Fordham Urban Law Journal

Volume 20 | Number 3 Article 7

1993

Jails and Prisons -- Reservoirs of TB Disease: Should Defendants with HIV Infection (Who Cannot Swim) Be Thrown into the Reservoir?

Faith Colangelo Pace University School of Law

Mariana Hogan New York Law School

Follow this and additional works at: https://ir.lawnet.fordham.edu/ulj



Part of the Criminal Law Commons

Recommended Citation

Faith Colangelo and Mariana Hogan, Jails and Prisons -- Reservoirs of TB Disease: Should Defendants with HIV Infection (Who Cannot Swim) Be Thrown into the Reservoir?, 20 Fordham Urb. L.J. 467 (1993). Available at: https://ir.lawnet.fordham.edu/ulj/vol20/iss3/7

This Article is brought to you for free and open access by FLASH: The Fordham Law Archive of Scholarship and History. It has been accepted for inclusion in Fordham Urban Law Journal by an authorized editor of FLASH: The Fordham Law Archive of Scholarship and History. For more information, please contact tmelnick@law.fordham.edu.

JAILS AND PRISONS — RESERVOIRS OF TB DISEASE: SHOULD DEFENDANTS WITH HIV INFECTION (WHO CANNOT SWIM) BE THROWN INTO THE RESERVOIR?

Faith Colangelo* and Mariana Hogan**

I. Introduction

It is not surprising that the resurgence of tuberculosis (TB) in urban areas has direct and alarming consequences within the criminal justice system. Lock-up facilities, jails and prisons are TB breeding grounds. It has been well established that TB strikes in populations that are minority, poor, homeless or living in overcrowded and/or unsanitary conditions. TB strikes with equal vengeance in populations with physical vulnerabilities caused by alcoholism, drug addiction, malnutrition, Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) and other immune-suppressing conditions. These are the same populations that are overrepresented in the criminal justice system.

Between 1980 and 1990 the number of reported cases of TB in New

^{*} Private practitioner specializing in criminal defense in federal district courts; formerly Associate Professor of Law, Pace University School of Law; B.A. Boston University, 1968; J.D. Brooklyn Law School, 1974.

^{**} Adjunct Professor, New York Law School; A.B., Brown University, 1976; J.D., Georgetown University, 1979.

^{1.} M. Miles Braun et al., Increasing Incidence of Tuberculosis in a Prison Inmate Population, 261 JAMA 393 (1989); THE NEW YORK CITY TASK FORCE ON TUBERCULOSIS IN THE CRIMINAL JUSTICE SYSTEM, FINAL REPORT 11-12 (1992) [hereinafter REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM]. See also, Tuberculosis: Hearings before the Subcomm. on Human Resources and Intergovernmental Relations of the Government Operations Comm., 101st Cong., 2nd Sess. 5 (1991) (testimony of Dr. Margaret A. Hamburg).

^{2.} REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1 at 11-12. Tuberculosis is a disease of poverty, social alienation, crowding, and homelessness. The epidemic will not abate until increasing proportions of the population have sufficient income to live decently and receive sufficient education to support themselves in our communities. HIV infection in New York occurs predominantly among drug using people. Drug use is preventable, drug treatment can be effective, and prisons are an expensive distraction in the march against drug use; too expensive for our society, where the costs of incarceration are high in human terms, in addition to fiscal.

TB Behind Bars: Hearings Before the Joint Assembly Committees on Correction and Health, 214th Gen. Assembly, 2d Reg. Sess. 2 (N.Y. 1992) (testimony of Robert Greifinger, M.D.).

York City rose 135%.³ The incidence of TB in urban areas is further magnified in the criminal justice system, particularly in holding pens, lock-ups, prisons and jails.⁴ The Centers for Disease Control estimate that TB cases occur at least three times more often in correctional settings than in the general population; in larger correctional systems the incidence rate may be as much as six to eleven times the normal rate.⁵ This trend is most alarming when coupled with the HIV epidemic.

People with HIV are particularly susceptible to contracting TB because they lack a healthy immune system.⁶ To further complicate matters, some newer strains of TB are resistant to many conventional drug treatments. These multiple-drug resistant tuberculosis (MDR TB) strains are also prevalent in correctional systems.⁷ The threat of MDR TB is particularly alarming for persons with HIV infection. More than 90% of those who recently developed active MDR TB disease in four of the New York City hospitals studied were HIV-infected, and more than 80% of those persons died within four to sixteen weeks of their TB diagnosis.⁸

The confluence of the HIV epidemic, the resurgence of TB and the appearance of MDR TB present unsurmountable problems for the criminal justice system.⁹ This Essay focuses on the problem: Is justice

- 3. REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1, at 10.
- 4. REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1, at 11-12. The alarmingly high TB prevalence in New York City's correctional system is due to the over-representation in the criminal justice system of populations at high risk for contracting TB: individuals who are infected with HIV, substance abusers, individuals with poor health status, inadequate housing or who are homeless. In addition, environmental conditions that facilitate the spread of TB are endemic throughout the system—crowding in jails, congregate housing and holding areas; poor ventilation; and rapid movement.

Id.

- 5. CENTERS FOR DISEASE CONTROL, U.S. DEP'T OF HEALTH & HUMAN SERV., CONTROL OF TUBERCULOSIS IN CORRECTIONAL FACILITIES A GUIDE FOR HEALTH CARE WORKERS [hereinafter Control of TB in Correctional Facilities].
- 6. Charles L. Daley, M.D. et al., An Outbreak of Tuberculosis with Accelerated Progression Among Persons Infected with the Human Immunodeficiency Virus, 326 New Eng. J. Med. 231 (1992).
- 7. See generally, William Gaunay, New York State Comm'n of Correction, An Outbreak of Multiple Drug Resistant Tuberculosis Among New York State Correctional Facility Inmates (1992) [hereinafter Gaunay, MDR TB Outbreak Report Among Inmates].
- 8. Nosocomial Transmission of Multidrug-Resistant Tuberculosis Among HIV-Infected Persons Florida and New York, 1988-1991, 40 MORBIDITY & MORTALITY WKLY. REP. 585-87 (1991) [hereinafter MDR TB Among HIV Infected in Florida and New York].
- 9. Elisabeth Rosenthal, *Doctors Warn of Looming TB Threat*, N.Y. TIMES, Nov. 16, 1991, at A22. "The spread of the disease (MDR-TB) 'will be devastating,' said Dr.

served by sentencing a person with a compromised immune system to a term of incarceration where there is a significant risk of exposing the defendant to a deadly disease?

Many factors lead to the conclusion that alternatives to incarceration are necessary for certain individuals with HIV infection. These include: (1) the difficulties of detection and treatment of TB and MDR TB in HIV-infected individuals; (2) the physical conditions that facilitate transmission of TB in prison; (3) the overrepresentation in prisons of people with high risk factors for HIV infection and their particular susceptibility to TB;¹⁰ (4) the burgeoning costs of TB treatment in prisons; and (5) the deadly effects of the disease in persons with HIV-immunosuppression.

Plea bargaining and sentencing restrictions in the New York State Penal Law¹¹ and Criminal Procedure Law¹² limit the alternatives judges, prosecutors and defense attorneys have in fashioning appropriate dispositions for people who are terminally ill or at high risk for contracting a terminal illness in prison. The result is that a portion of the defendants who would otherwise be appropriately sentenced to alternatives to incarceration (thus allowing them to get medical care that is infinitely less costly, in a nonincarcerative setting)¹³ are sentenced to prison.

It is time for New York State to reevaluate the mandatory sentenc-

Michael Iseman of the National Jewish Center for Immunology and Infectious Diseases, the country's leading experts [sic] on resistant TB. 'We'll see lethal outcomes and massive epidemics — particularly in shelters, hospitals, AIDS hospices and prisons. It has all the makings of a tragedy.'" Id.

There are many civil cases pending where courts have recognized the particular dangers of the TB epidemic in institutional settings: Mixon v. Grinker, 556 N.Y.S.2d 855 (App. Div. 1990) (suit brought by homeless persons with HIV illness for the right to safe housing outside TB infested shelters); Vega v. Sielaff, No. 92 Civ. 6475, 1992 U.S. Dist. LEXIS 5249 (S.D.N.Y. Apr. 22, 1992) (suit that has resulted in construction of a court ordered Contagious Disease Unit on Rikers Island in response to TB contagion); Grubbs v. Brown, No. 92 Civ. 2132 (S.D.N.Y.) (suit brought by pre-arraignment detainees for the unhealthy, inhumane, degrading and unequal conditions of confinement in police precincts, booking facilities, and courthouse pens); Austin v. Pennsylvania Dep't of Corrections, Civ. No. 90-7497, 1992 U.S. Dist. LEXIS 14971 (E.D. Pa. Sept. 29, 1992) (injunction ordering the Pennsylvania Department of Corrections to develop and implement better control and treatment measures to decrease inmates' imminent risk of TB infection). While we applaud improvement of the conditions that contribute to the TB epidemic the medical evidence and the sociological context of prisons make eradication of TB risks impossible.

- 10. Daley, supra note 6, at 231.
- 11. N.Y. PENAL LAW § 70 (McKinney 1987).
- 12. N.Y. CRIM. PROC. LAW § 220.10 (McKinney 1992).
- 13. Telephone Interview with Robert Greifinger, M.D., Deputy Commissioner, Chief Medical Officer, New York State Department of Correctional Services (October 10, 1992). According to Dr. Greifinger, the following are rough estimates of inmate hospitali-

ing laws and restrictions on plea bargaining. The interaction of HIV disease and TB offers a striking example of why justice is not served by binding the judiciary's hands.

Part II of this Essay provides a medical overview of HIV infection and TB and their ominous interaction. It outlines the scope and implications of these two epidemics for criminal defendants entering the prison system. Part III of this Essay discusses the legal limitations facing judges and practitioners who are trying to justly adjudicate criminal cases in New York State, and offers strategies for maximizing the flexibility of a flawed system.

