Weiss explained: “The tragedy of this epidemic is that we had it under control but then we dropped the ball. We let the programs

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<sup>146</sup> *Tuberculosis: The Federal Failure*.

<sup>147</sup> Quoting an article from 1895, Historian Nancy Tomes describes the same cross-class vulnerability to infectious disease as the “socialism of the microbe.” Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Harvard University Press, 1999), 128.

<sup>148</sup> Wallace and Wallace, *A Plague on Your Houses*, 81.

<sup>149</sup> Gandy and Zumla, *The Return of the White Plague*, 143.

<sup>150</sup> See: “Containment through reasonable levers of resources...proved impossible[.]” Not only had the diseases crossed class and race lines, they Wallace and Wallace, *A Plague on Your Houses*, 81.



that defeated TB run out, unfunded, unattended.”<sup>151</sup> By the time health departments sprang into action, TB cases had spun out of control.

The newly felt urgency along with the directionality of the spread, decisively shaped the control policy that emerged. Popular opinion, driven by the now-entrenched trope of the “recalcitrant,” non-white, poor TB patient, called for cities to “quarantine [TB] patients or lock them up.”<sup>152</sup> Punitive public health policies demanded individual behavioral changes without seeking changes to the structural conditions that lay at the root of the problem.<sup>153</sup> Rather than employing “primary” prevention measures (to reduce the incidence of tuberculosis) or secondary prevention measures (to identify cases before symptom onset), such policies employed “tertiary” prevention measures (to treat symptoms and prevent disease progression, or, more simply, to contain a problem that already exists).<sup>154</sup> Given the delay in responding to MDR-TB, and facing mounting cases, officials may have had no choice but to turn to tertiary prevention measures, losing sight of primary and secondary prevention in the panic.

One such punitive tertiary prevention policy was incarceration, including strict incarceration (in prisons or jails) and “quasi-incarceration” (involuntary detention in hospitals, sanitariums, and disease control centers, under conditions resembling confinement in correctional settings). In 1993, the Centers for Disease Control and Prevention (CDC) established the Advisory Council for the Elimination of Tuberculosis, which encouraged states to consider involuntary detention and quarantine for MDR-TB patients despite concerns about individual rights: “Confinement in a facility...may be necessary when less restrictive alternatives

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<sup>151</sup> *Tuberculosis: The Federal Failure.*

<sup>152</sup> Specter, “Tb Carriers See Clash of Liberty and Health.”

<sup>153</sup> Gandy and Zumla, *The Return of the White Plague*, 29, 32.

<sup>154</sup> See: “historical limits of the war on consumption,” Lerner explains, means that “tuberculosis control has long sought to detect and treat the disease in individual persons rather than address larger societal ills” Lerner, *Contagion and Confinement.*

have failed and confinement is the only way to assure that the patient is adherent...and the public's health is adequately protected."<sup>155</sup> Recommendations for involuntary detention came from international bodies, too, such as the WHO.<sup>156</sup>

In response to these national and international recommendations, many states passed or updated tuberculosis control laws. There was considerable variation among these laws, but all prioritized tertiary prevention, or containment.

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<sup>155</sup> Tara Ramanathan, "Menu of Suggested Provisions for State Tuberculosis Prevention and Control Laws: Appendix B. Selected State Tuberculosis Control Cases," Division of Tuberculosis Elimination, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, <https://www.cdc.gov/tb/programs/laws/menu/appendixb.htm>; Emily Weisberg, "Outbreak: The Legal Rights of a State in Controlling an Epidemic - City of Milwaukee V. Washington Case Comment," *J. Health & Biomedical L.* 4 (2008).

<sup>156</sup> Fidler, Gostin, and Markel, "Through the Quarantine Looking Glass."

## VI. 1990s-present: Carceral Logic in Action

Many state involuntary detention laws were first enacted in the early 20<sup>th</sup> century.<sup>157</sup> In 1905, the United States Supreme Court upheld state authority to restrict individual rights in the name of public health and welfare.<sup>158</sup> Decades later, concerns about individual rights grew, both as a result of publicized abuses in psychiatric institutions, and, subsequently, what turned out to be scientifically-unjustified HIV/AIDS quarantines.<sup>159</sup> Those concerns, however, subsided in the frenzy over MDR-TB. By the early 1990s, state laws mandating containment and isolation were enforced widely against MDR and XDR-TB patients.<sup>160</sup>

Some of these laws mandated incarceration or quasi-incarceration only when a TB patient poses an “immediate health threat.”<sup>161</sup> Some, but not all, included the CDC’s suggested language demanding exhaustion of “less restrictive alternatives” to justify involuntary confinement.<sup>162</sup> Some explicitly stated that a TB patient could be confined in a jail; others authorized detention in health care facilities or a personal residence coupled with electronic monitoring.<sup>163</sup> Still others left the place of detention unspecified, providing only that patients could be involuntarily detained in any “appropriate facility.”<sup>164</sup> Regardless the specific variation, these laws all

<sup>157</sup> Lerner, *Contagion and Confinement; City of Newark V. J.S.*, 652 A.2d 265 (1993).

<sup>158</sup> See *Compagnie Francaise Et Al. V. Board of Health*, 186 U.S. 380 (1902). (quarantines); *Jacobson V. Massachusetts*, 197 U.S. 11 (1905). (vaccinations). Public Health Law Program, “Public Health Emergency Law: Cdc Foundational Course for Front-Line Practitioners,” (U.S. Centers for Disease Control and Prevention, 2009). *Gibbons V. Ogden*, 22 U.S. 1 (1824).; Fidler, Gostin, and Markel, “Through the Quarantine Looking Glass.” (The Federal Government also has the power to detain TB patients within its jurisdiction and to use criminal sanctions or judicial injunction) 42 U.S.C. §§ 264-272.

<sup>159</sup> Parmet, “Legal Power and Legal Rights — Isolation and Quarantine in the Case of Drug-Resistant Tuberculosis.”

<sup>160</sup> Specter, “Tb Carriers See Clash of Liberty and Health.” In the 1980 decision, *Vitek V. Jones*, 445 U.S. 480 (1980). U.S. Supreme Court declared civil commitment, in the context of mental illness, a “massive curtailment of liberty.” Despite this recognition, both state and federal governments still held the power to direct individuals to discontinue risk behaviors, compel them to submit to physical exam or treatment, and detain them using public health or criminal justice powers. Fidler, Gostin, and Markel, “Through the Quarantine Looking Glass.”

<sup>161</sup> Gostin, “Controlling the Resurgent Tuberculosis Epidemic.”; Lerner, *Contagion and Confinement*, 125-26.

<sup>162</sup> *Contagion and Confinement*, 168. Gostin, “Controlling the Resurgent Tuberculosis Epidemic.”

<sup>163</sup> “Controlling the Resurgent Tuberculosis Epidemic.”

<sup>164</sup> 24 R.C.N.Y § 11.21: *Tuberculosis: Reporting, Examination, Treatment, Exclusion, Removal and Detention.*

employed of carceral logic, relying on control, punishment, and criminalization to stop the spread of MDR-TB.

As a result, patients have frequently been held in correctional settings, prioritizing containment over care. Ruby Washington's case shows this preference. She argued that a hospital was a more suited placement than a jail, as the latter was not "a facility where proper care and treatment will be provided and spread of the disease... prevented."<sup>165</sup> A trial court, appellate court and the Wisconsin Supreme Court all rejected her claim and deemed confinement in the jail permissible.<sup>166</sup>

Washington's confinement as a TB patient in jail was not unusual. In Fresno County, California, for instance, the TB control policy explicitly allowed public health officials to detain anyone with non-infectious TB in the county jail. Once confined, TB patients were subjected to the same punitive restrictions imposed on other incarcerated individuals.<sup>167</sup> For example, in 1998, Hongkham Souvannarath, a Laotian refugee who spoke little English, was incarcerated in the Fresno County Jail for failing to complete her TB medication. On arrival, Souvannarath was strip-searched, and cried that she was afraid of dying in jail. A Hmong officer mistranslated this comment as a suicide threat, so Souvannarath was moved to solitary confinement. There, she received "no water, heat, light, bed, or toilet."<sup>168</sup> After correctional officers moved her to the general population, Souvannarath was still treated punitively. She was allowed only one half-hour visit per week with her 10 children and had to pay for phone calls. Officers shackled Souvannarath when taking her to a clinic or hospital, and rarely provided translation services.

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<sup>165</sup>*City of Milwaukee V. Ruby Washington*; *Wis. Stat. § 252.07*.

<sup>166</sup> *Wis. Stat. § 252.07*.

<sup>167</sup> ("TB detainees are governed by the same security policies and restrictions that govern other jail inmates, including stringent restrictions on visitation, on materials coming into the jail, on possession of comfort items such as pillows and blankets and on privacy and exercise.") *Souvannarath V. Hadden*.

<sup>168</sup> *ibid*.

Ultimately, Souvannarath was incarcerated for 10 months, and then released with electronic monitoring surveillance for another two.<sup>169</sup>

Some jurisdictions confined TB patients in jails to punish them for not taking medications, rather than to protect public health. In San Joaquin County, Deputy District Attorney Stephen Taylor declared: “We don’t mess around when it comes to TB.... If you don’t take your medicine here, you’ll be hunted down and jailed very quickly. We’ll bring you back in chains if we have to.”<sup>170</sup> Indeed, after Deborah Sanchez was diagnosed with TB while in jail for prostitution, and subsequently failed to continue her treatment after release, she was immediately reincarcerated.<sup>171</sup> As Taylor made clear, San Joaquin’s priority was arrest and incarceration. No attempt was made to understand, much less address, why Sanchez was vulnerable to developing MDR-TB in the first place. New York City and Long Beach, California implemented similar policies, which persisted long after MDR-TB rates began to decline.<sup>172</sup> As recently as 2012, a TB patient in California, Armando Rodriguez, was jailed for failing to complete treatment.<sup>173</sup>

Not all involuntary detentions took place in jails and prisons. Some TB patients were “quasi-incarcerated,” or detained in non-correctional settings. Quasi-incarcerations maintained a “structural homology” to incarcerations, however, meaning that both served to reproduce “stigma, constraint, spatial confinement, and institutional encasement” of low-income, non-white patients with TB.<sup>174</sup> Even in hospitals or infectious disease centers, for instance, involuntary

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<sup>169</sup> *Souvannarath V. Hadden*

<sup>170</sup> Mark Arax, "Policing the Tb Beat," *Los Angeles Times*, December 5 1994.

<sup>171</sup> *Ibid.*

<sup>172</sup> Associated Press, "County Uses Strong Medicine—Jail—to Enforce Tb Treatment," *Chicago Tribune*, November 27 1994; Edmund Newton, "The Invisible Foe: On the Trail of Tb Urban Ills Combine to Make Tuberculosis Tough to Beat Tuberculosis Cases in Long Beach 1986-1993," *Los Angeles Times*, 1994 Mar 17 1994.

<sup>173</sup> See also case of a homeless man with schizophrenia in NYC described in Lerner, *Contagion and Confinement*, 168. "Tuberculosis Patient Charged in Calif. For Not Taking Medication," *The Associated Press*, May 16 2012.