II. Medical Overview

A. Stages of HIV Illness

HIV is a virus that attacks and progressively damages the human body's immune system. This gradual destruction is usually marked by steady reduction of an important lymphocyte cell, the CD4+ T-lymphocyte.¹⁴ These cells normally prevent infectious diseases from taking hold by stimulating the blood system's cellular defenses.¹⁵ As

zation costs in New York State prisons. These costs do not include drug therapy costs at the institution or screening and follow-up costs at each facility.

Inmate hospitalizations are divided into those occurring in secured wards and those in unsecured wards. The estimates that follow are predicated on the following assumptions:

- 1. One "bed day" equals the cost of one hospital bed used for a twenty-four hour period.
 - 2. A "secured ward" is a prison ward in a hospital.
- 3. An "unsecured ward" is a regular hospital ward where security guards must keep guard and there are no special locks for securing inmates/patients.
- 4. 40% of the hospitalizations in New York State Department of Correctional Services are in unsecured hospital wards.
- 5. A security officer's salary is \$39,600 base salary including benefits, the hourly rate for an officer is at a minimum, \$20.00.

A secured ward hospitalization of an inmate would cost The Department of Correctional Services \$1,500 per day. (\$1,000 per day for the hospital bed and \$500 per day for one security officer per patient per day). An unsecured ward needs two security officers, therefore \$2,000 per day.

A person in custody is not entitled to 50% Federal reimbursement under Medicaid. New York State pays 100% of an inmate's health costs.

A hospitalization for a patient with TB disease is roughly 14 to 30 days. Each inmate who develops active TB while incarcerated and who needs to be hospitalized costs the State of New York between \$21,000 and \$60,000.

A similarly situated person on public assistance in the community would cost the State and City roughly \$7,000 to \$15,000 in hospital costs.

Assuming 150 inmates need hospitalization for TB treatment in 1992 the cost to New York State ranges from a low of \$3,150,000. to a high of \$9 million.

14. C. EVERETT KOOP, SURGEON GENERAL'S REPORT ON ACQUIRED IMMUNE DE-FICIENCY SYNDROME 1, 10, 26 (1986).

15. *Id*.

the immune system is progressively destroyed the body becomes increasingly vulnerable to a variety of infections it once could defend against.¹⁶

Once infected with HIV, a person will usually have no symptoms for several years. While the virus is taking hold, but before it has destroyed the immune system, a variety of symptoms begin to develop: night sweats and prolonged fevers, severe diarrhea, weight loss and fatigue. At this stage the person is vulnerable to a variety of infections, including bacterial pneumonias, cervical cancer and pulmonary tuberculosis.¹⁷ These infections have serious and often fatal consequences to those who are HIV-infected.¹⁸

If a person with HIV infection evades or overcomes the more common bacterial infections the illness will progress until an "opportunistic" infection such as Kaposi's sarcoma or pneumocystis carinii pneumonia (pcp) develops. Once a person with HIV infection gets an "opportunistic" infection, a diagnosis of full blown AIDS can be made. Many people with HIV die before they ever get an "AIDS" diagnosis.¹⁹

Because of the high prevalence of certain more common illnesses in HIV-infected persons, and the severe medical consequences of these combinations, the Centers for Disease Control have proposed adding pulmonary TB, cervical cancer and recurrent bacterial pneumonia to the list of "indicator" illnesses defining AIDS.²⁰

The length of time from infection until the onset of symptoms is highly variable, and depends on such factors as an individual's overall health, diet and access to medical care. Additionally, the life expectancy of an HIV-infected individual is affected by a number of variables, including, race, age, medication and whether one is incarcerated or living in the community.

^{16.} Human Immunodeficiency Infection in the United States, 36 MORBIDITY & MORTALITY WKLY. REP. 801 (1987).

^{17.} CENTERS FOR DISEASE CONTROL, U.S. DEP'T OF HEALTH & HUMAN SERV. ADDENDUM TO THE PROPOSED EXPANSION OF THE AIDS SURVEILLANCE CASE DEFINITION 2 (1992) [hereinafter Addendum to the Proposed Expansion of the AIDS SURVEILLANCE CASE DEFINITION].

^{18.} Id. See also, Joint Subcomm. on AIDS in the Criminal Justice System, Association of the Bar of the City of New York, AIDS in the Criminal Justice System: Final Report and Recommendations 14 (1989) [hereinafter NYC Bar Ass'n AIDS Report].

^{19.} NYC BAR ASS'N AIDS REPORT, supra note 18, at 20-21.

^{20.} Letter from James W. Curran, M.D., M.P.W., Assistant Surgeon General, U.S. Dep't of Health & Human Serv. to Public Health Officials (Oct. 23, 1992) (on file with author); ADDENDUM TO THE PROPOSED EXPANSION OF THE AIDS SURVEILLANCE CASE DEFINITION, *supra* note 17, at 4, 5, 7.

B. Tuberculosis²¹ — The Difference Between Latent Tuberculosis Infection and Active Tuberculosis Disease

Pulmonary TB is caused by a bacterium, mycobacterium tuberculosis, that lodges in the lungs.²² If the bacterium is not controlled by medication or the body's immune system, it breeds, causing active TB disease. The tubercle bacilli multiply and kill lung tissue, causing uncontrollable coughing, fevers, and eventually death.²³

TB is transmitted when a person with active, contagious TB disease coughs the bacilli into the air and the air is inhaled by another person. The bacteria multiply in the lungs for a short time before a healthy body's defenses surround and contain it. The bacilli may remain settled in the lungs in a dormant state for weeks, months or years. This condition of latent TB bacilli in the lung is termed TB infection. The healthy person with latent TB infection will probably always test "positive" for TB²⁴ but will usually not become sick, develop any symptoms of active TB, or be contagious.²⁵

TB disease is a highly communicable,26 opportunistic disease which

Tuberculin skin test. The Mantoux technique (intradermal injection of 0.1 ml of purified protein derivative (PPD) containing 5 tuberculin units (TU) should be used as a diagnostic aid to detect tuberculous infection. Although tuberculin skin tests are <100% sensitive and specific for detection of infection with M. tuberculosis, no better diagnostic method has been devised. Tuberculin skin tests should be interpreted according to current guidelines (footnotes omitted). for persons with HIV infection, a reaction of >5 mm is considered positive.

Id.

^{21.} For purposes of this Essay from this point on when we refer to tuberculosis we are referring to pulmonary tuberculosis.

^{22.} CONTROL OF TB IN CORRECTIONAL FACILITIES, supra note 5, at 3-4.

^{23.} Elisabeth Rosenthal, Doctors and Patients Are Pushed to Their Limits by Grim New TB, N.Y. TIMES, Oct. 12, 1992, at A1, B2.

^{24.} See Samuel W. Dooley, Jr. et al., Guidelines for Preventing the Transmission of Tuberculosis in Health-Care Settings, with Special Focus on HIV-Related Issues, 39 MORBIDITY & MORTALITY WKLY. REP. 5 (1990) [hereinafter Preventing TB in Health-Care Settings]. The skin test for latent tuberculosis infection that is referred to throughout this Essay is called the "Mantoux skin test" and the "PPD test." It is defined as follows:

^{25.} CONTROL OF TB IN CORRECTIONAL FACILITIES, supra note 5, at 4. "A person who has TB infection without disease: cannot spread infection to others; is not considered a case of TB; usually has a negative chest x-ray and no symptoms of TB; but DOEs have TB bacteria in his or her body that remain capable of causing disease at any time later in life." Id. Usually the only evidence of TB infection is a positive reaction to the Mantoux tuberculin skin test.

^{26.} Preventing TB in Health-Care Settings, supra note 24, at 3. M. tuberculosis, a bacilli, is carried in airborne particles, known as droplet nuclei, that can be generated when persons with pulmonary or laryngeal tuberculosis disease sneeze, cough, speak or sing. The TB bacilli, Mycobacterium tuberculosis, can infect any part of the body. People that are most capable of spreading the disease are those with pulmonary, laryngeal tuberculosis disease and those with TB disease in the respiratory tract or oral cavity. Infection is caused primarily by breathing in the droplet nuclei. "The [droplet nuclei] particles are so

develops when a TB-infected individual's health breaks down and the once latent TB bacteria activate and grow.²⁷ For a small proportion (3% to 5%) of newly infected persons initial infection progresses to TB disease (progressive primary disease) within a year. Another 3% to 5% group will develop TB disease at some point in their life when the once contained and latent bacteria begin to replicate and produce disease (reactivation disease).²⁸ However, this is not the clinical picture for a person with HIV-immunosuppression.

For persons infected with HIV who are exposed to TB or who have latent TB infection, the statistical profile for developing active, contagious disease is far worse. HIV infection progressively inhibits the body's ability to ward off TB all together, or to contain it in a latent state; therefore, a person who is HIV-immunosuppressed is much more likely to develop active, contagious TB disease and develop it more rapidly.

In one study of thirty residents of a housing facility for HIV-infected persons exposed to TB, active tuberculosis disease developed in eleven (37%), and four others (13%) had newly positive tuberculin skin tests indicating latent TB infection.²⁹ The total duration of the outbreak was 106 days and in one patient disease developed within four weeks.³⁰ This study demonstrates that persons with HIV infection who are initially exposed to TB have a high risk of rapid progression to active TB disease.

C. HIV Infection Undermines the Effectiveness of Tuberculosis Detection, Treatment and Prevention/Infection Control

The three prongs of TB control are detection, treatment and prevention/infection control. The protocols for TB screening and treatment are generally effective for persons with healthy immune systems. However, for persons with HIV-immunosuppression, the difficulties in screening for latent TB infection and the inability to diagnose and treat active, contagious TB disease have become life-threatening. The added and more frightening consequences of the recent outbreaks of drug resistant TB strains has awakened the terror of the original

small (1-5 microns) that normal air currents keep them airborne and can spread them throughout a room or building." *Id.* Infection "occurs when a person inhales droplet nuclei containing *M. tuberculosis*, and bacilli become established in the alveoli of the lungs and spread throughout the body." *Id.*

^{27.} CONTROL OF TB IN CORRECTIONAL FACILITIES, supra note 5, at 4.

^{28.} Daley, supra note 6, at 235.

^{29.} Id at 234.

^{30.} Id. at 235.

"white plague" of the early 1900s.31

1. Detection of Latent Tuberculosis Infection

Diagnosing latent TB infection is generally accomplished by a skin test. The skin test recommended in protocols for screening is the Mantoux skin test, also know as the PPD test.³² A small amount of killed tubercle bacilli is injected in the skin usually on the inner forearm. After forty-eight to seventy-two hours, a person with a healthy immune system who has TB infection will have a reaction, usually swelling and redness around the injection site. The reaction is then measured in millimeters.³³

Because the test is predicated on the ability of the body to mount an immune reaction to the dead TB bacilli, the test is not effective in screening latent TB infection in persons with a compromised immune system. In HIV-immunosuppressed individuals with latent TB infection, a failure to react to the PPD test is called "anergy." In addition, a negative skin test, (small or no reaction) does not rule out latent TB infection.³⁴ False-negative results are more likely in an HIV-infected

31. Rorie Sherman, TB Hysteria, Repeated?, NAT. L. J., June 29, 1992, at 1. When the century was still young and the discovery that tuberculosis was caught, not inherited, was still new, public health officials launched a crusade to contain the lethal contagion then known as 'The White Plague.'

The most drastic measures, adopted in New York, Boston and elsewhere, enabled officials to cart away anyone suspected of having TB, involuntarily and without judicial hearings, to sanatoriums for indefinite stays.

Id. See also, Sheila M. Rothman, The Sanitorium Experience: Myths and Realities, in United Hospital Fund of New York, A Special Report, The Tuberculosis Revival: Individual Rights and Societal Obligations in a Time of AIDS 67 (1992).

Tuberculosis was the leading cause of death throughout the nineteenth century. From 1800 to 1850, it accounted for 25 percent of all deaths, and it was a social leveler, affecting the well-born and renowned as well as the poor. In 1852, for example, when Franklin Pierce was elected president, his wife Jane probably had the disease (indeed, almost all her family had succumbed to it), the newly elected vice president was in Cuba in search of a cure (he was sworn in there but died before he could assume office), and the secretary of state's son was in the last stage of the disease.

Id.

- 32. Preventing TB in Health-Care Settings, supra, note 24, at 5.
- 33. Id.

^{34.} Peter A. Selwyn, M.D. et al., A Prospective Study of the Risk of Tuberculosis Among Intravenous Drug Users with Human Immunodeficiency Virus Infection, 320 NEW ENG. J. MED. 9 (1989). Selwyn suggests that since 27% of his population of HIV-sero-positive subjects were anergic on multiple-antigen skin testing there may have been some degree of underdetection of latent tuberculous infection among these subjects. See also Neil M.H. Graham, M.D. et al., Prevalence of Tuberculin Positivity and Skin Test Anergy in HIV-1-Seropositive and -Seronegative Intravenous Drug Users, 267 JAMA 369-373 (1992). This study indicates the difficulty in reading PPD test reactions of HIV-infected

individual and the chances for such false results increase as HIV disease progresses.³⁵

2. Diagnosis of Active, Contagious Tuberculosis Disease

No screening test is available for the early detection of active, contagious TB disease. Chest x-rays in immunologically healthy individuals with TB disease will normally show "cavities" and other radiological signs to enable a physician to diagnose active, contagious TB disease.³⁶ In HIV-immunosuppressed individuals these signs are not usually present and the x-rays are not as predictive of an active, contagious case of TB disease.³⁷

TB disease diagnosis can only be confirmed by obtaining a bacteriological specimen, usually sputum for an acid fast bacilli "AFB"³⁸ smear and culture. If the cultured specimen reveals the presence of *Mycobacterium tuberculosis*, the active, contagious TB disease diagnosis is confirmed.³⁹

Unfortunately, immunocompromised individuals (such as those with HIV infection) are difficult to screen and test for TB.⁴⁰ According to doctors at the Centers for Disease Control, "[t]he failure to diagnose tuberculosis rapidly in HIV-infected persons has led to

persons. The study suggests that using the CDC guideline of an induration of >5mm in diameter for PPD TB positivity in HIV-1 seropositives "significantly underestimates the 'true' infection rate " Id. at 369.

^{35.} Preventing TB in Health-Care Settings, supra note 24, at 7.

A negative skin test does not rule out tuberculosis disease or infection. Because of the possibility of a false-negative result, the tuberculin skin test should never be used to exclude the possibility of active tuberculosis among persons for whom the diagnosis is being considered, even if reactions to other skin-test antigens are positive. Persons with HIV infection are more likely to have false-negative skin tests than are persons without HIV infection (footnotes omitted). The likelihood of a false-negative skin test increases as the stage of HIV infection advances (CDC/Florida Department of Health and Rehabilitative Services/New York City Department of Health, unpublished data). For this reason, a history of a positive tuberculin reaction is meaningful, even if the current skintest result is negative.

Id. See also, Selwyn, supra note 34, at 549; Graham, supra note 34, at 373.

^{36.} Dixie E. Snider, Jr., M.D. and William L. Roper, M.D., The New Tuberculosis, 326 New Eng. J. Med. 703 (1992).

^{37.} Snider and Roper, supra note 36, at 703.

^{38. &}quot;AFB" is Acid-fast bacilli. "They are organisms that retain certain stains, even after being washed with acid alcohol. Most are mycobacteria. When seen on a stained smear of sputum or other clinical specimen, a diagnosis of tuberculosis should be considered." Preventing TB in Health-Care Settings, supra note 24, at 25.

^{39.} CONTROL OF TB IN CORRECTIONAL FACILITIES, supra note 5, at 7.

^{40.} Jordan B. Glaser, Joseph K. Aboujaoude, and Robert Greifinger, *Tuberculin Skin Test Conversion Among HIV-Infected Prison Inmates*, 5 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 4, 431 (1992).

higher mortality rates, as well as to the transmission of tuberculosis in hospitals and other settings."⁴¹ Because an HIV-infected person cannot be quickly and reliably screened for contagious TB disease, the danger of TB transmission to other inmates and corrections staff is frighteningly obvious.

3. Multiple Drug-Resistant Tuberculosis (MDR TB)

To further complicate matters, some strains of TB are resistant to many available drug treatments. In addition to being difficult to diagnose and treat, multiple drug-resistant TB strains are expensive to treat.⁴² The medical evidence demonstrates that people with HIV illness are most vulnerable to MDR TB. "About 90% of cases of drug-resistant tuberculosis have occurred in HIV-infected persons. Mortality rates from disease of this type range from 70 to 90%, with a median of four to sixteen weeks from diagnosis to death."⁴³

TB that is incompletely or incorrectly treated yields MDR tuberculosis that is even more difficult to treat. The incomplete or insufficient treatment enable the bacilli to survive by learning to evade each new medicine until there are few if any drugs that will successfully control the mutated bacilli.⁴⁴ An individual may also become initially infected with MDR TB by a resistant strain.⁴⁵ In a recent study of 466 TB patients in New York City, MDR TB seemed to be acquired with the initial infection in over 70% of the patients.⁴⁶

In April 1991 the Centers for Disease Control and the New York City Health Department studied all individuals with a positive culture for TB and found that 30% of all individuals were resistant to one

^{41.} Snider and Roper, supra note 36, at 704.

^{42.} Michael Specter, Neglected for Years, TB Is Back With Strains That Are Deadlier — Opportunities to Eradicate the Disease Were Lost, N.Y. TIMES, October 11, 1992, at 1, 44. "Enough medicine to cure a patient of a simple, uncomplicated case of TB costs \$300. With drug-resistant strains those costs rise to more than \$6,000. The entire medical bill for a simple TB case, including the price of drugs, supervised therapy and medical exams, averages about \$11,000, according to the C.D.C. But treating TB resistant to two or more drugs usually exceeds \$250,000." Id. at 44. See also Rosenthal, supra note 23, at B2. "'There are no protocols for treating MDR TB,' said Dr. Eran Bellin. Dr. Bellin, of Montefiore Medical Center, who is head of infectious diseases at the Rikers Island correctional center in New York City, notes that 'they do it one way at Columbia. Another at Cornell. I have my own idiosyncratic mix. We really need cooperative studies to give us better guidance.'" Id. See generally, Interview with Robert Greifinger, supra note 13.

^{43.} Snider and Roper, supra note 36, at 704.

^{44.} Rosenthal, supra note 23, at A1, B2. See also Fred Ayvazian, M.D., Origins of Resistance, Letter to the Editor, N.Y. TIMES, Nov. 3, 1992, at A18.

^{45.} Brian R. Edlin, M.D. et al., An Outbreak of Multidrug-Resistant Tuberculosis Among Hospitalized Patients with the Acquired Immunodeficiency Syndrome, 326 New Eng. J. Med. 1514 (1992).

^{46.} Rosenthal, supra note 23, at B2.

drug, isoniazid (INH) and 19% were resistant to at least two drugs, INH and rifampin (RIF).⁴⁷ Once the arsenal of drugs has been exhausted (some patients take up to twelve pills and one shot daily) the treatment is surgically aggressive (collapsing or removing an infected lung) and very costly.⁴⁸

D. Multiple Drug-Resistant Tuberculosis — Difficulty of Initial Diagnosis

The control of MDR TB is severely hampered by the difficulty in diagnosis and in early successful treatment. The drugs initially administered to the patient following TB diagnosis may not kill resistant strains of the disease. Cultures must be analyzed separately for drug susceptibility, as the ineffectiveness of drugs used to treat TB is not readily apparent without laboratory confirmation of resistance. These tests "may take three to eight weeks for colony growth and then three to eight additional weeks for incubation with antimicrobial agents" while the unsuccessfully treated disease continues to progress and spread, particularly in HIV-immunosuppressed individuals. 50

E. Tuberculosis Treatment

Once TB disease is suspected but before confirmation, the patient usually begins drug therapy and is put in AFB isolation until sputum tests are clear.⁵¹ The entire treatment for TB disease may last from six to twelve months or longer if the sputum tests continue to be positive for the bacilli.