<sup>174</sup> Wacquant uses the phrase “structural homology” to compare the containment purpose of both the racialized prison and “ghetto.” Wacquant, "Class, Race & Hyperincarceration in Revanchist America."

detentions have been conducted under armed guard, with patients provided only limited access to phones, visitors, personal items, or fresh air. In New York's Goldwater Memorial Hospital, for example, patients were kept under 24-hour supervision in a locked "detention unit."<sup>175</sup> If they consistently refused treatment, they were moved to "strict respiratory isolation," *i.e.* complete isolation in a room with negative air pressure.<sup>176</sup> By 1999, NYC had confined more than 200 MDR-TB individuals in these conditions at Goldwater.<sup>177</sup>

Governments relying on quasi-incarceration, just like those relying on more formal incarceration, often used detention for uncooperative patients more as punishment than treatment. In 2006, Robert Daniels was involuntarily detained for more than 10 months in the Maricopa County Hospital in Phoenix, Arizona in the "jail unit for criminals" who came from local correctional facilities for treatment.<sup>178</sup> Unlike the other patients in the unit, who had committed other illegal acts, Daniels was judged a "criminal" solely because of his failure to finish his course of treatment.<sup>179</sup> The hospital detained him on a court order, with hospital staff referring to him as another "inmate."<sup>180</sup> The conditions of Daniels's confinement closely resembled prison:

He has a light on 24 hours. There's a video camera in the corner of the room that takes pictures of his every activity in that room 24/7. His mail is opened routinely...he has not been allowed a TV or a telephone, and he has absolutely no activities during the day. It is taking, predictably, a terrible toll on his psyche.<sup>181</sup>

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<sup>175</sup> Feldman et al., "Detention until Cure as a Last Resort."

<sup>176</sup> Ibid. Catharina Haar et al., "Tuberculosis Drug Resistance and Hiv Infection, the Netherlands," *Emerging Infectious Diseases* 13, no. 5 (2007).

<sup>177</sup> In 1993, the City of Newark confined a man in a hospital, and repeatedly stopped him from leaving. *City of Newark V. J.S.* A hospital in Massachusetts implemented similar practices. Marie Tuner and Lee Reichman, "Should Noncompliant Tb Patients Be Held for Treatment?," *The Washington Post*, August 15 1995. Such cases also had precedent in the period before the 1990s. For instance, in 1963, an individual was detained in a "maximum security cell" in the Southwest Florida Tuberculosis Hospital. *Moore V. Armstrong*, 149 So. 2d 36 (1963).

<sup>178</sup> Richard Knox, "Arizona Tb Patient Jailed as a Public Health Menace," in *TB Patient Sparks Public Health Scare*, ed. Morning Edition (NPR, 2007).

<sup>179</sup> *ibid.*

<sup>180</sup> "Cdc Quarantines Tuberculosis Patient," *International Wire*, May 30 2007.

<sup>181</sup> Fidler, Gostin, and Markel, "Through the Quarantine Looking Glass."; Knox, "Arizona Tb Patient Jailed ".

These conditions, designed with carceral logic rather than healthcare in mind, prioritized punishment over treatment. In some cases, these measures even inhibited treatment, as they took a physical and psychological toll on health.

Quasi-incarcerations could also take place in infectious disease centers, where conditions also resembled (and sometimes even appeared worse than) those of incarceration. In the 1990s, Kien Chung Ta, for instance, was held in isolation at the Texas State Department of Health's Center for Infectious Disease Control in San Antonio, Texas. Kien was treated worse than many incarcerated individuals. In correctional settings, for instance, solitary confinement is typically reserved as a disciplinary measure, or for those who pose immediate threat of violence or victimization.<sup>182</sup> The Texas center's practice, by contrast, was to confine all TB patients to solitary confinement and allow them only two one-hour exercise breaks per day.<sup>183</sup> After Kien used furniture "as a weapon," the Center removed all his furniture except his mattress. After a month in solitary confinement, Kien began to exhibit signs of mental illness. When he refused psychiatric medication, his doctor added Prolixin, an antipsychotic drug, to his orange juice without Kien's knowledge. As a result, Kien developed tardive dyskinesia, a side effect of Prolixin that causes muscle spasms, and was subsequently treated with Haldol, again without his knowledge or consent. Ta later sued for battery, negligence, false imprisonment, and violations of his constitutional rights, but passed away before the case was decided on appeal.<sup>184</sup> One appellate judge described the treatment Kien had received as "gross mistreatment" that was "[r]eminiscent of dark images from Solzhenitsyn's Gulag Archipelago[.]"<sup>185</sup> That judgment,

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<sup>182</sup> Even so, many argue that solitary confinement is cruel and unusual punishment and that the practice must be ended. Lauren Brinkley-Rubinstein and Terence Johnson, "Solitary Confinement and Health," *North Carolina Medical Journal* 80, no. 6 (2019).

<sup>183</sup> *Neimes V. Kien Chung Ta*, 985 S.W.2d 132 (1998).

<sup>184</sup> *Ibid.*

<sup>185</sup> *Ibid.*

however, comparing Kien's conditions of confinement to those of a Russian prison camp, came in a dissenting opinion, and was insufficient to persuade the court that Kien had been denied any clearly established right.

Some states authorized conditions of quasi-incarceration and incarceration even when the patient voluntarily admitted themselves to the facility.<sup>186</sup> Stephen Fisher, for instance, who had a history of alcoholism and depression, voluntarily agreed to a court-ordered isolation, and was admitted to the same center as Kien in 1993. Despite his cooperation, Fisher was placed in solitary confinement, and received no treatment for his pre-existing depression for four months. Similarly, in 2006, Adalberto M, a 37-year-old man experiencing homelessness, tested positive for TB in Ventura, California.<sup>187</sup> M had been confined to a motel room, "stocked with drinks, food, a refrigerator and a microwave," but failed to follow instructions and left the motel.<sup>188</sup> When he subsequently sought treatment on his own accord at the Santa Paula Hospital, he was detained by security guards and forced to remain in the hospital. Ninety days later, M was no longer contagious, but was nevertheless held for an additional 90 days on the purported justification that he needed to be "fully compliant" with the rest of the treatment, lest he risk developing MDR-TB.<sup>189</sup>

Other forms of treatment in the 1990s, even outside of incarceration and quasi-incarceration, employed carceral logic as well. Paternalistic and authoritarian programs, like directly observed therapy (DOT) and "pill-monitors" became common practice nationwide. In 1992 alone, for instance, New York City hired 50 pill-monitors to find and visit TB patients to ensure that they took their medicine. The design of pill monitors and DOT nurses, tasked with tracking down

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<sup>186</sup> Gostin, "Controlling the Resurgent Tuberculosis Epidemic."

<sup>187</sup> *Levin V. Adalberto M.*, 156 Cal. App. 4th 288 (2007).

<sup>188</sup> *ibid.*

<sup>189</sup> *Ibid.*



individuals or standing over them to “make sure patients swallow,” stripped patients of dignity and autonomy.<sup>190</sup> While some patients came to see monitors as a “friend,” others felt “harassed” and “treat[ed] like a child.”<sup>191</sup> Field workers often intruded on patient homes and lives, “knock[ing] loudly on the door,” waking a patient up, or using friends and acquaintances to track someone down.<sup>192</sup> In some cases, these techniques publicized patient diagnoses, leaving individuals vulnerable to eviction and other negative consequences.<sup>193</sup>

While less intrusive than involuntary detention, these programs, like incarceration and quasi-incarceration, similarly promoted carceral logic at the expense of treatment efficacy. DOT and pill monitors rely on observation, which, as Foucault argues, is an important aspect of social control.<sup>194</sup> The success of such programs, moreover, often derived from the threat of involuntary confinement.<sup>195</sup> While some physicians praise DOT as the “gold standard” for ensuring TB medicine adherence, scientific evidence on the efficacy of such therapies remains inconclusive. A literature review in 2015, for instance, found that in trials comparing DOT to self-administered therapy, DOT proved no better at improving adherence.<sup>196</sup> Other studies, too, have found inconclusive or conflicting results.<sup>197</sup>

Complicated regimens, antibiotic side effects, and complex logistics limit the efficacy of DOT treatments. Individuals with MDR-TB must complete months—or even years—of

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<sup>190</sup> Mireya Navarro, “Pill Monitors Make Sure Tb Patients Swallow: As Tb Spreads, New York City’s Pill Monitors Make Sure Patients Swallow Forcing Patients to Finish Their Cure Is Called Crucial for Public Health,” *New York Times*, Sep 5 1992.

<sup>191</sup> Ibid.

<sup>192</sup> Ibid.

<sup>193</sup> Ibid. Draus, *Consumed in the City: Observing Tuberculosis at Century’s End*.

<sup>194</sup> Foucault, *Discipline and Punish: The Birth of the Prison*.

<sup>195</sup> Coker, *From Chaos to Coercion: Detention and the Control of Tuberculosis*.

<sup>196</sup> J. Karumbi and P. Garner, “Directly Observed Therapy for Treating Tuberculosis,” *Cochrane Database Syst Rev* 2015, no. 5 (2015).

<sup>197</sup> Gandy and Zumla, *The Return of the White Plague*, 201. See also carriers

treatment, with multiple doses per week.<sup>198</sup> Despite the initial fanfare about “wonder drugs,” by the 1990s, reports documented widespread adverse effects. In one study, 26% of patients on TB antibiotics experienced side-effects, including hearing loss, hypothyroidism, severe diarrhea, and AIDS-related peripheral neuropathy.<sup>199</sup> Side effects and complicated regimens inhibit compliance.<sup>200</sup> One patient reported, “They make it sound so easy...I have to take four kinds of pills three times each day. They make me sick sometimes.”<sup>201</sup>

DOT clinics are often difficult to reach, especially for homeless individuals, such as Washington, M, J.S., and Daniels. For such individuals, Wisconsin’s ACLU explained, “[i]t is their day-to-day struggle to live—not a defiant attitude or indifference to health risks...[,]which prevents them from adhering to the long-term treatment regimen.”<sup>202</sup> Clinics often distributed bus passes. Still, one patient explained: “I have to come [to the clinic] and sit and wait for my pills. I have to wait for two buses just to get here. It takes hours.”<sup>203</sup> J.S., for instance, was involuntarily detained after failing to attend a TB clinic a bus trip away from his shelter. He had no bus money, because his supplemental security income check had been delivered to a hospital, not his shelter, by mistake.<sup>204</sup> For individuals with substance dependence and psychiatric disturbances, too, tracking and attending appointments can be immensely challenging.<sup>205</sup> These individuals require compassion, care, and flexible, individualized plans, not punishment.

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<sup>198</sup> For initial infections, patients must complete at least 6 months of treatment, but for reactivated TB or MDR-TB, treatment can take 18 months- 2 years, and can require six different drugs each day. *City of Milwaukee v. Ruby Washington, In the Interest of Ruby Washington: The American Civil Liberties Union of Wisconsin Foundation Amicus Curiae Brief*, September 7 2006.

<sup>199</sup> Feldman et al., "Detention until Cure as a Last Resort." The CDC published reports of liver failure among TB patients who had received antibiotics in NYC. Gandy and Zumla, *The Return of the White Plague*.

<sup>200</sup> Patients who struggle with “compliance” to antibiotic regimens often justify their decisions on the grounds of gastrointestinal issues or painful injections Feldman et al., "Detention until Cure as a Last Resort."

<sup>201</sup> Specter, "Tb Carriers See Clash of Liberty and Health."

<sup>202</sup> *In the Interest of Ruby Washington*.

<sup>203</sup> Specter, "Tb Carriers See Clash of Liberty and Health."