There are four main drugs used in the treatment and prevention of

^{47.} REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1, at 16.

^{48.} Specter, supra note 42. See also, Rosenthal, supra note 23.

^{49.} Edlin, supra note 45, at 1520.

^{50.} Snider and Roper, supra note 36. "The delay in identifying patients with drugresistant strains adds to the problem. A recent survey by the Centers for Disease Control (CDC) found that only 61 percent of all isolates were tested for drug susceptibility (unpublished data), and several weeks are required to obtain the results of drug-susceptibility tests. Patients with unrecognized drug-resistant disease may be treated with ineffective regimens and thus continue to transmit infection." Id. at 704. See also, MDR TB Among HIV Infected in Florida and New York, supra note 8, at 589; GAUNAY, MDR TB OUTBREAK REPORT AMONG INMATES, supra note 7, at 3.

^{51.} Acid-fast bacilli (AFB) isolation is used to designate the type of isolation room required to prevent the transmission of TB from patients with active TB disease to others by reducing the amount of infectious droplet nuclei in the general air. The room must have negative air pressure (air only flows into the room) and that there be at least four to six complete air exchanges in the room per hour, with the exhausted air vented to the outdoors. Control of TB in Correctional Facilities, supra note 5, at 8. See also, Division of Health Services, Department of Correctional Services, DOCS Health Services Policy Manual — Tuberculosis III(C) 4 (1991).

tuberculosis: isoniazid (INH), rifampin (RIF), pyrazinamide (PZA), and ethambutol (EMB).⁵² The initial phase of treatment for an active case of TB disease is two months of daily doses of INH/RIF/PZA/EMB. The second phase of treatment, the continuation phase, requires four months of daily or twice weekly doses of INH/RIF. For an HIV-positive patient the continuation phase lasts a minimum of seven months for a total of nine months (minimum) of daily or twice-weekly pill taking.⁵³

For people who test PPD positive, but who have not progressed to active TB disease, preventive drug therapy is advised. Preventive therapy usually consists of six months of INH administered daily or twice a week. For people who are HIV-infected the recommended course of preventive therapy is at least twelve months. The drugs are taken as a prophylaxis to prevent the development of active TB disease.⁵⁴

After several weeks of drug therapy, a TB patient may no longer be contagious. A series of bacilli-clear sputum tests and a reduction of symptoms (less coughing, weight gain) usually indicate that the patient is responding to the medication.⁵⁵ Each person must be evaluated individually to determine that they are no longer contagious and may leave isolation. However, the medication must continue to be administered even if the sputum tests are clear in order to prevent relapse and reactivation of the bacilli.⁵⁶

Knowledge of the specific treatment regimens is essential to an understanding of the difficulties of ensuring that infectious individuals take their medicine. In addition to the length and complexity of the treatment, some of the TB drugs have disturbing side effects, e.g. dizziness, constant nausea, and liver toxicity, which may cause patients to be reluctant to continue taking the drugs. ⁵⁷ Failure to complete the drug therapy has serious public health consequences. If the treatment regimen is inaccurate or incomplete, the TB bacillus is not con-

^{52.} CONTROL OF TB IN CORRECTIONAL FACILITIES, supra note 5, at 9.

^{53.} Id.

^{54.} Id. See also Theresa Jordan, Ph.d. et al., Isoniazid as Preventive Therapy in HIV-Infected Intravenous Drug Abusers, 265 JAMA 2987, (1991).

^{55.} See Control of TB in Correctional Facilities, supra note 5, at 9.

^{56.} See, The Use of Preventive Therapy for Tuberculous Infection in the United States - Recommendations of the Advisory Committee for Elimination of Tuberculosis, 39 MORBIDITY & MORTALITY WKLY. REP. 8 (1990).

^{57.} James W. Long, M.D., THE ESSENTIAL GUIDE TO PRESCRIPTION DRUGS 597, 925 (1992). See also, Rosenthal, supra note 23. "The average patient under treatment for drug-resistant TB must take over a dozen pills and a shot a day. Some of the drugs produce serious nausea and drowsiness; others alarmingly often lead to hearing loss and dizziness; another produces personality changes and psychosis." Id. at B2.

trolled and may mutate to a virile, drug resistant form.⁵⁸

F. HIV Infection, Tuberculosis and the Prisons

The return of TB is not a fluke or a mystery but the predictable outcome of a glaring social failure. Over the past decade, homelessness, drug abuse and AIDS have left a huge population defenseless against the germ that causes the disease. By ignoring those people's medical needs - and crowding thousands of them into prisons, shelters and holding pens - America has essentially cultivated the contagion. 59

TB transmission is a function of two basic variables: the TB profile of the population and the physical characteristics of the environment. The TB profile of the inmate population in the criminal justice system is the highest by any standard.⁶⁰ The environment that is of highest risk is one that does not permit the dispersal of TB germs, i.e. one that is crowded, physically antiquated and poorly ventilated. The holding pens in the police precincts, court houses and jails, as well as most of the prisons in New York State, qualify as high-risk environments.⁶¹

The prisons and jails have become a breeding ground for tuberculosis disease. For increasing numbers of the urban, minority poor who are HIV-infected, the criminal justice system has become a reservoir of TB disease. As their HIV disease progresses many inmates succumb to an early death hastened by TB disease. Approximately

^{58.} MDR TB Among HIV Infected in Florida and New York, supra note 8, at 589. See also, Rosenthal, supra note 23, at A1.

^{59.} Geoffrey Cowley et al., Tuberculosis: A Deadly Return, NEWSWEEK, March 16, 1992, at 53.

^{60.} Tuberculosis in the New York City Criminal Justice System: Hearings Before the Joint Assembly Committees on Correction and Health, 214th Gen. Assembly, 2d Reg. Sess. (N.Y. 1992) [hereinafter Hearings] (testimony of James Neal, M.D.). "The 250,000 people who are arrested and the 120,000 people who move through the City's correctional system each year are among the poorest and sickest New Yorkers." Id.

^{61.} Id. "The demographics and health indicators of this population, coupled with environmental factors in the criminal justice system such as crowding, inadequate ventilation, constant movement and mixing of individuals, create conditions conducive to the transmission of tuberculosis." Id. See also, Hans Abeles, et al., The Large City Prison—A Reservoir of Tuberculosis, 101 Am. Rev. Respiratory Disease 706 (1970); Braun, supra note 1.

^{62.} REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1 at 11-12. See also, Dixie Snider, Jr., M.D., M.P.H. and Mary Hutton R.N., M.P.H., Tuberculosis in Correctional Institutions, 261 JAMA 436, 436-37 (1989); William Stead, M.D., Undetected Tuberculosis in Prison Source of Infection for Community at Large, 240 JAMA 2544, 2544-47 (1978); NANCY MAHON, AIDS IN PRISON PROJECT, THE CORRECTIONAL ASS'N OF NEW YORK, DEVELOPING A SYSTEM FOR TB PREVENTION AND CARE IN NEW YORK CITY (September 1992) (unpublished manuscript on file with author).

30,000 people entered the New York State prison system by the end of 1992.⁶³ According to population statistics, 4,500 are HIV positive; 28%, or 1,260 inmates, of those are TB-infected.⁶⁴ Eight percent of those infected with TB will become contagious with active TB during the next year.⁶⁵ Five thousand inmates at the New York Department of Correctional Services (DOCS) are currently taking TB drugs (INH) as a prophylaxis.⁶⁶

Inmates coming into the DOCS system are given an initial screening for latent TB infection. Twenty eight percent of the inmates in reception test positive for latent TB infection.⁶⁷ The TB bacilli infecting these inmates could continue to remain dormant or start to multiply and convert into active, contagious TB disease in a matter of weeks or months. There are no screening tests available to detect this conversion. The active, contagious, TB disease will go unnoticed until symptoms develop that lead the inmate to sick call.⁶⁸ If the inmate has HIV infection the symptoms may be confused with the onset of HIV symptomatic illness, masking the TB disease and making diagnosis difficult.

DOCS has been experiencing a major crisis in the provision of health care to HIV-infected prisoners.⁶⁹ AIDS is the leading cause of death in New York State correctional facilities.⁷⁰ The New York State prison system has the highest caseload of persons with AIDS in the United States.⁷¹ There are currently estimated to be approximately 8000 prisoners in the New York State prison system who are HIV-infected.⁷² Early studies found that, "[s]tatistically, people in-

^{63.} Interview with Robert Greifinger, supra note 13.

^{64.} Id.

^{65.} Id.

^{66.} *Id*.

^{67.} Interview with Robert Greifinger, supra note 13.

^{68.} Id.

^{69.} See REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1. See also NYC BAR ASS'N AIDS REPORT, supra note 18, at 192-223. Vega v. Sielaff, No. 92 Civ. 6475, 1992 U.S. Dist. LEXIS 5249 (S.D.N.Y. Apr. 22, 1992) (concerning inadequate medical care delivery to city jail inmates); Grubbs v. Brown, No. 92 Civ. 2132 (S.D.N.Y.) (concerning medically inadequate conditions of confinement in court pens, pre-arraignment holding areas and precinct pens); Inmates of New York State with H.I.V. v. Cuomo, No. 90-CV-252, 1992 U.S. Dist. LEXIS 18797 (N.D.N.Y. Nov. 27, 1992); Cunningham v. Coughlin, No. 92 Civ. 0579 (N.D.N.Y.) (similar class action law suits involving New York State prison inmates).

^{70.} NEW YORK STATE COMMISSION OF CORRECTION, ACQUIRED IMMUNE DEFICIENCY SYNDROME: A DEMOGRAPHIC PROFILE OF NEW YORK STATE INMATE MORTALITIES 34 (3d ed. 1988).

^{71.} THE CORRECTIONAL ASSOCIATION OF NEW YORK, AIDS IN PRISON FACT SHEET (1991).

^{72.} Interview with Robert Greifinger, supra note 13. The 8,000 figure was not arrived

fected with the AIDS virus who are incarcerated will live only half as long as those in the general population."⁷³ The death rate for inmates living with HIV was 37.7 per 10,000 in 1987 and 37.3 per 10,000 in 1988 and declined to 26 per 10,000 in 1989 following the widespread use of Zidovudine, a drug prescribed for HIV treatment and prophylaxis.⁷⁴ The recent jump in mortality rates to 35.4 per 10,000 in 1991 is presumed to be caused by the short-lived protective effect of Zidovudine and the outbreak of MDR TB among HIV-infected inmates.⁷⁵

The Department of Correctional Services is forced to deal with TB and HIV epidemics in the inmate population in houses. The DOCS inmate population has experienced a 900% increase in active tuberculosis over the past decade, including a recent outbreak of multiple drug-resistant TB.⁷⁶ The medical problems are multiplying exponentially because the number of inmates in the system continues to increase as concentrated numbers of HIV-infected inmates remain undiagnosed for TB infection and/or active TB disease.⁷⁷

The transmission of tuberculosis to persons with HIV infection is of particular concern because they are at high risk of developing active tuberculosis. TB is difficult to detect in persons with compromised immune systems, and it is those same people who are at the highest risk to contract and spread TB. Tragically, the people who are most

at by identifying and counting each inmate who is HIV-infected, but by doing anonymous blood testing on a sample of individuals in the prison system and then performing a statistical analysis and projection for the prison population as a whole.

^{73.} People v. Jimmie E., N.Y. L.J., April 4, 1991 at 21 (Sup. Ct. N.Y. County) (White, J.).

^{74.} Robert Greifinger, M.D., Tuberculosis Behind Bars, reprinted in Am. Soc'y L. & MED. ET AL., THE DUAL EPIDEMICS OF TUBERCULOSIS AND AIDS: HEALTH CARE POLICY, PROFESSIONAL PRACTICE, LAW AND ETHICS 184-85 (Conference for World AIDS Day, Dec. 4-5, 1992) (on file with author).

^{75.} Id

^{76.} Letter from Sue Kelly, Executive Deputy Director, Office of Public Health, State of New York Department of Health, to Commissioner Thomas A. Coughlin III, New York State Department of Correctional Services (November 14, 1991) (on file with author). "The rate of TB among inmates has increased dramatically, rising almost 900 percent, from 15 per 100,000 in 1976-78 to greater than 130 per 100,000 in 1988-91. Over 25 percent of incoming inmates are infected with TB based on significant skin test reactivity." Id. See also Elisabeth Rosenthal, HIV Infection Foiling the Tests That Detect Deadly TB Germs, N.Y. TIMES, December 10, 1991, at A1.

^{77.} Letter from Sue Kelly to Thomas Coughlin III, supra note 76, at 2.

^{78.} Id. "The HIV epidemic has profound impact on the development of TB, and on TB control efforts, in and out of correctional facilities. This is because co-infection with TB and HIV increases the likelihood of developing TB disease dramatically; one estimate is that every year, one of every ten people co-infected will develop active TB." Id. See also Preventing TB in Health-Care Settings, supra note 24.

^{79.} Daley, supra note 6, at 231.

at risk are the hardest to protect.⁸⁰ The large number of HIV-infected inmates in prison, the difficulties of diagnosis and treatment, and the poorly ventilated physical plants create a high likelihood of continued and worsening outbreaks of TB and MDR TB in prison.

G. Problems in Treating Inmates in Jails and Prisons

The city and state prison systems are medically ill-equipped to handle the increasing number of sick inmates. Both systems are unable to implement adequate protocols to detect, treat and control diseases among prisoners.⁸¹ Even given the best of medical leadership and intentions, the very nature of prison systems with the primary emphasis on security mitigates against providing optimal medical attention to both the HIV and TB/MDR TB epidemics.⁸² The emphasis on security translates into periodic, irregular transfers of inmates and lack of cooperation by security staff in implementing medical follow-up. Treatment of inmates with TB who are no longer contagious but must continue to take their medications may be interrupted by transfer to another institution or release from custody before drug therapy is completed. In addition, inmates released from jail may not be adequately supplied with medication and may not be linked with a community-based treatment facility. ⁸³

The inmates' distrust of prison health care providers also detracts from the ability of the prison system to adequately treat them.⁸⁴

^{80.} Snider and Roper, supra note 36; See Peter Barnes et al., Tuberculosis in Patients with Human Immunodeficiency Virus Infection, 324 NEW Eng. J. MED. 23 (1991). See also, MDR TB Among HIV Infected in Florida and New York, supra note 8.

^{81.} REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1. See also NYC BAR ASS'N AIDS REPORT, supra note 18, at 192-223; Stead, supra note 62; Mahon, supra note 62; Vega v. Sielaff, No. 92 Civ. 6475, 1992 U.S. Dist. LEXIS 5249 (S.D.N.Y. Apr. 22, 1992) (concerning inadequate medical care delivery to city jail inmates); Grubbs v. Brown, No. 92 Civ. 2132 (S.D.N.Y.) (concerning medically inadequate conditions of confinement in court pens, pre-arraignment holding areas and precinct pens); Inmates of New York State with H.I.V. v. Cuomo, No. 90-CV-252, 1992 U.S. Dist. LEXIS 18797 (N.D.N.Y. Nov. 27, 1992); Cunningham v. Coughlin, No. 92 Civ. 0579 (N.D.N.Y.)(similar class action law suits involving New York State prison inmates).

^{82.} GAUNAY, MDR TB OUTBREAK REPORT AMONG INMATES, supra note 7. According to this report, inmate specimens submitted for culture "required an average of 21.5 days to report, one required 113 days and four cases an average 3.6 months. . . . At present, (July 1992), the laboratory capacity available for rapid confirmation of tuberculosis culture results to prison-based clinicians is grossly inadequate to diagnose tuberculosis within time frames necessary to limit transmission and to identify drug resistant strains." Id. at iv. See also, supra note 81.

^{83.} Braun, supra note 1, at 397. See also REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1, at 44-45.

^{84.} Susan E. Shepard, Dep't of Investigation, City of New York, An Investigation into the Process of Admitting Inmates at the Manhattan Deten-

There are a myriad of other problems associated with the delivery of medical services in prison. First, the prison system is confronted with fiscal constraints and the physical plants used for housing and medical facilities are antiquated. Additionally, there is a reluctance on the part of community health-care providers to care for inmates, who are often viewed as "pariahs." Finally, inmates are faced with a public health infrastructure that is unable to deliver timely surveillance, contract tracing, and continuity of care upon discharge.⁸⁵

Protocols for TB surveillance in correctional settings have been developed by the Centers for Disease Control, the New York City and State Health Departments and the New York State Department of Correctional Services.⁸⁶ Even if these protocols are implemented to

TION COMPLEX: VIOLATIONS OF DEPARTMENT OF CORRECTION DIRECTIVES AND FEDERAL COURT ORDERS (1992). Although the investigation concerned whether or not orders were followed concerning admitting detainees within 24 hours, the results indicated that repeatedly inmates were housed in general population without first receiving the mandated medical screenings. *Id* at 24.

See also, REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1, at Appendix "A" (Letter from Harold Appel, M.D. to the Task Force) (Dr. Appel has been a prison health doctor for 18 years).

[A]ccess to care is the inmates' biggest health problem. This situation is a result of the Department of Correction personnel sometimes acting as a resentful or reluctant gatekeeper to health care. . . . What specifically am I talking about? I'm talking about the PPDs not being read because the inmate 'can't be located' or are encouraged to 'refuse' treatment. The reading of the PPDs is clearly the heart of the problem but I'm also talking about missed medication because the inmate 'didn't respond' or because they went to court. I'm talking about delays in getting lab and x-ray results, about lost medical records, about specialty clinic appointments delayed for months and then, on the long awaited date, the inmate is brought too late or to the wrong place or after being awakened early in the morning and waiting all day in a holding pen are encouraged to 'refuse' treatment so they can return 'home' before late at night. I'm talking about inmates really [emphasis in original] refusing treatment because of these experiences and their perception of getting second class treatment at the city hospitals. I'm also talking about a demoralized staff working in a hostile environment who are blamed for these problems not of their making, who work in an atmosphere conducive to contagion [emphasis added] and who are often viewed with suspicion by the people they are trying to help because they are seen as a part of this faulty system. What I am saying is that it would be great if experts develop protocols for treatment and plans for healthier inmate housing and clinic areas, for aftercare programs, for epidemiologic surveys and the like but unless the correctional health care system is made to work properly, the incidence of tuberculosis will continue to rise.

Id.

^{85.} Vega v. Sielaff, No. 92 Civ. 6475, 1992 U.S. Dist. LEXIS 5249, (S.D.N.Y. Apr. 22, 1992); Inmates of New York State with H.I.V. v. Cuomo, No. 90-CV-252, (S.D.N.Y. Nov. 27, 1992); Cunningham v. Coughlin, No. 92 Civ. 0579 (N.D.N.Y.); Grubbs v. Brown, No. 92 Civ. 2132 (S.D.N.Y.); See also, GAUNAY, MDR TB OUTBREAK REPORT AMONG INMATES, supra note 7; Mahon, supra note 81.