<sup>204</sup> *City of Newark V. J.S.*

<sup>205</sup> Wisconsin’s ACLU explains: “the notion that persons so affected can remember and comply with clinic appointments and medication regimes is laughable.” *In the Interest of Ruby Washington*.

Clinic trips and their cost disrupt everyday lives. J.S.T., a TB patient involuntarily detained in the Texas Center for Infectious Disease, for example, had failed to show up to his DOT appointments because he had to work.<sup>206</sup> He had “no problem taking medicine” but did not want to travel to a different county to get to the nearest clinic.<sup>207</sup> Treatments also impose a serious financial burden for uninsured or underinsured patients. Not all states pay for inpatient care, even when an individual is involuntarily detained, and even fewer pay for outpatient care.<sup>208</sup>

When DOT does prove effective, the cause is not obviously related to the efficacy of carceral logic. For instance, declining case numbers may stem from a decrease in reported cases for fear of involuntary detention. Herd immunity, or changing social welfare are other plausible explanations.<sup>209</sup> Indeed, DOT treatment appears to be effective when it incorporates individualized patient plans, accessible medications, treatment in flexible settings, and integrated social services, all elements that reduce reliance on carceral logic.<sup>210</sup>

Carceral logic criminalizes TB patients by levying criminal penalties on individuals for violating a public health order. Twenty-six states, for instance, use this practice.<sup>211</sup> Some treat these infractions as misdemeanors, and others as felonies. In addition, when individuals are incarcerated or quasi-incarcerated during TB treatment, they can receive criminal penalties for disorderly conduct during detention.<sup>212</sup>

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<sup>206</sup> *In Re J.S.T.*, 478 S.W.3d (2015).

<sup>207</sup> *Ibid.*

<sup>208</sup> Gostin, "Controlling the Resurgent Tuberculosis Epidemic." 38 states require public health departments to pay for inpatient care (many only after determining by their own “means-testing” that a patient cannot pay themselves), but only 27 states pay for outpatient care, and just 7 will pay for follow-up treatment after an individual is discharged from a hospital

<sup>209</sup> Gandy and Zumla, *The Return of the White Plague*, 130-31. Wallace and Wallace, *A Plague on Your Houses*.

<sup>210</sup> Gandy and Zumla, *The Return of the White Plague*, 202.

<sup>211</sup> Gostin, "Controlling the Resurgent Tuberculosis Epidemic."

<sup>212</sup> *Ibid.*

Carceral logic also infected decision-making by clinics and hospitals treating TB patients, interfering with TB control as clinicians and administrators often worked closely with police. In Milwaukee, the clinic that first diagnosed Ruby Washington is located directly across the street from a district police station, a physical proximity symbolic of the closeness with which the officials in each building operate.<sup>213</sup> Failure to appear for a DOT appointment, as demonstrated by Washington's case, quickly leads to contact with the carceral state, via court orders, arrest, and incarceration. Indeed, when Washington failed to appear at a DOT appointment, the first action taken by the TB clinic program manager, Irmine Reitl, was to call the police. Earlier, when Washington had entered the Aurora Sinai Medical Center to give birth, a nurse had alerted the health department, which promptly petitioned the circuit court for a detention order. Similarly, when Souvannarath failed to take her medication, police took her to the county jail at gunpoint. So too, in 1994, in San Joaquin County, those who failed to take their medication were reported to police, which posted mug shots on local TV.<sup>214</sup> The constant, looming threat of incarceration and police reports under this approach incentivizes individuals to forgo medical care altogether, and thereby winds up being counterproductive from a public health standpoint. In Washington's case, the ACLU explained that fear of being reported to police and the "possibility of... being committed to jail" leads people who "are sick but have committed no crime" to "deny or hide symptoms."<sup>215</sup>

TB policies have also inhibited patient care by linking treatment with immigration control. In 1994 in California, a ballot-initiative, Proposition 187 attempted to prohibit undocumented immigrants from using non-emergency medical care. Before it was found unconstitutional, Prop

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<sup>213</sup> Google, "Google Maps for Keenan Clinic: Milwaukee, Wi."

<sup>214</sup> Arax, "Policing the Tb Beat." Press, "County Uses Strong Medicine—Jail—to Enforce Tb Treatment."

<sup>215</sup> *In the Interest of Ruby Washington*. See also: Gostin, Burris, and Lazzarini, "The Law and the Public's Health: A Study of Infectious Disease Law in the United States."

187 required hospitals providing TB treatment to notify Immigration and Naturalization Services (INS) and the attorney general of California if the health care provider suspected that a patient was an undocumented immigrant.<sup>216</sup>

Links between police (or INS officials) and medical professionals are particularly threatening for pregnant people, like Washington. Her detention after giving birth reflects one of many longstanding barriers to care for mothers—particularly low-income Black and brown women—who, justifiably, fear arrest when seeking perinatal care. Undocumented mothers, for instance, report avoiding perinatal care for fear of possible deportation.<sup>217</sup> Similarly, pregnant people who use drugs tend to avoid hospitals for fear of arrest and separation from their children. Healthcare workers fuel this reluctance, both because they are more likely to report Black than white women to welfare agencies and probation officers and because drug testing practices are concentrated in hospitals that serve low-income and non-white communities.<sup>218</sup> Washington's case suggests the risk of detention after failing to complete TB treatment may well be an additional barrier to seeking prenatal care for this demographic.

In summary, the TB control policies developed in response to the MDR-TB outbreak drew on the directionality of TB spread and the image of the poor, non-white, “recalcitrant” TB patient to prioritize carceral logic, social control, and containment at the expense of effective treatment. Tertiary disease prevention “spot treatments,” like involuntary detention and DOT, ignored the conditions of structural inequality at the root of the MDR-TB outbreak while blaming TB cases

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<sup>216</sup> Gandy and Zumla, *The Return of the White Plague*, 47.

<sup>217</sup> Division of Health Promotion and Disease Prevention Institute of Medicine, Committee to Study Outreach for Prenatal Care, *Prenatal Care: Reaching Mothers, Reaching Infants* (National Academies Press, 1985).

<sup>218</sup> Dorothy E. Roberts, "Punishing Drug Addicts Who Have Babies: Women of Color, Equality, and the Right of Privacy," *Harv Law Rev* 104, no. 7 (1991).

on individual patients, many of whom faced significant barriers to completing treatment.<sup>219</sup>

Thus, these policies perpetuated social control of marginalized communities while leaving risk factors for future epidemics intact.

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<sup>219</sup> See for instance, Gandy and Zumla, *The Return of the White Plague*, 146.: “to minimize production of MDR-TB, public health authorities must minimize the number of people treated by applying primary prevention measures such as reducing housing overcrowding, assuring food security and proper nutrition and enforcing anti-sweatshop laws”

### *VII. Discriminatory Impact and Social Control*

In line with carceral logic that attempts to contain and control disadvantaged groups, TB policies disproportionately impacted non-white low-income communities, particularly by expanding surveillance and incarceration. While these laws were touted as eliminating TB, they had the effect of adding another mechanism by which national, state, and municipal governments could control non-white non-affluent communities. In principle, the laws authorizing involuntary detention applied to all TB patients who did not adhere to their prescribed treatment. These policies, however, gave physicians and public health officials broad discretion in deciding whether to detain patients.<sup>220</sup> Such laws did not universally include, for instance, any assessment of infectiousness, which seems at odds with a policy supposedly justified based on protecting the public's health.<sup>221</sup> Instead, officials could justify decisions based on whom they thought sufficiently "responsible" to complete TB treatment, or based on nebulous "sociological reasons."<sup>222</sup> Given well-established racist and classist stereotypes of criminality and disobedience from the latter half of the 20<sup>th</sup> century, such subjective measures of "responsibility" created a real danger of uneven application.

And indeed, in practice, those concerns became reality. The TB patients who were detained were disproportionately poor, non-white, and recent migrants, co-infected with HIV/AIDS, and with histories of homelessness, mental illness, substance use and arrest or incarceration.<sup>223</sup> Of a study of 46 patients detained in NYC, all were non-white.<sup>224</sup> More than

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<sup>220</sup> Lerner, *Contagion and Confinement*, 117.

<sup>221</sup> *Ibid.*

<sup>222</sup> Coker, *From Chaos to Coercion: Detention and the Control of Tuberculosis*. Lerner, *Contagion and Confinement*, 122. Gostin, Burris, and Lazzarini, "The Law and the Public's Health: A Study of Infectious Disease Law in the United States."

<sup>223</sup> Feldman et al., "Detention until Cure as a Last Resort."; Specter, "Tb Carriers See Clash of Liberty and Health." Lerner, *Contagion and Confinement*. Navarro, "Pill Monitors Make Sure Tb Patients Swallow." Similar trends existed for those assigned to pill monitors.

<sup>224</sup> Feldman et al., "Detention until Cure as a Last Resort."

90% had prior histories of substance dependence, half were previously incarcerated, 70% were homeless at some point, and 54% were HIV infected.<sup>225</sup> The other cases in this paper show similar trends. Washington, J.S., M, and J.S.T. were poor.<sup>226</sup> J.S. was described as Black.<sup>227</sup> Souvannarath was a recent refugee and Kien spoke little English.<sup>228</sup> J.S. was co-infected with HIV.<sup>229</sup> Washington, M, J.S., Daniels, and J.S.T. all experienced homelessness.<sup>230</sup> Fisher had a history of depression.<sup>231</sup> Sanchez, Washington, Fisher and M all had histories of substance use. J.S.T. and Sanchez had criminal records.

Perhaps those who were non-white and low-income, with experiences of housing instability, mental health concerns, criminal-legal system involvement, and co-infection with HIV/AIDS have been less likely to comply with antibiotic regimens than TB patients not confronting those circumstances. But it is difficult to determine trends between those who were labeled noncompliant and all who were actually noncompliant, in part because the pool of those labeled “noncompliant” cannot be separated from the biases of those doing the labeling. Still, trends of detention, the discretionary power officials wielded, and historical and contemporary research on medical bias suggest that both the label “noncompliant” and the resulting detentions were likely discriminatorily applied to low-income communities of color.<sup>232</sup> Historian and

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<sup>225</sup> Feldman et al., “Detention until Cure as a Last Resort”

<sup>226</sup> *City of Milwaukee V. Ruby Washington; City of Newark V. J.S. Levin V. Adalberto M. In Re J.S.T.*

<sup>227</sup> *City of Newark V. J.S.*

<sup>228</sup> *Souvannarath V. Hadden; Neimes V. Kien Chung Ta.*

<sup>229</sup> “Man with Aids and Tb Confined to Home,” *The Associated Press* 1994.; *City of Newark V. J.S.*

<sup>230</sup> Nicholas Riccardi, “The Nation: The Man in the Leg Irons and Mask,” *Los Angeles Times*, May 02 2007.

<sup>231</sup> *Neimes V. Kien Chung Ta.*

<sup>232</sup> Such a hypothesis is supported by more recent studies, which, while not specific to MDR-TB, have documented associations between racial bias and physician predictions of patient noncompliance. A. Londono Tobon et al., “Racial Implicit Associations in Psychiatric Diagnosis, Treatment, and Compliance Expectations,” *Acad Psychiatry* 45, no. 1 (2021); Quinn Capers, “How Clinicians and Educators Can Mitigate Implicit Bias in Patient Care and Candidate Selection in Medical Education,” *ATS Sch* 1, no. 3 (2020); William J. Hall et al., “Implicit Racial/Ethnic Bias among Health Care Professionals and Its Influence on Health Care Outcomes: A Systematic Review,” *American Journal of Public Health* 105, no. 12 (2015). Michelle van Ryn and Jane Burke, “The Effect of Patient Race and Socio-Economic Status on Physicians’ Perceptions of Patients,” *Social Science & Medicine* 50, no. 6 (2000). J. Sabin et al., “Physicians’ Implicit and Explicit Attitudes About Race by Md Race, Ethnicity, and Gender,”



bioethicist Barron Lerner also found from an analysis of 1950s journal articles a trend of incorporation of explicit racial and ethnic characteristics to identify patients as eligible subjects for an invasive lung surgery designed for uncooperative patients.<sup>233</sup> While not regarding the practice of involuntary detention specifically, such bias in TB treatment prescription likely carried across TB control policies.

Regardless whether TB policies shaped by carceral logic were discriminatorily *applied* on the basis of class or race, there is no doubt that such policies disproportionately *impacted* low-income communities of color. These policies led to the surveillance and incarceration of low-income people of color, and particularly those with substance dependencies and who periodically experienced homelessness. In short: TB laws infused with carceral logic TB laws became a continuous part of a longer legacy of social control of historically disadvantaged communities.

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*J Health Care Poor Underserved* 20, no. 3 (2009). Ivy W. Maina et al., "A Decade of Studying Implicit Racial/Ethnic Bias in Healthcare Providers Using the Implicit Association Test," *Social Science & Medicine* 199 (2018). L. A. Cooper et al., "The Associations of Clinicians' Implicit Attitudes About Race with Medical Visit Communication and Patient Ratings of Interpersonal Care," *Am J Public Health* 102, no. 5 (2012).

<sup>233</sup> Lerner, *Contagion and Confinement*.

### *VIII. Reproduction of the image of the “recalcitrant” patient*

The discursive treatment of non-white, low-income patients was cyclical: the stereotype of recalcitrance justified detention; officials who participated in detention then deployed language that invoked and reified the stereotype. Many involuntary detention laws, for example, explicitly use the phrase “public health menace” to refer to patients targeted for detention.<sup>234</sup> This language had first appeared during the Wonder Drug Era of the 1950s.<sup>235</sup> Such phrases initially popularized the idea of a “recalcitrant” patient who undermined the available resources and thus acted with malice, deliberately infecting the public. Of course, such language elided mention of structural failings that plagued patients, including faulty prescriptions issued by doctors or failing to attend appointments due to stigma, untreated mental health conditions, or cost of travel or missing work.

Courts and lawyers in the 1990s used the phrase “public health menace” when seeking to incarcerate or quasi-incarcerate a TB patient. For instance, J.S. was confined until “he [would no longer] be a menace to the community.”<sup>236</sup> A court in McDowell County, West Virginia quasi-incarcerated William Greene for being “a health menace to others.”<sup>237</sup> Galveston County requested temporary protective custody given that J.S.T. was “a threat to the public health.”<sup>238</sup> The Milwaukee counsel similarly described Washington as a “serious menace.”<sup>239</sup>

When ordering involuntary detentions, courts employed the stereotype of the “recalcitrant” TB patient as an “outside threat” to the “general” or “normal” population.<sup>240</sup> Such language

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<sup>234</sup> *City of Milwaukee V. Ruby Washington. California Health and Safety Code § 120210.*

<sup>235</sup> (“[S]ome persons treated with wonder drugs...become public health menaces... because some germs, which developed resistance to the drug...are capable of causing primary infection in others.” “Tb Death Rate Down, but Not Number of Cases,” *The Gazette* Mar 21 1953.

<sup>236</sup> *City of Newark V. J.S.*

<sup>237</sup> *Greene V. Edwards*, 164 W. Va. 326 (1980).

<sup>238</sup> *In Re J.S.T.*

<sup>239</sup> *In the Interest of Ruby Washington.*

<sup>240</sup> Press, “County Uses Strong Medicine—Jail—to Enforce Tb Treatment.”

reflected a judgement about the directionality of MDR-TB outbreaks, namely that irresponsible (non-white) (poor) outsiders were putting the (white) (wealthy) “normal” community at risk. While a narrative of danger is typically required to justify detention, TB control policies also used this language to create separation between the entire demographic that MDR-TB patients represented and the “general” community. Rather than treating these individuals as vulnerable patients for whom the community had a responsibility to care, they were cast as abnormal, criminal and dangerous.

In 1994, the San Joaquin County Deputy District Attorney said so explicitly: “These aren’t normal people... They’re the people you find living in parks or under freeway overpasses. They’re really hard-core drug addicts.”<sup>241</sup> Local television in San Joaquin picked up this language of TB patients being a “nonresident,” posting footage that declared one TB patient, Deborah Sanchez, “wanted for contaminating the city of Stockton.”<sup>242</sup> Language of contamination suggests that Sanchez was able to “ruin” or impurify a city of which she was not a part. Such language is part of a long history of viewing non-white, low-income communities as “less pure” than whiter, wealthier parts of a city.<sup>243</sup>

In Washington’s case, too, the judge declared: “There is a huge threat to our community if Miss Washington is walking around[.]”<sup>244</sup> While the phrase “*our* community” might simply suggest that the community had a responsibility to take care of its members, including Washington, the language of criminality and punishment used in other parts of the opinion—including descriptions of Washington as “combative,” aggressive, and unruly— suggest instead

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<sup>241</sup> Press, “County Uses Strong Medicine—Jail—to Enforce Tb Treatment.”

<sup>242</sup> Arax, “Policing the Tb Beat.”

<sup>243</sup> See, for instance, Julie Sze, *Noxious New York* (The MIT Press, 2006).

<sup>244</sup> *City of Milwaukee V. Ruby Washington*.

that the judge meant to distance Washington from “our” community.<sup>245</sup> Put differently, “our community” was an entity that needed to be protected from Washington, rather than one responsible for her care and treatment.

The rhetoric used in the application of MDR-TB laws also reinforced the idea that the “recalcitrant” patient was simultaneously incompetent and a criminal mastermind. Rhetoric that cast some patients as threats merged with condescension, depicting patients as too child-like to be trusted but responsible enough to be adult “criminals” deliberately creating public health catastrophes.<sup>246</sup>

In the application of the laws of TB control, officials, lawyers, and reporters reified the image of the “recalcitrant” TB patient as worthy of punishment and containment, not treatment and care. This rhetoric reproduced the image of the “recalcitrant” TB patient, while the discriminatory impact of the laws meant that most people facing involuntary detention were non-white and low-income. Thus, the stereotype of the non-white, low-income, “recalcitrant” patient drove the creation of carceral logic-infused TB control policies, and the language used in the application of this carceral logic perpetuated this symbol. The symbol persisted, publicized by mug shots, news descriptions, and court summaries, further reinforcing support for punitive laws of containment, rather than of treatment and care.

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<sup>245</sup> See, for instance, Reitl’s description of Washington’s disruptive behavior: “[She was] agitated...kicking, screaming, yelling, and crying *ibid*.”

<sup>246</sup> See, for instance, the court’s discussion of M as the “architect of his own confinement” as well as his behavior as “foolish.” (“Appellant contests his confinement for treatment that not only improved his health, but saved his life. His recalcitrance was both foolish and selfish. By leaving isolation, appellant put the entire community at risk...The public health officer ‘bent over backwards’ to help him and safeguard the community...Appellant’s recalcitrance...is the obvious reason why the public health officer could not again trust appellant in a motel setting. Appellant was the architect of his own confinement.”) By calling M “foolish” and “selfish” while claiming that he put the entire community at risk, the court conjures an image of a poorly behaved child who does not know what is best for him. Simultaneously, with the phrase “architect,” the court makes clear that they believe M intentionally responsible for the situation. *Levin V. Adalberto M.*

### *IX. Alternative Paths*

Weaving carceral logic into public health strategies to control disease spread in the 1990s was far from novel. The Hebrew Bible speaks of quarantining individuals with skin diseases.<sup>247</sup> In AD 549, Byzantine emperor Justinian enacted a law mandating quarantine for people entering his empire from areas with plague.<sup>248</sup> Venice had similar laws in the late 14<sup>th</sup> century.<sup>249</sup> Foucault described French hospitals in 1657 as an example of mass incarceration of the poor.<sup>250</sup> More recently, in 1900 in the United States, a federal court struck down a racially discriminatory exercise of state “police power” when San Francisco quarantined 10,000 individuals of Chinese descent out of purported fear of bubonic plague.<sup>251</sup>

For centuries, medical professionals have struggled with questions of how to treat the “noncompliant” patient. A respiratory disease as serious as TB presents a real question of how to safeguard public health. And yet, despite the long history of policies infused with carceral logic, such logic need not be the only response. Public health research shows other means of TB control to be more effective. Given the limits incarceration poses on treatment and health, avoiding strategies of involuntary confinement, whenever possible, seem advisable.

Decarceration appears preferable, albeit only with accompanying safeguards. Russia, for instance, responded to the high rates of TB in its prison system by releasing TB patients, 10% of

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<sup>247</sup> Leviticus 13:1-8 See: God spoke to Moses and Aaron: “When someone has a swelling or a blister or a shiny spot on the skin that might signal a serious skin disease on the body, bring him to Aaron the priest or to one of his priest sons. The priest will examine the sore...If the hair in the sore has turned white and the sore appears more than skin deep, it is a serious skin disease and infectious...If the shiny spot on the skin is white but appears to be only on the surface and the hair has not turned white, the priest will quarantine the person for seven days. On the seventh day the priest will examine it again; if, in his judgment, the sore is the same and has not spread, the priest will keep him in quarantine for another seven days. On the seventh day the priest will examine him a second time.”

<sup>248</sup> Fidler, Gostin, and Markel, "Through the Quarantine Looking Glass."

<sup>249</sup> Ibid.

<sup>250</sup> Foucault, *Discipline and Punish: The Birth of the Prison*.

<sup>251</sup> *Jew Ho V. Williamson*, 103 F. 10, 26 (C.C.N.D. Cal. 1900), (1900).

whom have active TB, and more than 80% of whom have latent TB.<sup>252</sup> This decarceration, however, was implemented without ensuring adequate healthcare and housing would be available for formerly incarcerated individuals. As a result, decarceration actually caused TB to spread more broadly throughout the country and even globally.<sup>253</sup> Compassionate release policies (like those Russia supposedly pursued) must be designed to do more than simply reduce the financial burden of providing medical care to costly patients. Only when adequate healthcare is provided for these patients after their release in the community can responsible decarceration (or, in the case of quasi-incarceration, a shifting to out-patient treatment) contribute to more effective TB control. Such responsible decarceration laws might make sense both in the general correctional populations, and specifically for MDR-TB patients involuntarily detained.

Involuntary detention should be used only as last resort in response to a TB infection of an otherwise non-incarcerated individual. Despite the 1990s CDC recommendations, which urged states to exhaust all other less restrictive options before turning to involuntary detention, many state policies nevertheless pursued options most restrictive of the patient's dignity, liberty, and privacy. In Washington's case, for instance, the appellate court declared that Washington had no right to confinement in the facility least restrictive of her freedom. Criticizing detention as a first step, one public health official in Los Angeles criticized San Joaquin's "take-your-medicine-or-go-directly-to-jail approach," explaining that jail should never be the first response to someone who did not take their medicine.<sup>254</sup>

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<sup>252</sup> Reichman and Tanne, *Timebomb*, 53; Fred Weir, "Prison Reforms Aim to Free 350,000: Critics Fear Move to Ease Crowding in Jails May Saddle Community with Social Costs of Drugs and Violence Russia," *South China Morning Post*, Jan 11 2001.