^{86.} CONTROL OF TB IN CORRECTIONAL FACILITIES, supra note 5; Letter from Sue

the letter, the risks of transmission of TB and MDR TB remain alarmingly high. Anyone who is HIV-immunosuppressed is at great risk of infecting others, of being infected with TB and the multi-drug resistant strains of TB, or both.⁸⁷ This is due to a number of factors, including the large and dynamic population of unknown HIV-infected inmates; the difficulty in rapid diagnosis of TB disease among this population; and the cost limitations and physical limitations of definitive serology and pre-diagnostic isolation.

III. Legal Overview and Strategies for Sentencing HIV-Infected Defendants

The structure of the New York State sentencing law does not take into account the ramifications of the severe medical crisis confronting the criminal justice system by the convergence of the HIV and TB epidemics in the correctional system. The ability of the system to fairly evaluate individual cases and judiciously use limited prison resources is hampered by certain statutory restrictions. Mandatory sentencing, as well as a complete statutory ban on judicial modification of sentences once a term of incarceration has begun severely limits the exercise of judicial discretion. Furthermore, statutory restrictions on plea bargaining after indictment limit the prosecutor's discretion to offer lesser pleas in recognition of defendant's medical circumstances.

A. The Mandatory Sentencing Provisions and Restrictions on Plea Bargaining

Article 70 of the New York State Penal Law provides for mandatory imprisonment for a number of crimes and classes of offenders.⁸⁸ New York Criminal Procedure Law (CPL) section 220.10(5) contains restrictions on plea bargaining after indictment

Kelly to Thomas Coughlin III, supra note 76; REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1.

^{87.} MDR TB Among HIV Infected in Florida and New York, supra note 8. At least two categories of factors may have contributed to these [MDR TB] outbreaks. First, diagnosis of TB in HIV-infected patients was delayed, in may cases, because of unusual clinical and radiographic characteristics, and recognition of drug resistance was delayed because of the lengthy time required for laboratory identification, confirmation, and reporting of drug-resistance patterns. Until M. tuberculosis drug resistance was identified as a problem and the pattern of resistance known, no reliably effective therapeutic regimens could be prescribed. Thus, treatment regimens had to be adjusted empirically when patients failed to respond, and patients sometimes remained infectious for prolonged periods.

Id. at 589.

^{88.} N.Y. PENAL LAW § 70 (McKinney 1987).

which limit the discretion of the prosecutor to offer pleas to lesser offenses in many circumstances.⁸⁹ These two provisions work together to severely limit the ability of judges, prosecutors, and defense attorneys to fashion appropriate dispositions in many cases involving HIV-debilitated and TB-vulnerable defendants.

Judges and prosecutors need the discretion to divert terminally ill defendants out of the prison system in cases where sending the defendant to jail exposes him/her to a significant risk of contracting a disease that would hasten his/her already imminent death. Public health considerations as well as an interest in maximizing the resources of the criminal justice system argue for the availability of nonincarcerative sentences in such circumstances.

The public safety is better served by not sending HIV-infected TB sensitive defendants into an environment where their chances of catching and spreading TB are significantly increased. The public health consequences of fueling the TB epidemic in the prisons are awesomely frightening. The economic cost to the public of treating an inmate is astronomical. In addition, litigation costs could be minimized in appropriate cases if early nonincarcerative dispositions were available, saving the limited court and prison resources of the criminal justice system for defendants who are more likely to pose a future threat to society.

The arguments for allowing pleas to nonincarcerative sentences in cases that now require a prison term are most compelling when the crimes charged are nonviolent, victimless, or involve compelling mitigating circumstances. Street level drug offenses are a prime example of cases that would benefit from case-by-case scrutiny by the judiciary. The interaction of the felony drug laws and the second felony offender laws create many situations where a judge's hands are tied and the only legal sentence is an indeterminate prison sentence.⁹² It

^{89.} N.Y. CRIM. PROC. LAW § 220.10(5) (McKinney 1992).

^{90.} See generally Braun, supra note 1; Abeles, supra note 61; New York STATE COMMISSION OF CORRECTION, ACQUIRED IMMUNE DEFICIENCY SYNDROME: A DEMOGRAPHIC PROFILE OF NEW YORK STATE INMATE MORTALITIES, supra note 70 and accompanying text.

^{91.} See supra note 13 and accompanying text.

^{92.} Under Article 220 of the Penal Law, possession of any amount of any controlled substance with the intent to sell it is a Class D felony carrying a mandatory minimum sentence of two to four years for any second felony offender. Possession of any amount of a narcotic drug with the intent to sell it is a Class B felony carrying a mandatory minimum sentence of four and one-half years to nine years for any second felony offender. Possession of any mixture of one-eighth ounce or more containing a narcotic drug is a Class C felony carrying a mandatory minimum sentence of three years to six years regardless of intent. The laws regardless of amount is a Class B felony carrying a minimum

comes as no surprise then that 60% to 70% of New York State prisoners (34,500 to 40,250 inmates) have a history of drug abuse and about 60% of offenders sent to state prison in 1990 were convicted of nonviolent crimes.⁹³ Ironically, it is the drug offenders who are most likely to be HIV-infected and most vulnerable to TB infection.

The New York State Bar Association has recommended an amendment to the Criminal Procedure Law that would give judges greatly needed flexibility in plea bargaining.⁹⁴ The proposed amendment adds a new subsection 5(h) to Criminal Procedure Law section 220.10 that reads:

Notwithstanding the above provisions, the court, upon the consent of the defense and district attorney, and upon a finding that the defendant is suffering from a terminal condition, disease or syndrome and to be so debilitated or incapacitated as to create a reasonable probability that he or she is physically incapable of presenting any danger to society, and upon a finding that the furtherance of justice so requires, may accept a plea of guilty to any lesser included offense of any count of the indictment, to satisfy the entire indictment. In making such determination, the court must consider the factors listed in Criminal Procedure Law § 210.40 (1)(a-j) (McKinney 1992) (governing dismissals in the interest of justice). 95

At least this amendment would allow the parties to fashion more appropriate dispositions for terminally ill defendants. But, given the susceptibility of any HIV-immunosuppressed defendant to TB disease, an alternative that allows consideration of the prospective life threatening danger of an incarcerative sentence may be warranted.⁹⁶

Criminal Procedure Law section 430.10 prohibits a judge from changing, interrupting, or suspending a sentence of imprisonment after service of the sentence has begun.⁹⁷ This provision can be devastating to an inmate whose medical condition was unknown at the time

term of incarceration of four and one half years to nine years. N.Y. PEN LAW § 220.39 (McKinney 1992). This would apply equally to an HIV-infected drug addict selling as little as one grain of heroin to an undercover officer to support his own habit as it would to a higher level dealer selling a significantly larger amount of narcotics. Interestingly, the addict/seller of one grain of heroin who has a prior felony conviction of any kind is also likely to be subjected to a more stringent sentence than the perpetrator of a violent felony offense who has no prior felony convictions.

^{93.} THE CORRECTIONAL ASSOCIATION OF NEW YORK, PRISONER PROFILE (1991).

^{94.} NEW YORK STATE BAR ASS'N COMMITTEE ON AIDS AND THE LAW, REPORT ON AIDS AND THE LAW (1992).

^{95.} Id. at 32.

^{96.} Id. This could be accomplished by changing the word "and" in the Bar Association's proposed amendment to "or".

^{97.} N.Y. CRIM. PROC. LAW § 430.10 (McKinney 1992).

of sentence or significantly deteriorated during service of the sentence. Again the sentencing judge's hands are tied even if he/she would have sentenced the defendant differently had the defendant's medical condition been known at the time of sentence.

The pointlessness and poignancy of people dying in prison are not the only concerns. The vast increases in the number of desperately ill inmates puts tremendous pressure on jail and prison medical facilities, and presents the taxpayer with a far more burdensome health care bill given the increased cost of medical treatment in a correctional setting.

B. What Alternatives Do Practitioners And Judges Have Now?

New York State law does leave some limited options for diversion of terminally ill/HIV-infected individuals out of the jail and prison system. All of the options are discretionary and have thus far been used sparingly. But with more widespread recognition of the danger of the TB epidemic and the emergence of the more virulent strands of MDR TB, there is greater recognition of the necessity of alternatives to incarceration for terminally ill defendants. Alternatives to incarceration serve both the public policy interest in curbing the spread of the TB epidemic and a humanitarian interest in not inflicting unnecessary pain and suffering on an already ill defendant.

1. Pre-Sentence

Obviously, in cases where there are no restrictions on plea bargaining, counsel should attempt to plea bargain with the district attorney to avoid a jail or prison sentence. In cases where CPL section 220.10(5) would limit plea bargaining after indictment counsel can try to work out an acceptable disposition by agreeing to waive indictment under Article 195 of the Criminal Procedure Law.⁹⁸

In cases where plea bargaining to a nonincarcerative sentence is not possible, either because of statutory restrictions or the reluctance of the local district attorney, counsel should consider filing a motion to dismiss in furtherance of justice (*Clayton* Motion) pursuant to CPL section 210.40.99 If that motion is unsuccessful, delay of sentence is a possibility under CPL section 380.30(1).100

2. Motions to Dismiss in Furtherance of Justice

Currently, the motion to dismiss in furtherance of justice may be

^{98.} N.Y. CRIM. PROC. LAW § 195 (McKinney 1992).

^{99.} People v. Clayton, 342 N.Y.S.2d 106 (App. Div. 1973); See also N.Y. CRIM. PROC. LAW § 210.40 (McKinney 1992).