<sup>253</sup> Reichman and Tanne, *Timebomb*.

<sup>254</sup> ("We're not supposed to be health Nazis....we [must] try very hard to exhaust all avenues before we jail someone.) Arax, "Policing the Tb Beat."

Even when absolutely necessary, detention conditions should resemble hospitals and treatment facilities, not prisons. Thus, patients must be treated, and more generally cared for, as a patient, not prisoner. This means individuals should have access to hospital amenities and freely decide whether or not to take additional non-TB-related medications. Involuntary detentions should not be used as an opportunity to collect fines and levy criminal charges against otherwise innocent patients for disruptive behavior while detained.<sup>255</sup> To be sure, this may limit the ability to punish behavior during such detentions, but it seems a reasonable accommodation that maintains the ultimate goal of detention to disease control and well-being at both the patient and population levels.

Apart from responsible decarceration and a commitment to exhausting all other less-restrictive options, other policies that might address MDR and XDR-TB require a more dramatic paradigm shift in conceptualizations of patient autonomy and public health. First, we should shift questions of “how to force compliance” to models that respect both physician advice and a reasonable amount of patient resistance.<sup>256</sup> Such models would emphasize negotiation and collaboration between health provider and patient and concentrate on the idea of “mutual persuasion.”<sup>257</sup> Ideally, such negotiations would generate individualized treatment plans, including testing of personal susceptibility to side-effects and efficacy of different antibiotics. Such plans may include incentives, counseling, and social support.<sup>258</sup> These individualized plans might also include connections between patients and community health workers with lived experiences similar to those of the patient (*e.g.*, a peer advocate with experience of

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<sup>255</sup> Gostin, "Controlling the Resurgent Tuberculosis Epidemic."

<sup>256</sup> Lerner, "From Careless Consumptives to Recalcitrant Patients: The Historical Construction of Noncompliance."

<sup>257</sup> *Ibid.*

<sup>258</sup> Gostin, "Controlling the Resurgent Tuberculosis Epidemic."

homelessness), rather than relying solely on a physician who may have a more limited understanding of the patient's particular circumstances.<sup>259</sup>

Second, and perhaps most importantly, primary prevention measures must be prioritized as a public health measure. This means that sound TB control policies should include funding comprehensive healthcare, housing, and social services. Structural factors predispose individuals to developing MDR-TB and hinder the ability of diagnosed patients to comply with treatment regimens. Indeed, some argue that anti-TB antibiotics themselves should be used only as a backup to these, more effective, primary forms of prevention.<sup>260</sup> Instead of relying on public health measures that criminalize and target individuals who have the disease, true infectious disease control requires measures that address the structural causes of TB.

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<sup>259</sup> Gostin, "Controlling the Resurgent Tuberculosis Epidemic."

<sup>260</sup> Wallace and Wallace, *A Plague on Your Houses*, 92. For instance, Wallace and Wallace explain that antibiotics can only work when individuals have access to extremely stable living conditions, and if DOT is used on every reported case. For this to work, every case must be identified and reported, which, especially in neighborhoods disrupted by social inequalities, is extremely difficult.



## X. *Conclusion*

MDR-TB policies of the 1990s must be understood not only as a public health apparatus, but also a component of a legacy of carceral state control over low-income non-white communities. Just as social welfare programs of the 1960s and drug policies of the 1970s and 80s proved to be contribute to social control, so too did policies of isolation, incarceration, and outpatient surveillance. Often surveillance and control overshadowed effective disease control, perhaps most insidiously by supplanting primary disease prevention measures, including sensible investment in social services and community infrastructure.

Counterproductive and damaging TB control laws continue to operate today. Even as MDR-TB rates dropped at the turn of the millennium, the image of the low-income, non-white “recalcitrant” patient persisted. Since Washington’s 2006 case, lawmakers sharpened the Wisconsin statute used to justify her detention to explicitly authorize involuntary detention in jail for tuberculosis patients.<sup>261</sup> Other TB control statutes, like those in California and New York, remain ambiguous, allowing involuntary detention in “appropriate locations.”<sup>262</sup> More generally, TB patients continue to be involuntarily detained by discretionary appeal to public health grounds.<sup>263</sup> Such policies supplant more effective and humane strategies of decarceration and other public health strategies that are not rooted in carceral logic, such as primary prevention measures of community reinvestment, and collaborative, individualized treatment plans.

Over the 20<sup>th</sup> century, cost concerns had shaped TB control policies. A primary argument for replacing sanatoriums and community support with pills charging cents on the dollar was the

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<sup>261</sup> *Wis. Stat.* § 252.07.

<sup>262</sup> 24 *R.C.N.Y* § 11.21; *California Health and Safety Code* § 120210.

<sup>263</sup> *In Re J.S.T.*

promised cost savings for cities.<sup>264</sup> Washington's case serves as an example: the court justified her confinement on the basis of tax-payer savings.<sup>265</sup>

And yet, carceral logic often made MDR-TB control policies extraordinarily expensive. Detention requires food, housing, and guard in addition to regular treatment cost.<sup>266</sup> Prisons and hospitals required ventilation technology and isolation units. DOT required clinics, and pill monitor programs needed staffing.<sup>267</sup> In short, policies shaped by carceral logic tend to require inordinate infrastructure investment. For example, in the 1990s, millions of dollars were devoted to fund jail and prison construction of ventilation units for TB patients.<sup>268</sup>

In the context of crime control in the 1960s, historian Naomi Murakawa explains that individuals with divergent goals coalesced to support funding new, more expansive carceral machinery.<sup>269</sup> In the context of TB policy, a similarly diverse set of goals—including aims to punish those who failed to finish their treatment, control the spread of TB, and social control of non-white communities—fueled policies that bolstered carceral machinery. As a result, those funds went to security, police, prisons, and jails, as opposed to primary prevention, direct treatment, or community-led initiatives.<sup>270</sup>

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<sup>264</sup> Reichman and Tanne, *Timebomb*, 40-41.

<sup>265</sup> ("The jail already has security. It would not cost our taxpayers any more") *City of Milwaukee V. Washington*, 292 Wis.2d 258, (2005).

<sup>266</sup> Specter, "Tb Carriers See Clash of Liberty and Health."

<sup>267</sup> Gostin, Burris, and Lazzarini, "The Law and the Public's Health: A Study of Infectious Disease Law in the United States."

<sup>268</sup> New York City spent millions of dollars on security guards and secure facilities. Wallace and Wallace, *A Plague on Your Houses*. Specter, "Tb Carriers See Clash of Liberty and Health." San Joaquin County created a new jail equipped specifically to deal with patients. ("[T]he new 750-bed jail has been equipped with five cells for highly contagious inmates.) Arax, "Policing the Tb Beat." And Hennepin County, Minnesota built "state-of-the-art" facilities for containing communicable diseases. David Hutchinson, "Covid-19 in Jail News," Hennepin County Sheriff, <https://www.hennepinsheriff.org/jail-warrants/jail-information/COVID-19>.

<sup>269</sup> N. Murakawa, *The First Civil Right: How Liberals Built Prison America* (Oxford University Press, 2014), 70.

<sup>270</sup> Committee On Government Operations House Of Representatives, *Tuberculosis in New York City: An Epidemic Returns*, first, December 18 1991. Specter, "Tb Carriers See Clash of Liberty and Health."

Regardless of origin or intended purpose, the creation of carceral machinery through disease control shifted the responsibility of treating low-income communities of color from hospitals, clinics, and public health workers to correctional institutions, prison guards, and police. As a result of these policies and infrastructure, infectious disease treatment—for years to come—will be provided in places where the goals of the carceral state and the fundamental objectives of public health inevitably conflict.<sup>271</sup> Having embraced this logic means that infectious disease control has become part of the U.S. disciplinary society more broadly, and especially of public social control of poor, non-white subpopulations.

The lessons of the MDR-TB outbreak therefore remain acutely relevant as public health officials combat COVID-19. To be sure, the politics of this disease are quite different, in large part because COVID-19 has impacted almost every community immediately, not just low-income non-white communities. And yet, perceptions of the infected here, too, differ significantly based on race. Perceptions of white patients tend to be generous: while criticized by left-leaning media, white patients who fail to comply with COVID-19-related public health measures, such as mask-mandates, are often described as Americans invoking their freedom, not as dangerous “public health menaces” who must be incarcerated.<sup>272</sup> By contrast, non-white patients who refuse to comply, often find themselves disproportionately and aggressively targeted by law enforcement.<sup>273</sup> Meanwhile, non-white patients who *do* comply, particularly,

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<sup>271</sup> Gandy and Zumla, *The Return of the White Plague*, 189.

<sup>272</sup> Marcie Bianco, "Covid-19 Mask Mandates in Wisconsin and Elsewhere Spark 'My Body, My Choice' Hypocrisy," *NBC News*, August 3 2020.

<sup>273</sup> Steve Chaplin, 2020, <https://www.acui.org/resources/bulletin/bulletin-detail/2020/08/04/up-in-the-air-campus-vary-on-masks-distancing-and-bias-enforcement>. Robert Gatter and Seema Mohapatra, "Covid-19 and the Conundrum of Mask Requirements," *Washington and Lee Law Review Online* 77, no. 1 (2020).

Black men, have been targeted by law enforcement for appearing to be “up-to-something” under their mask.<sup>274</sup>

There are further parallels between COVID-19 and the MDR-TB outbreak. In jails and prisons, for instance, limited capacity to isolate patients humanely has led correctional officials to rely on punitive strategies, such as solitary confinement, to control COVID-19. Such measures once again merge punishment with public health. Correctional officers punitively segregate incarcerated individuals who refuse to comply with masking or testing policies, disregarding that such punitive measures have terrible mental and physical health effects on these individuals. Just as in the MDR-TB era, correctional officials rely on quarantine and isolation more than treatment. If decarceration is not an option, a sounder approach would offer amenities, compassion, and treatment, while simultaneously using language of patient care rather than discipline to refer to, and care for, infected individuals as patients, even while they remain incarcerated for other reasons.

MDR-TB provides yet another lesson for the COVID-19 pandemic. As public health officials fret over variants of COVID-19, the 1990s MDR-TB outbreak reminds us that we disregard primary prevention at our peril. Even as tertiary COVID-19 control efforts are employed, and perhaps even necessary, we should nevertheless not lose sight of the structural disadvantage that left some communities disproportionately vulnerable to COVID-19 infection, morbidity, and mortality in the first place. Officials should best devise COVID-19 control policies with the MDR-TB epidemic in mind: policies must be individualized, not rely on containment or criminalization, and provide funding to address the social welfare conditions of housing,

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<sup>274</sup> Leah Christiani et al., "Masks and Racial Stereotypes in a Pandemic: The Case for Surgical Masks," *The Journal of Race, Ethnicity, and Politics* (2021). Gatter and Mohapatra, "Covid-19 and the Conundrum of Mask Requirements."

nutrition, substance use, and co-occurring infections that render some individuals particularly vulnerable to the disease.

The 1990s MDR-TB outbreak thus reveals that infectious disease control can easily slip into the realm of punitive social control, especially when it fails to engage with all levels of disease prevention. While tertiary prevention may seem most immediate and urgent in times of crisis, primary and secondary prevention must not be neglected. Especially a focus on primary prevention highlights how inequitable resource distribution and community investment renders some more vulnerable to disease. This disproportionate impact, in turn, can fuel policies that perpetuate inequality and harm within these communities, leaving risk factors intact. Perhaps most importantly, the 1990s MDR-TB epidemic teaches us that health policy must be critically and historically informed to reveal the structural causes of the disease, and to develop policies that address infectious disease and social inequality at once.

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## *Bibliography*

### **Primary Sources**

- 24 R.C.N.Y § 11.21: *Tuberculosis: Reporting, Examination, Treatment, Exclusion, Removal and Detention.*
- 42 U.S.C. §§ 264-272.
- "Action Urged on Complaints at Tb Hospital: Sanitarium Doctor Says Charges Are True." *Chicago Daily Tribune*, October 13 1945, 20.
- Advisory Council for the Elimination of Tuberculosis. "Prevention and Control of Tuberculosis in Correctional Facilities Recommendations of the Advisory Council for the Elimination of Tuberculosis " In *Morbidity and Mortality Weekly Report*, 1-27. Atlanta, GA: Centers for Disease Control and Prevention, 1996.
- . "Prevention and Control of Tuberculosis in Correctional Facilities Recommendations of the Advisory Council for the Elimination of Tuberculosis " In *Morbidity and Mortality Weekly Report (MMWR)*, 1-27. Atlanta, GA: Centers for Disease Control and Prevention, 1995.
- Alang, Sirry, Donna McAlpine, Ellen McCreedy, and Rachel Hardeman. "Police Brutality and Black Health: Setting the Agenda for Public Health Scholars." *Am J Public Health* 107, no. 5 (May 2017): 662-65.
- Allen, C. B. "Rocket Fuel Production Is Cut to Get Chemical for Tb Drugs." *New York Herald Tribune*, Mar 13 1952, 15.
- Alvarez, Walter C. "Dr. Alvarez Says: New Drug Is Only Partial Success." *Los Angeles Times*, Sep 28 1952, 32.
- Arax, Mark. "Policing the Tb Beat." *Los Angeles Times*, December 5 1994.
- Asnaani, Anu, J. Anthony Richey, Ruta Dimaita, Devon E. Hinton, and Stefan G. Hofmann. "A Cross-Ethnic Comparison of Lifetime Prevalence Rates of Anxiety Disorders." [In eng]. *J Nerv Ment Dis* 198, no. 8 (Aug 2010): 551-5.
- Barton, William S. "Careful Test Urged before Giving Antibiotics." *Los Angeles Times*, Dec 07 1955, 1.
- Bianco, Marcie. "Covid-19 Mask Mandates in Wisconsin and Elsewhere Spark 'My Body, My Choice' Hypocrisy." *NBC News*, August 3 2020.
- Boen, Courtney E. "Criminal Justice Contacts and Psychophysiological Functioning in Early Adulthood: Health Inequality in the Carceral State." [In eng]. *Journal of Health and Social Behavior* 61, no. 3 (Sep 2020): 290-306.
- Brinkley-Rubinstein, Lauren, and Terence Johnson. "Solitary Confinement and Health." *North Carolina Medical Journal* 80, no. 6 (2019): 359-60.
- California Health and Safety Code § 120210.*
- Capers, Quinn. "How Clinicians and Educators Can Mitigate Implicit Bias in Patient Care and Candidate Selection in Medical Education." [In eng]. *ATS Sch* 1, no. 3 (Jun 23 2020): 211-17.
- "Cdc Quarantines Tuberculosis Patient." *International Wire*, May 30 2007.
- "Cdc: Recalcitrant Tb Patients Should Be Forcibly Committed." *The Washington Post*, December 17 1993, A04.
- Centers for Disease Control. "Prevention and Control of Tuberculosis in U.S. Communities with at-Risk Minority Populations: Recommendations of the Advisory Council for the Elimination of Tuberculosis and Prevention and Control of Tuberculosis among

- Homeless Persons: Recommendations of the Advisory Council for the Elimination of Tuberculosis." Department of Health and Human Services, <https://www.cdc.gov/mmwr/preview/mmwrhtml/00019922.htm>.
- Chaplin, Steve. "Up in the Air: Campuses Vary on Masks, Distancing, and Bias Enforcement." Bloomington, Indiana: ACUI: Advancing Campus Community, 2020.
- Christiani, Leah, Christopher J. Clark, Steven Greene, Marc J. Hetherington, and Emily M. Wager. "Masks and Racial Stereotypes in a Pandemic: The Case for Surgical Masks." *The Journal of Race, Ethnicity, and Politics* (2021): 1-18.
- City of Milwaukee V. Ruby Washington Wi 104, (Affirming 2006 Wi App 99)*, 304 Wis.2d 98 (2007).
- City of Milwaukee V. Washington*, 292 Wis.2d 258, (2005).
- City of Newark V. J.S.*, 652 A.2d 265 (1993).
- Clark, Robert. "Some Tb Strains Now Resist 'Miracle Drugs'." *The Courier-Journal*, 1961, 57.
- Cohen, S., and G. M. Williamson. "Stress and Infectious Disease in Humans." [In eng]. *Psychol Bull* 109, no. 1 (Jan 1991): 5-24.
- Compagnie Francaise Et Al. V. Board of Health*, 186 U.S. 380 (1902).
- Cooper, L. A., D. L. Roter, K. A. Carson, M. C. Beach, J. A. Sabin, A. G. Greenwald, and T. S. Inui. "The Associations of Clinicians' Implicit Attitudes About Race with Medical Visit Communication and Patient Ratings of Interpersonal Care." [In eng]. *Am J Public Health* 102, no. 5 (May 2012): 979-87.
- Copeland, Larry. "City Talking Tough Steps against Tb." *Philadelphia Inquirer* March 20 1992.
- "Disposal." *Cincinnati Enquirer*, 1926 Jun 22 1926, 10.
- "Dunning Hospital Called Disgrace." *Chicago Daily Tribune*, August 3 1913, 7.
- City of Milwaukee v. Ruby Washington. In the Interest of Ruby Washington: The American Civil Liberties Union of Wisconsin Foundation Amicus Curiae Brief*, September 7 2006.
- "Election Booths Finally Discharged." *Philadelphia Inquirer*, January 28 1894, 1.
- Freeman, Lucy. "Restrained Hopes on Tb Drugs Urged." *New York Times*, April 22 1952, 31.
- Friedlandcranford, Sandra. "Waging a War on Drug-Resistant Tb: A Disease That Was '100% Preventable' Is on the Increase." *New York Times*, May 10 1992, 1.
- Galton, Lawrence. "When Wonder Drug Meets Wonder Bug." *New York Times*, Apr 08 1962, 3.
- Gatter, Robert, and Seema Mohapatra. "Covid-19 and the Conundrum of Mask Requirements." *Washington and Lee Law Review Online* 77, no. 1 (2020).
- Geiger, John. "The Truth About Tb." *New Journal and Guide*, Mar 28 1953, 24.
- "Georgia Sanitarium at Alto Is Praised: Committee Declares State Institution Was Found in Splendid Condition." *The Atlanta Constitution*, August 12 1919, 11.
- Gibbons, Roy. "'Miracle' Drug Fails to Prove It's Cure in Tb." *Chicago Daily Tribune*, Jul 18 1952, 1-b10.
- Gibbons V. Ogden*, 22 U.S. 1 (1824).
- Gifford, Elizabeth J. "How Incarceration Affects the Health of Communities and Families." *North Carolina Medical Journal* 80, no. 6 (2019): 372-75.
- Goodman, Walter. "Wonder Drugs: How Much Can You Believe?" *Redbook* 1960.
- Google. "Google Maps for Keenan Clinic: Milwaukee, Wi."
- Greene V. Edwards*, 164 W. Va. 326 (1980).
- "Group Warns on Tb Cures." *Arizona Republic*, Feb 25 1952, 4.

- Haar, Catharina, Frank G.J. Cobelens, Nico A. Kalisvaart, Jan J. van der Have, Paul J.H.J. van Gerven, and Dick van Soolingen. "Tuberculosis Drug Resistance and Hiv Infection, the Netherlands." *Emerging Infectious Diseases* 13, no. 5 (2007).
- Hall, William J., Mimi V. Chapman, Kent M. Lee, Yesenia M. Merino, Tainayah W. Thomas, B. Keith Payne, Eugenia Eng, Steven H. Day, and Tamera Coyne-Beasley. "Implicit Racial/Ethnic Bias among Health Care Professionals and Its Influence on Health Care Outcomes: A Systematic Review." *American Journal of Public Health* 105, no. 12 (2015): e60-e76.
- Haseltine, Nate. "Some of Deadliest Ills Defeated by Antibiotics." *The Washington Post and Times Herald* Oct 19 1956, 1.
- Herek, Gregory M., and John P. Capitanio. "Aids Stigma and Sexual Prejudice." *American Behavioral Scientist* 42, no. 7 (1999/04/01 1999): 1130-47.
- "House May Cut on Every Item." *The Atlanta Constitution*, Nov 29 1902.
- Hutchinson, David. "Covid-19 in Jail News." Hennepin County Sheriff, <https://www.hennepinsheriff.org/jail-warrants/jail-information/COVID-19>.  
*In Re J.S.T.*, 478 S.W.3d (2015).
- Jacobson V. Massachusetts*, 197 U.S. 11 (1905).
- Jew Ho V. Williamson*, 103 F. 10, 26 (C.C.N.D. Cal. 1900), (1900).
- Jordan, C.H. "Thoughts on Cachexia Africana or Negro Consumption." *Transylvania Journal of Medicine* 5 (1832).
- Kaplan, Morris. "Doctors Reassess Tb 'Miracle' Drug." *New York Times*, Feb 22 1962, 27.
- Kappers V. Dekalb County Bd. Of Health*, 214 Ga. App. 117 (1994).
- Karumbi, J., and P. Garner. "Directly Observed Therapy for Treating Tuberculosis." [In eng]. *Cochrane Database Syst Rev* 2015, no. 5 (May 29 2015): Cd003343.
- Kiazyk, S., and T. B. Ball. "Latent Tuberculosis Infection: An Overview." [In eng]. *Canada communicable disease report = Releve des maladies transmissibles au Canada* 43, no. 3-4 (2017): 62-66.
- Knox, Richard. "Arizona Tb Patient Jailed as a Public Health Menace." In *TB Patient Sparks Public Health Scare*, edited by Morning Edition: NPR, 2007.
- Laurence, William L. "New Drug Hailed as Gain in Tb Fight." *New York Times*, Dec 28 1952, 36.
- . "New Tb Drugs Are Revealed as Cheap Coal-Tar Synthetics." *New York Times*, Feb 22 1952, 1.
- . "New Tb Wonder Drug May Offer Cure for \$100." *The Atlanta Constitution*, Feb 22 1952, 17.
- . "Results Dramatic: New Wonder Drugs Seen Hope for Tb Victims." *The Globe and Mail*, Feb 22 1952, 1.
- Levin V. Adalberto M.*, 156 Cal. App. 4th 288 (2007).
- Londono Tobon, A., J. M. Flores, J. H. Taylor, I. Johnson, A. Landeros-Weisenberger, O. Aboiralor, V. J. Avila-Quintero, and M. H. Bloch. "Racial Implicit Associations in Psychiatric Diagnosis, Treatment, and Compliance Expectations." [In eng]. *Acad Psychiatry* 45, no. 1 (Feb 2021): 23-33.
- Maina, Ivy W., Tanisha D. Belton, Sara Ginzberg, Ajit Singh, and Tiffani J. Johnson. "A Decade of Studying Implicit Racial/Ethnic Bias in Healthcare Providers Using the Implicit Association Test." *Social Science & Medicine* 199 (2018/02/01/ 2018): 219-29.
- "Malden Man Lives in Tent." *Boston Daily Globe*, 1902, 9.