^{100.} N.Y. CRIM. PROC. LAW § 380.30(1) (McKinney 1983).

the New York defense attorney's best approach for avoiding the imposition of mandatory prison sentences. The all or nothing nature of the *Clayton* motion makes it a less than perfect solution to the dilemma posed by many cases, but it at least offers judges the opportunity to consider the particular facts and circumstances of a case, and, where appropriate, divert the case from the criminal justice system.¹⁰¹

The Clayton motion allows a judge to dismiss an indictment

in the furtherance of justice . . . even though there may be no basis for dismissal as a matter of law . . . [when] such dismissal is required as a matter of judicial discretion by the existence of some compelling factor, consideration or circumstance clearly demonstrating that conviction or prosecution of the defendant upon such indictment or count would constitute or result in injustice. ¹⁰²

The statute lists the following ten factors for a judge to consider when determining a *Clayton* motion:

- a. the seriousness and circumstances of the offense;
- b. the extent of harm caused by the offense;
- c. the evidence of guilt, whether admissible or inadmissible at trial:
- d. the history, character and condition of the defendant;
- e. any exceptionally serious misconduct of law enforcement personnel in the investigation, arrest and prosecution of the defendant:
- f. the purpose and effect of imposing upon the defendant a sentence authorized for the offense;
- g. the impact of a dismissal upon the confidence of the public in the criminal justice system;
- h. the impact of a dismissal on the safety or welfare of the community;
- i. where the court deems it appropriate, the attitude of the complainant or victim with respect to the motion;
- j. any other relevant fact indicating that a judgment of conviction would serve no useful purpose. 103

A Clayton motion offers the judiciary the opportunity to consider "the needs of both the defendant and society . . . on an ad hoc ba-

^{101.} N.Y. CRIM. PROC. LAW § 210.40 allows a judge to dismiss an "indictment or any count thereof" (emphasis added) in furtherance of justice. Therefore, the judge could dismiss only the counts that require the imposition of prison terms and leave those counts that would allow her to sentence the defendant to probation or impose conditions, rather than dismissing the entire indictment.

^{102.} N.Y. CRIM. PROC. LAW § 210.40(1) (McKinney 1992).

^{103.} N.Y. CRIM. PROC. § 210.40 (McKinney 1992).

sis."¹⁰⁴ Many New York judges have been receptive to *Clayton* motions brought on behalf of defendants who are suffering with advanced cases of AIDS or AIDS-Related Complex (ARC). Obviously, the seriousness and circumstances of the offense and the defendant's criminal history may weigh against dismissal. Courts have dismissed serious felony charges brought against recidivists, but only in cases where the defendant's death was imminent.¹⁰⁵

Courts have also begun to seriously consider *Clayton* motions even when the defendant has not progressed from HIV disease to AIDS or ARC.¹⁰⁶ One court, in dismissing felony drug charges in the furtherance of justice, explicitly recognized the reality that an economically deprived, homeless defendant with HIV illness is effectively terminal.¹⁰⁷ The situation that now faces defendants with AIDS or HIV infection in prison makes an even more compelling motion for dismissal in furtherance of justice. Certainly the argument can be made that an immune-suppressed defendant stands a high risk of contracting MDR TB in prison and that an immune-suppressed person with MDR TB is effectively terminal.

Many of the statutory factors for determining a Clayton motion are applicable and arguably compelling in every case involving a defendant with a severely compromised immune system given the presence of a TB epidemic in the prisons. The "history, character and condition of the defendant" allows a judge to consider the defendant's medical history and condition. Counsel should attach the defendant's medical records to the motion papers, and where possible, offer the court evidence (either in the form of expert testimony at a hearing or letters or affidavits attached to the motion papers) of the severity of the defendant's condition. ¹⁰⁸

"The purpose and effect of imposing upon the defendant a sentence authorized for the offense" is also relevant in virtually all cases involving immune-compromised defendants. There is arguably little purpose in having a terminally ill defendant serve a prison sentence.

^{104.} People v. Suarez, N.Y. L.J. February 1, 1991, at 21, (Sup. Ct. N.Y. County) (Crane, J.).

^{105.} People v. Camargo, 516 N.Y.S.2d 1004 (Sup. Ct. Bronx County 1986); People v. Roman, N.Y. L.J., October 5, 1990, at 21 (Sup. Ct. Bronx County) (Bamberger, J.); People v. Scruggs, N.Y. L.J., July 20, 1987, at 18 (Sup. Ct. Kings County) (Meyerson, J.); People v. Williams, N.Y. L.J., September 18, 1987, at 13 (Sup. Ct. N.Y. County) (Levittan, J.).

^{106.} Suarez, N.Y. L.J., February 1, 1991, at 21; People v. Gray, N.Y. L.J., March 15, 1991, at 21 (Sup. Ct. Kings County) (Miller, J.).

^{107.} Suarez, N.Y. L.J., February 1, 1991, at 21.

^{108.} Counsel should take precautions to protect the defendant's rights to confidentiality pursuant to N.Y. Pub. HEALTH LAW §§ 2780-2787. (McKinney Supp. 1993).

Judges have referred to the imposition of a prison sentence on a terminally ill defendant as "an exercise in futility" and "both wanting and cruel." Judges have also recognized that the defendant's illness is a significant punishment in itself concluding that "[n]o sentence... could compare with the severity of the many diseases being painfully and fatally suffered by...[the]... defendant." Given the current medical realities, counsel can also argue that the effects of having the defendant serve time for the offense will be devastating to the defendant and excessively cruel in relation to the crime. Counsel can make a compelling case for dismissal by offering evidence relating to the prevalence of TB in prisons and the dangerous interaction of AIDS, HIV infection and TB disease.

"The impact of a dismissal upon the confidence of the public in the criminal justice system" can also argue favorably for dismissal in these cases. Given the economic realities of the 1990s the public will arguably appreciate a criminal justice system that examines each individual case before committing the system's limited resources. In granting a *Clayton* dismissal, one judge noted:

The indictment's dismissal will have a beneficial effect upon the criminal justice system. The prison health services [sic] resources will be available. A dismissal will end a proceeding which probably will not go to trial. And, the prosecution will be able to devote attention to the large volume of serious and violent felony cases.¹¹²

More importantly, increased public awareness of the harsh realities of AIDS, HIV, and TB should contribute to the public's understanding of the need for more compassionate treatment of seriously ill defendants. In dismissing a felony case against a terminally ill defendant one judge wrote:

[I]f the moral fabric of our society is perceived to be so thin or taught [sic] as to be rent by a dismissal of these charges under the circumstances presented, then this court is at a loss to explain the cynicism and collective mean-spiritedness which the foregoing would seem to imply.¹¹³

Ultimately, "[i]n the eyes of the public, the criminal justice system

^{109.} Camargo, 516 N.Y.S.2d at 1006.

^{110.} People v. Ortiz, N.Y. L.J., February 16, 1990, at 21 (Sup. Ct. Bronx County) (Massaro, J.).

^{111.} Camargo, 516 N.Y.S.2d at 1006-7.

^{112.} People v. Gamble, N.Y. L.J., September 30, 1991, at 21 (Sup. Ct. Bronx County) (Brandveen, J.); See also, People v. Roman, N.Y. L.J., October 5, 1990, at 25, (Sup. Ct. Bronx County) (Bamberger, J.).

^{113.} People v. Jacobs, N.Y. L.J., Aug. 22, 1986, at 14 (Sup. Ct. Richmond County).

can only be enhanced where knowledge that reason and compassion not pointless prosecution or punishment guide responsible judicial decision making."¹¹⁴

The court's consideration of "[t]he impact of a dismissal on the safety or welfare of the community" in these cases also favors dismissal. It has often been argued that many people who have AIDS are in too poor health to pose a threat to the safety and welfare of the community. A broader case can be made by delineating the public health benefit of limiting the exposure of highly susceptible, severely immune-compromised individuals to TB and MDR TB and thereby limiting the further spread of the TB epidemic. The safety and welfare of the community is not enhanced by the compulsory dumping of HIVinfected defendants into the reservoir of TB infection in our prisons and jails. Anyone who is immune-compromised is more prone to catch TB and because they are more difficult to diagnose, screen and treat they are also more likely to spread the infection to others. Given the constant circulation of people between the community and the prison system, an epidemic in the prisons will inevitably lead to an epidemic in the community.115

Finally, CPL section 210.40 allows a judge to consider "any other relevant fact indicating that a judgment of conviction would serve no useful purpose." This catch-all often encompasses many of the arguments already advanced. If under the circumstances of the case there would be no particular deterrent effect and no need for isolation of the defendant then a conviction would serve no useful purpose. As one judge noted in dismissing a case "[t]o ask for 'revenge'. . . is perverse."

Because the *Clayton* motion is entirely within the discretion of the trial judge, denial will not often offer a viable appellate issue. However, given the susceptibility of immune-compromised defendants to TB and the virtual impossibility of protecting an inmate from exposure in prison, the motion is well worth pressing, particularly for a defendant who is charged with a nonviolent offense.

3. Delay of Sentence

Practitioners have started to request delay of sentence in cases where the defendant's motion for Clayton relief has been denied and

^{114.} Ortiz, N.Y. L.J., Feb. 16, 1990, at 21; see also, People v. Gonzalez, N.Y. L.J., March 28, 1988, at 54 (Sup. Ct. Queens County) (Clabby, J.).

^{115.} REPORT ON TB IN THE CRIMINAL JUSTICE SYSTEM, supra note 1. See also MAHON, supra note 62.

^{116.} Roman, N.Y. L.J., Oct. 5, 1990, at 21 (Sup. Ct. Bronx County) (Bamberger, J.).

he/she faces mandatory incarceration upon sentence. CPL section 380.30 (1) provides that "[s]entence must be pronounced without unreasonable delay." Some judges are now accepting guilty pleas but continuing the defendants on bail or parole and adjourning the sentence at the defense's request. This alternative is supported by the recognition that the defendant is too ill to commit further crimes and incarceration would serve no useful purpose. This is often a more attractive option to the judges and district attorneys because, unlike an outright dismissal, it allows the court to retain jurisdiction over the defendant.