- "Man with Aids and Tb Confined to Home." *The Associated Press*, 1994.
- Moore V. Armstrong*, 149 So. 2d 36 (1963).
- Morbidity and Mortality Weekly Report*, Vol. 30, No. 21, June 5, 1981.
- National Center for Environmental Health. "Prevention." In *Picture of America: Our Health And Environment* Centers for Disease Control and Prevention, 2017.
- Navarro, Mireya. "Pill Monitors Make Sure Tb Patients Swallow: As Tb Spreads, New York City's Pill Monitors Make Sure Patients Swallow Forcing Patients to Finish Their Cure Is Called Crucial for Public Health." *New York Times*, Sep 5 1992, 1.
- Neill, John JO. "Guided Missiles to Fight Tuberculosis." *New York Herald Tribune*, Sep 14 1952, 1.
- Neimes V. Kien Chung Ta*, 985 S.W.2d 132 (1998).
- Nelson, Harry. "Officials Scramble to Deal with Resurgence of Tuberculosis." *Los Angeles Times*, July 9 1992, VYA5.
- Newton, Edmund. "The Invisible Foe: On the Trail of Tb Urban Ills Combine to Make Tuberculosis Tough to Beat Tuberculosis Cases in Long Beach 1986-1993." *Los Angeles Times*, 1994 Mar 17 1994, 5.
- Perez V. Lippold*, 32 Cal. 2d 711 (1948).
- "Powerful New Weapons Found in Fight on Disease, Death." *Daily Boston Globe*, Dec 31 1952, 9.
- Press, Associated. "County Uses Strong Medicine—Jail—to Enforce Tb Treatment." *Chicago Tribune*, November 27 1994, 4.
- Prevention, Centers for Disease Control and. "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health-Care Settings, 2005." In *Morbidity and Mortality Weekly Report*. Atlanta, GA, 2005.
- "Prisoners Cook Patients' Food at Tuberculosis Sanitarium." *Cincinnati Enquirer*, November 9 1916, 9.
- Public Health Law Program. "Public Health Emergency Law: Cdc Foundational Course for Front-Line Practitioners." U.S. Centers for Disease Control and Prevention, 2009.
- Quenard, F., P. E. Fournier, M. Drancourt, and P. Brouqui. "Role of Second-Line Injectable Antituberculosis Drugs in the Treatment of Mdr/Xdr Tuberculosis." [In eng]. *Int J Antimicrob Agents* 50, no. 2 (Aug 2017): 252-54.
- Ramanathan, Tara. "Menu of Suggested Provisions for State Tuberculosis Prevention and Control Laws: Appendix B. Selected State Tuberculosis Control Cases." Division of Tuberculosis Elimination, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, <https://www.cdc.gov/tb/programs/laws/menu/appendixb.htm>.
- Reinhart, E., and D. L. Chen. "Incarceration and Its Disseminations: Covid-19 Pandemic Lessons from Chicago's Cook County Jail." [In eng]. *Health Aff (Millwood)* 39, no. 8 (Aug 2020): 1412-18.
- Riccardi, Nicholas. "The Nation: The Man in the Leg Irons and Mask." *Los Angeles Times*, May 02 2007.
- Rowan, Carl. "Tb Wonder Drug Has Drawback." *Minneapolis Morning Tribune*, July 11 1952, 13.
- Sabin, J., B. A. Nosek, A. Greenwald, and F. P. Rivara. "Physicians' Implicit and Explicit Attitudes About Race by Md Race, Ethnicity, and Gender." [In eng]. *J Health Care Poor Underserved* 20, no. 3 (Aug 2009): 896-913.

- Sarkar, D., M. K. Jung, and H. J. Wang. "Alcohol and the Immune System." [In eng]. *Alcohol Res* 37, no. 2 (2015): 153-5.
- Shepherd, Glen. "No Miracle Cure for Tuberculosis." *The Washington Post*, 1953, 17.
- Souvannarath V. Hadden 95 Cal. App. 4th 7 (2002).
- Specter, Michael. "Tb Carriers See Clash of Liberty and Health." *New York Times*, 1992.
- Spingarn, Natalie Davis. "A Mother Asks About Tuberculosis." *Parents' Magazine & Family Home Guide*, Jun 1954 1954, 34-35, 69-70.
- St Leger, Anthony J., David M. Koelle, Paul R. Kinchington, and Georges Michel G. M. Verjans. "Local Immune Control of Latent Herpes Simplex Virus Type 1 in Ganglia of Mice and Man." [In eng]. *Frontiers in immunology* 12 (2021): 723809-09.
- Tanne, Janice Hopkins. "Q & a About Tb." *New York*, 1992 Mar 23 1992, 30.
- "Tb Death Rate Down, but Not Number of Cases." *The Gazette* Mar 21 1953, 3.
- "Tents to Be Pitched on Top of Building." *The Atlanta Constitution*, 1907, 14.
- "They Pitch Their Tents in the City." *Chicago Daily Tribune*, December 05 1909, 1.
- Committee On Government Operations House Of Representatives. *Tuberculosis in New York City: An Epidemic Returns*, first, December 18 1991.
- "Tuberculosis Is Put in Pillory." *Chicago Daily Tribune* December 10 1905.
- "Tuberculosis Patient Charged in Calif. For Not Taking Medication." *The Associated Press*, May 16 2012.
- Human Resources and Intergovernmental Relations Subcommittee of the Committee on Government Operations. *Tuberculosis: The Federal Failure*, Second, April 2 1992.
- Tuner, Marie, and Lee Reichman. "Should Noncompliant Tb Patients Be Held for Treatment?" *The Washington Post*, August 15 1995.
- Ubell, Earl. "The Anti-Tb Drugs 2 Years Later." *New York Herald Tribune*, Feb 07 1954, 1.
- . "It's 'Now or Never' for War to End Tb." *New York Herald Tribune*, Mar 2 1960, 24.
- Van Dellen, T.R. "How to Keep Well." *Cincinnati Enquirer*, October 20 1953, 7.
- van Ryn, Michelle, and Jane Burke. "The Effect of Patient Race and Socio-Economic Status on Physicians' Perceptions of Patients." *Social Science & Medicine* 50, no. 6 (2000/03/01/2000): 813-28.
- Vitek V. Jones*, 445 U.S. 480 (1980).
- Volmink, J., and P. Garner. "Directly Observed Therapy for Treating Tuberculosis." [In eng]. *Cochrane Database Syst Rev*, no. 2 (Apr 19 2006): Cd003343.
- W.K. "The Year in the Field of Medicine." *New York Times*, Dec 28 1952, 1.
- Weir, Fred. "Prison Reforms Aim to Free 350,000: Critics Fear Move to Ease Crowding in Jails May Saddle Community with Social Costs of Drugs and Violence Russia." *South China Morning Post*, Jan 11 2001, 16.
- Wildeman, C., and E. A. Wang. "Mass Incarceration, Public Health, and Widening Inequality in the USA." [In eng]. *Lancet* 389, no. 10077 (Apr 8 2017): 1464-74.
- Wis. Stat.* § 252.07.
- "Wonder Drugs May Widen Tb, Expert Warns." *Chicago Daily Tribune*, Nov 11 1955, 1-a3.

## Secondary Sources

- Aids and Tuberculosis: A Deadly Liasion*. Infection Biology Handbook Series. Wiley-VCH Verlag, 2009.
- Alexander, M. *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New Press, 2012.

- Ben-Moshe, Liat, Angela Y. Davis, Chris Chapman, and Allison Carey. *Disability Incarcerated: Imprisonment and Disability in the United States and Canada*. Palgrave Macmillan US, 2014.
- Brandt, A.M. *No Magic Bullet: A Social History of Venereal Disease in the United States since 1880*. Oxford University Press, 1985.
- Caraley, Demetrios. "Washington Abandons the Cities." *Political Science Quarterly* 107, no. 1 (1992): 1-30.
- Coker, R.J. *From Chaos to Coercion: Detention and the Control of Tuberculosis*. St. Martin's Press, 2000.
- Conaty, S. "Detention to Prevent Transmission of Tuberculosis: A Proportionate Public Health Response?" [In eng]. *N S W Public Health Bull* 23, no. 5-6 (May-Jun 2012): 120-1.
- Coyle, Michael J., and Mechthild Nagel. *Contesting Carceral Logic: Towards Abolitionist Futures*. New York: Routledge, 2021.
- Davis, A.Y. *Are Prisons Obsolete?* : Seven Stories Press, 2003.
- de Saussure, Ferdinand. *Course in General Linguistics*. Translated by Roy Harris. Open Court Classics, 1986.
- Draus, Paul J. *Consumed in the City: Observing Tuberculosis at Century's End*. Temple University Press, 2004.
- Feldman, Gabriel, Prem Srivastava, Edward Eden, and Thomas R. Frieden. "Detention until Cure as a Last Resort: New York City's Experience with Involuntary in-Hospital Civil Detention of Persistently Nonadherent Tuberculosis Patients." *Semin Respir Crit Care Med* 18, no. 05 (1997): 493-501.
- Fidler, David P., Lawrence O. Gostin, and Howard Markel. "Through the Quarantine Looking Glass: Drug-Resistant Tuberculosis and Public Health Governance, Law, and Ethics." *The Journal of Law, Medicine & Ethics* 35, no. 4 (2007): 616-28.
- "Fluoroquinolones." In *Livertox: Clinical and Research Information on Drug-Induced Liver Injury*. Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases, 2012.
- Foucault, M. *Discipline and Punish: The Birth of the Prison*. Knopf Doubleday Publishing Group, 1975.
- Gandy, M., and A. Zumla. *The Return of the White Plague: Global Poverty and the New Tuberculosis*. Verso Books, 2003.
- Goffman, Erving. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Taylor & Francis, 1961.
- Gonsalves, Gregg, and Peter Staley. "Panic, Paranoia, and Public Health — the Aids Epidemic's Lessons for Ebola." *New England Journal of Medicine* 371, no. 25 (2014): 2348-49.
- Goodman, Walter. "From the Sanitarium to Streptomycin: How Tb, a Public-Health Priority, Was Vanquished but Then Returned." *New York Times*, Oct 02 1995, 1.
- Gostin, L. O., S. Burris, and Z. Lazzarini. "The Law and the Public's Health: A Study of Infectious Disease Law in the United States." [In eng]. *Columbia Law Rev* 99, no. 1 (Jan 1999): 59-128.
- Gostin, Lawrence O. "Controlling the Resurgent Tuberculosis Epidemic: A 50-State Survey of Tb Statutes and Proposals for Reform." *JAMA* 269, no. 2 (1993): 255-61.
- Hinton, E. *From the War on Poverty to the War on Crime: The Making of Mass Incarceration in America*. Harvard University Press, 2016.

- Institute of Medicine, Division of Health Promotion and Disease Prevention, Committee to Study Outreach for Prenatal Care. *Prenatal Care: Reaching Mothers, Reaching Infants*. National Academies Press, 1985.
- Kanabus, Annabel. "Sanatorium: From the First to the Last." *Global Health Education*, [tbfacts.org/sanatorium/](http://tbfacts.org/sanatorium/).
- Karandinos, George, and Philippe Bourgois. "The Structural Violence of Hyperincarceration — a 44-Year-Old Man with Back Pain." *New England Journal of Medicine* 380, no. 3 (2019): 205-09.
- Kihss, Peter. "Benign Neglect' on Race Is Proposed by Moynihan." *The New York Times*, 1970.
- Lerner, Barron H. *Contagion and Confinement: Controlling Tuberculosis Along the Skid Road*. Johns Hopkins University Press, 1998.
- . "From Careless Consumptives to Recalcitrant Patients: The Historical Construction of Noncompliance." *Social Science & Medicine* 45, no. 9 (November 1 1997): 1423-31.
- Murakawa, N. *The First Civil Right: How Liberals Built Prison America*. Oxford University Press, 2014.
- Ott, K. *Fevered Lives: Tuberculosis in American Culture since 1870*. Harvard University Press, 1996.
- Parment, Wendy E. "Legal Power and Legal Rights — Isolation and Quarantine in the Case of Drug-Resistant Tuberculosis." *New England Journal of Medicine* 357, no. 5 (2007): 433-35.
- Reichman, L., and J.H. Tanne. *Timebomb: The Global Epidemic of Multi-Drug Resistant Tuberculosis*. McGraw-Hill Education, 2002.
- Reverby, Susan M. "Can There Be Acceptable Prison Health Care? Looking Back on the 1970s." *Public Health Reports* 134, no. 1 (2019/01/01 2018): 89-93.
- Roberts, Dorothy E. "Punishing Drug Addicts Who Have Babies: Women of Color, Equality, and the Right of Privacy." [In eng]. *Harv Law Rev* 104, no. 7 (May 1991): 1419-82.
- Rothman, S.M. *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in America*. Basic Books, 1994.
- Sensi, P. "History of the Development of Rifampin." *Reviews of Infectious Diseases* 5, no. Supplement\_3 (1983): S402-S06.
- Sze, Julie. *Noxious New York*. The MIT Press, 2006.
- Thompson, Heather Ann. "Why Mass Incarceration Matters: Rethinking Crisis, Decline, and Transformation in Postwar American History." *Journal of American History* 97, no. 3 (2010): 703-34.
- Tomes, Nancy. *The Gospel of Germs: Men, Women, and the Microbe in American Life*. Harvard University Press, 1999.
- Tone, A. *The Age of Anxiety: A History of America's Turbulent Affair with Tranquilizers*. Basic Books, 2009.
- Wacquant, Loïc. "Class, Race & Hyperincarceration in Revanchist America." *Daedalus* 139, no. 3 (2010): 74-90.
- Wallace, D., and R. Wallace. *A Plague on Your Houses: How New York Was Burned Down and National Public Health Crumbled*. Verso Books, 1998.
- Warner, John H. "The Doctor in Early Cold War America." [In eng]. *Lancet* 381, no. 9876 (Apr 27 2013): 1452-3.
- Weisberg, Emily. "Outbreak: The Legal Rights of a State in Controlling an Epidemic - City of Milwaukee V. Washington Case Comment." *J. Health & Biomedical L.* 4 (2008): 427.

Wilson, William Julius. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy, Second Edition*. University of Chicago Press, 1987.

### *Bibliographic Essay*

My thesis began with a quote: “We received a grant...for a tuberculosis unit because they were having civil commitments. This was 15, 20 years ago[.]”

It was early July, and I had been coding interviews in my sticky, unairconditioned New Haven sublet for hours. My head snapped up: A medical grant for a jail? Civil commitments? Tuberculosis? Only 15 years ago?

The quote was from a correctional officer, describing why his jail had unusually low COVID-19 case rates. I was reading the interview for my job at the SEICHE Center for Health and Justice, a Yale research group that seeks to understand the impact of incarceration on individual and community health. As a student researcher, I was investigating the impact of COVID-19 on incarcerated individuals, and how policies in different correctional facilities affected disease spread.

I was fascinated by this quote. Why would someone be incarcerated solely for having a disease? Having spent time in classes like Miriam Rich’s *Incarceration and Health*, Carolyn Roberts’s *Sickness and Health in African American History*, and Elizabeth Hinton’s *Urban Inequality Since Civil Rights*, I had long been interested in how the line(s) between care and treatment, and containment and punishment and been created, negotiated, and shifted, and who is caught on which side.

Further, I had always thought of tuberculosis as a disease of the past, controlled by antibiotics sometime in the 20<sup>th</sup> century. A quick Google search showed I was not alone. Many (white, middle-class) Americans believe that tuberculosis is mostly eradicated. In fact, TB is alive and well, surging through communities that have been historically subjected to policies of community disinvestment.

Inspired by the interview I read, I spoke with medical historical librarian Melissa Grafe, to see if we could find the court case responsible for the civil commitment of tuberculosis patients this century. But there my lead stopped. I never found a case about matching the interview from the summer.

Dr. Grafe, however, found a CDC webpage, documenting a series of court cases that had been pivotal in the formation of current U.S. tuberculosis law. I also worked with a law librarian Michael Vanderheijden, who taught me how to use legal databases to find other cases. Between those resources, as well as Proquest and Google Scholar, I quickly came to see that cases of civil commitment that made it to trial were only the tip of the iceberg. Historical newspapers, TV archives, National Public Radio, and blog posts, revealed numerous other examples of people who had been committed to both jails and hospitals for the treatment of their TB.

And so my research began. I spent the bulk of my first semester seeking examples of the practice (which I quickly learned from the secondary literature was called “involuntary detention:”) and categorizing different cases by where people were confined (hospital or jail), what symptoms or actions qualified them as candidates for detention, and when these cases occurred. I began to see patterns: the recurring image of the “recalcitrant” patient, the demographics of those who were detained, and the connections between community disinvestment and outbreaks of TB.

I dove into the secondary literature, including, critically for my own understanding, Katherine Ott’s *Fevered Lives*, an account of TB in the U.S. I learned that TB history is broadly separated by key pivot points: the discovery of the culprit bacteria, the rise of sanitariums, the discovery of antibiotics, and the resurgence of the multi-drug resistant form of the disease at the end of the 20th century.

Throughout, my focus remained on incarceration, and constitutively on what cultivated policies in the 1990s that prioritized containment over treatment and care.

I learned in my course with Dr. Marco Ramos (The History of Drugs and Addiction) that the term “noncompliance” developed during the 1950s so-called Golden Age of Medicine, a period of heightened medical authority and scientific optimism where doctors—and their orders—seemed infallible. I connected this idea to the images of the “recalcitrant” patient that spun through my primary sources. This approach cohered with primary discourse around the 1950s development of isoniazid, its reception, and the overconfidence that followed.

I then asked, where does antibiotic resistance actually come from? Why is it so difficult to treat? When I read Matthew Gandy and Alimuddin Zumla’s edited volume *The Return of the White Plague: Global Poverty and the “New” Tuberculosis*, I learned how antibiotics failed to address the root causes of TB. I learned from the book’s various essayists that antibiotic resistance is not solely attributable to “noncompliant” or “difficult” patients, but rather to doctors who overprescribe medications, social conditions that prevent individuals from taking medications, and public policies that had neglected low-income, non-white communities, thereby leaving these communities vulnerable to the rise and spread of TB.

Leaning on my second major (Molecular, Cellular, and Developmental Biology), I read scientific primary literature, investigating the limitations of TB antibiotics, mutation rate of the disease, and difference between latent and active forms of TB. I read about different methods of disease prevention, and, specifically, the difference between primary, secondary, and tertiary forms of prevention.

I learned that the specific biology of TB, which involves a transition from latent to active disease, compounds the connections between TB and inequality. Given the sharp difference in



immune response to latent and active TB, stressful events (for instance, eviction, poverty, incarceration, HIV/AIDS, etc.) plays a major role in the development of TB. The concentration of such events in low-income communities of color, a variety of secondary sources reasoned, might be one reason why TB is often (mistakenly) considered “caused” by those communities.

Now that I understood where MDR-TB had come from, and why it had plagued some communities more than others, I could turn to my second question. Why had the U.S. turned largely to carceral policies?

I turned to sociology. During my time at Yale, I took two courses with Professor Julia Adams, and learned about a wide variety of thinkers, a few of whom influenced my answer to this question.

To connect infectious disease control with ideas of containment and punishment, I drew on Michel Foucault, who theorizes how surveillance and biopolitics, particularly in times of public health crises, contribute to state power. I also thought about ideas of state power more broadly, drawing on the work of Angela Davis and Ruth Wilson Gilmore to see how the logic of TB control policies might contribute more broadly to the structures of the carceral state that they describe.

To understand the similarities between the conditions of involuntary detention in hospitals and prisons, I drew in Erving Goffman, who discusses the role of institutions that confine individuals who have not committed any crime (asylums). Goffman compares these institutions to prisons. While reading Goffman, I began to think about how to describe the similarities I was seeing between involuntary detention in different institutions, surveillance in other TB therapies (like pill monitors and directly observed therapy), and the connection between clinics and hospitals and police departments. I began playing with the word “quasi-incarceration”

to describe detention in hospitals and non-correctional settings under conditions that resembled those of incarceration, and the phrase “carceral logic” to connect the ideas of criminalization, social control, surveillance, and confinement that seemed to be key components of each of the MDR-TB policies.

Finally, I thought about linguist Ferdinand de Saussure, who described language as a formal system, which could be investigated and analyzed. While Saussure takes a backseat in my paper, I applied Saussure’s analysis, particularly his ideas about the sign to the idea of the “recalcitrant” patient.

While there was ample theory to use as foundation, the limitations of data became apparent as I began writing. Few secondary sources connect these different moments in TB history with theories of social control, the carceral state, and symbol creation. Most accounts that connect urban disinvestment to MDR-TB stopped with the early 1990s. Those that discussed involuntary confinement discussed just hospital detention or sanitarium detention, rather than detention in jails and prisons, and without analyzing the similarities between detention in different locations. Numerous sources discussed the legal application of different detention measures and how these relate to individual rights, but rarely connected these ideas with the science of effective disease prevention and control.

So I brought each of these ideas together. Drawing on my biology background and interest in clear scientific communication, I explained the biology of TB, and specifically, why those who experience social stress are particularly vulnerable to active infection. I talked about different periods of TB control in the 20th century, focusing on three main eras: the sanitariums (which I think of as the prequel, emblemizing the care-to-criminalization pipeline I identified in later eras); the “Wonder Drug Era” (when the symbol of the “recalcitrant” patient was born);

the years of fiscal conservatism where TB risk factors were concentrated in low income communities of color); and finally, the 1990s MDR-TB era, where the harms of prior eras combined to create systems of public health containment.

After presenting a draft paper at a SEICHE lab meeting, my co-workers recommended that I think about practical alternatives. I dove into scientific literature and policy proposals, coming up with suggestions combining my findings with SEICHE ideas of community-based health care.

I ended the paper with a connection to COVID-19, specifically connecting the carceral logic of the MDR-TB policies to the use of isolation in correctional institutions as both a COVID control mechanism and a punishment for disobeying COVID policies.

And so, I ended where I started, with COVID in prisons, but with a new understanding of the source of policies of containment and punishment to treat infectious disease, and more importantly, what policies we could be using instead.

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