4. Post-incarcerative sentence

After an incarcerative sentence has been imposed, the alternatives are more limited. The New York State legislature enacted a medical parole law in March 1992 which permits terminally ill prisoners who have not been convicted of the most serious crimes, and who no longer present a danger to society to be paroled prior to the expiration of their minimum sentence. According to the Correctional Association of New York, which has been monitoring the implementation of the law, the anticipated humanitarian purposes and medical cost-saving benefits have not been realized thus far:

Sadly, the law's promise has not been fulfilled. To date, [October 16, 1992] only four prisoners have been released on medical parole while over 150 prisoners have died of AIDS in New York State prisons since the law's passage. No prisoners have been released who needed home care. Correctional officials conservatively estimate that 50 to 80 applications are currently pending. Although the processing of each application is time consuming, the law does not provide funding for additional staff for Department of Correctional Services (DOCS) or for Division of Parole (Parole), the two agencies administering the law.¹¹⁹

The legislature could alleviate the problems associated with incarcerating HIV-infected offenders by reconsidering the mandatory sentencing laws and by lessening plea bargaining restrictions in the interest of justice.

^{117.} Letter from Laura Held, Assigned Counsel Plan Administrator for the First Department to members of the Appellate Division — First Department 18-B Panel (October 6, 1992) (on file with author).

^{118.} N. Y. Exec. Law § 259-r (McKinney Supp. 1993).

^{119.} NANCY MAHON, AIDS IN PRISON PROJECT, THE CORRECTIONAL ASSOCIATION OF NEW YORK, UPDATE AND RECOMMENDATIONS ON THE IMPLEMENTATION OF MEDICAL PAROLE (1992).

C. Is An Eighth Amendment Claim Of Cruel And Unusual Punishment Justified In These Circumstances?

In Solem v. Helm, the Supreme Court announced that no sentence is shielded from constitutional challenge, ¹²⁰ and that even "a single day in prison may be unconstitutional in some circumstances." ¹²¹ Given the current conditions in the correctional facilities, the severely heightened susceptibility of HIV-infected individuals to contracting TB, or worse yet, MDR TB and the rapidity with which MDR TB infection can kill people with compromised immune systems, can the argument be made that sentencing a person with a severely compromised immune system to a term of incarceration in a correctional institution, where exposure to TB and or MDR TB is likely, amounts to cruel and unusual punishment under the Eighth Amendment?

In Solem, the Supreme Court held that prison sentences are subject to a proportionality analysis that examines (1) the gravity of the offense and the harshness of the penalty, (2) compares the sentences imposed on other criminals in the same jurisdiction, and, (3) may compare the sentences imposed for the commission of the same crime in other jurisdictions. However, after the Supreme Court's ruling in Harmelin v. Michigan, 123 in the very least Solem has been severely limited. The five-member majority agreed to either overrule or severely narrow the proportionality of punishment analysis as applied to noncapital criminal sentences. 124 Justice Kennedy, in his concurring opinion joined by two other Justices, altered the three-factor Solem test. The concurrence found that unless there is a threshold finding of gross disproportionality between the crime committed and the sentence, the second and third prongs of the Solem analysis should not be used. 125

Despite the ambiguity of the present state of Eighth Amendment jurisprudence in the context of noncapital cases, it is clear that the standard for a finding of cruel and unusual punishment based on an excessive sentence is high. The sentence must be "grossly disproportionate to the severity of the crime." Successful constitutional chal-

^{120.} Solem v. Helm, 463 U.S. 277 (1983).

^{121.} Id. at 290.

^{122.} Id. at 290-291.

^{123.} Harmelin, 111 S. Ct. 2680 (1991).

^{124.} Id at 2686, 2702.

^{125.} Id. at 2707.

^{126.} Id. at 2707 (Kennedy, J., concurring); Rummel v. Estelle, 445 U.S. 263, 271 (1989).

lenges to sentences other than capital sentences are rare.¹²⁷ Absent "extreme facts"¹²⁸ the courts are reluctant to invalidate what they regard as the "legislative prerogative."¹²⁹ In New York, sentencing an individual to an authorized sentence of imprisonment is ordinarily not cruel and unusual punishment in the constitutional sense.¹³⁰ However, the New York courts have recognized that there may be exceptional cases where a sentence within statutory limits constitutes cruel and unusual punishment.¹³¹

The New York Court of Appeals has rejected constitutional challenges to mandatory sentences in drug cases reasoning that the mandatory sentences under Article 70 of the Penal Law are not grossly disproportionate to the offense nor do they "shock the conscience of the community." They have also held that "a defendant's affliction with AIDS, in and of itself, is not an extraordinary circumstance which would warrant interference with a sentence imposed within statutory guidelines." Despite their reluctance to interfere with legally imposed sentences, New York courts have repeatedly recognized that there may be "exceptional circumstances" or "rare cases" where the imposition of a legally-mandated sentence would be constitutionally prohibited. But, legally imposed sentences must be regarded as "subhuman" not simply "harsh" to constitute cruel and unusual punishment. 135

The medical consequences in prisons of the interaction of AIDS/

^{127.} Harmelin, 111 S. Ct. at 2705 (Kennedy, J., concurring); Solem, 463 U.S. at 289-90; (both cases quoting Rummel, 445 U.S. at 272).

^{128.} Rummel, 445 U.S. at 273.

^{129.} Id. at 273, 274.

^{130.} People v. Jones, 350 N.E.2d 913 (N.Y. 1976)

^{131.} Rummel v. Estelle, 445 U.S. 263 (1979); People v. Broadie, 332 N.E.2d 336 (N.Y. 1975), cert. denied 423 U.S. 950 (1975).

^{132.} Broadie, 332 N.E.2d 336 (N.Y. 1975), cert. denied, 423 U.S. 950 (1975).

^{133.} People v. Chrzanowski, 538 N.Y.S.2d 55 (App. Div. 1989) (citations omitted); People v. Napolitano, 525 N.Y.S.2d 698 (App. Div. 1988); People v. Escobales, 551 N.Y.S.2d 757 (Sup. Ct. Bronx County 1990); see also, People v. Clark, 576 N.Y.S.2d 704,705 (App. Div. 1991).

^{134.} People v. Jones, 350 N.E.2d 913 (N.Y. 1976) (the fact that co-defendants in drug case got less time not exceptional circumstance); People v. Clark, 576 N.Y.S.2d 704 (App. Div. 1991) (HIV positive mother with two small children not the rare case where legal sentence is constitutionally prohibited); People v. Rivera, 501 N.Y.S.2d 122 (App. Div. 1986) (mandatory prison sentence is harsh but not the rare case where sentence is constitutionally invalid); People v. Hooks, 467 N.Y.S.2d 8 (App. Div. 1983) (despite mitigating factors surrounding commission of the offense and the defendant's character and background this is not the very rare case calling for judicial interference with the legislative prerogative); People v. Alvarez, 410 N.Y.S.2d 840, 845 (App. Div. 1978) (court reversing on other grounds noted grave doubts as to constitutionality of mandatory sentence given defendant's lack of criminal history and minor participation in drug case). 135. Escobales, 551 N.Y.S.2d at 759.

HIV infection and TB, and the presence of MDR TB in correctional settings in New York, presents a new and much more compelling medical crisis to the courts than the medical crisis presented by AIDS/HIV infection alone. While courts have consistently held that "[t]he fact that defendant is HIV-positive or suffers from AIDS is not a sufficient reason to modify an otherwise lawful sentence of imprisonment," they have never been confronted with the devastating consequences of exposing immune-suppressed individuals to new, more virulent strains of TB. Nor have courts confronted the prison system's unique position as an unwitting breeding ground for TB, and the correctional system's inability to protect the most medically vulnerable inmates from exposure.

Exposing a defendant to a significant risk of contracting a potentially deadly disease is a harsh sentence — in some cases of extreme immunodeficiency it may be tantamount to a death sentence involving a "lingering" and painful death. 137 In the capital context, the stricter Harmelin analysis does not apply. The Supreme Court ruled in Coker v. Georgia 138 that the Eighth Amendment bars punishments which are excessive in relation to the crime. Where the punishment is "nothing more than the purposeless and needless imposition of pain and suffering," it violates the Eighth Amendment. 139 An HIV-infected offender who commits a nonviolent crime and is incarcerated in a prison facility with a high prevalence of TB could be subject to a "lingering death" that could be found excessive in relation to the crime committed, and in violation of the Eighth Amendment. 140 The new medical realities applied to a nonviolent crime, or other mitigating circumstances, may present the extraordinary facts that would merit reversal of an otherwise lawful prison sentence on Eighth Amendment grounds.

IV. Conclusion

The convergence of the HIV and the tuberculosis epidemics among criminal defendants presents a major crisis in the criminal justice system and a challenge to everyone in the system to work together to create humane, compassionate and just responses to the cruel and un-

^{136.} Clark, 576 N.Y.S.2d at 705.

^{137.} In re Kemmler, 136 U.S. 436, 447 (1890) (tortuous or lingering death unnecessarily cruel and violative of the Eighth Amendment).

^{138. 433} U.S. 584, 592 (1977) (death sentence grossly disproportionate and excessive punishment for crime of rape).

^{139.} Id.

^{140.} Coker, 463 U.S. at 592; In re Kremmel, 136 U.S. 436, 447 (1890).

usual circumstances these two epidemics create. Often, justice is not served by sentencing defendants, particularly nonviolent second felony offenders with compromised immune systems, to prison terms where they face a grave risk of contracting multi-drug resistant tuberculosis.

This Essay has discussed the specifics of both HIV and TB disease in an attempt to convey the medical risks of contraction and the attendant fatal consequences of MDR TB to defendants with HIV infection. Readers, especially defense attorneys, prosecutors and judges should use this knowledge to determine whether the criminal justice system as it now operates is fair to defendants with HIV infection. Where the system works injustice, practitioners can alter their case strategy, prosecutors can change their policies, judges can alter their rulings, and, finally, legislators can change laws. As a humane and just society, we must think carefully before incarcerating medically vulnerable defendants into a sea of disease.