EXHIBIT B

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Maria Alejandra Celimen Savino, *et al.*, Petitioners-Plaintiffs, v. Steven J. Souza, Respondent-Defendant.	Civil Action No. 1:20-cv-10617-WGY

DECLARATION OF FREDERICK L. ALTICE

I, Frederick L. Altice, upon my personal knowledge, and in accordance with 28 U.S.C. § 1746, declare as follows:

Personal Qualifications

1. I am a professor of Medicine (Infectious Diseases), Epidemiology (Microbial Diseases), and Public Health, and a clinician, clinical epidemiologist, and intervention and implementation researcher at Yale University School of Medicine and School of Public Health. Attached as Exhibit A is my CV.

2. I received a B.A. from Texas A&M in 1982, an M.A. from Universidad de Santiago de Compostela, Spain in 1982, and an M.D. from Emory University in 1986. I completed my residency in internal medicine (1989) and fellowship in infectious diseases (1992) at Yale University.

3. I am a Board-certified internist, specializing in infectious diseases. My primary research focuses on interventions and implementation science at the interface between infectious diseases and addiction, and I have conducted research in several global health settings.

4. I have extensive experience working with vulnerable populations and their exposure to infectious diseases, including people in jails and prisons, and those otherwise involved with the criminal justice system. I have also developed programs that link HIV-infected inmates to community health care when they leave prison.

5. For the past 29 years, I have been the Director of the HIV in Prisons Program at Yale University School of Medicine, which consults with the Connecticut Department of Correction and treats inmates with HIV, viral hepatitis, tuberculosis, and other infectious

diseases. This program conducts research and provides expert consultation for criminal justice systems in over 30 countries worldwide.

6. I am a board member of the Health in Prisons Program for the World Health Organization, a member of the Health in Prisons Program for the United Nations and a founding member and on the steering committee for Worldwide Prison Health Research & Engagement Network (WEPHREN). We develop and write guidance for healthcare delivery systems in prisons and jails globally. Additionally, I have the highest number of publications in the world related to infectious diseases in prisons, including in high impact journals such as *The Lancet, the Journal of the American Medical Association* and others.

7. I have provided expert opinion in a number of legal cases, including serving as the plaintiffs' lead expert in *Henderson v. Thomas,* 913 F. Supp. 2d 1267 (M.D. Ala. 2012) (addressing discrimination against Alabama prisoners based on their HIV status) and *Tribble v. Greene*, No. 2013 CA 003237 B (D.C. Super. Ct, 2016) (awarding damages for a wrongfully convicted man who suffered serious medical conditions while incarcerated). I have also been a court-appointed monitor in several cases including, *Doe v. Meachum*, Civ. No. H-88-562 (PCD) (class action suit addressing the delivery of HIV prevention and treatment in Connecticut) and others.

Current Information on COVID-19

8. In an infectious disease pandemic, there are three drivers of infection: a) the agent (in this case COVID-19); b) the vulnerability of the host (age and medical comorbidity increase risk for the most severe form of the disease); and c) the risk environment (proximity, physical distancing, sanitation). Effective interventions in such situations including developing herd immunity by a substantial number of getting infected (and result in marked levels of death and burden on hospitals), vaccination (unlikely in the next 12-18 months, physical distancing (showing some impact already) and ability to maintain a sanitary environment when not physically distancing.

9. COVID-19 is a novel coronavirus. It is a highly infectious disease that spreads from person-to-person and is a serious national and global public health risk. It is 10-times more deadly than the common flu (Influenza A). Unlike Influenza A and other flu-like viral infections, COVID-19 can be infectious 24-48 hours before symptoms develop, making transmission possible before we are able to self-quarantine. Moreover, it now appears that it is transmissible in persons without symptoms, making screening strategies using symptoms alone insufficient to prevent transmission. All 50 states have reported cases of COVID-19 to the CDC. I am aware that, as of April 8, 2020, there have been almost 17,000 reported cases in Massachusetts alone, with 433 confirmed deaths. Within the United States, 395,011 total cases of COVID-19 have been reported, with 12,754 fatalities attributed to the virus as of April 8, 2020.

10. Older adults – those over 50 years of age – and people with serious underlying medical conditions such as heart disease, hypertension, HIV, diabetes, obesity, lung disease, and

other respiratory maladies are at a substantially higher risk of developing severe illness, including hospitalization, intensive care needs and death, from contraction of the COVID-19 virus. Approximately 66% of individuals who have contracted COVID-19 in the United States were over 45 years old; nearly half (48%) were 55 years of age and older. A substantial number of patients with COVID-19 do not appear to have this list of co-morbid conditions making it impossible to fully secure the safety of individuals.

11. The illness occurs in two phases. The first may be asymptomatic but often involves basic symptoms like cough, congestion and fever. Viral transmission during this phase is especially high. Later, for about 20% of infected patients, their symptoms become more life-threatening as they develop progressive lung disease requiring hospitalization. Approximately 40% of those requiring hospitalization require mechanical ventilation in an intensive care unit and develop and multi-organ failure. Most of those requiring mechanical ventilation die and for those who don't, they often remain critically ill for extended periods of time. While it can be difficult to report death rates with total accuracy, initial global estimates of death rates were 3.5% in China; 0.8% in China, excluding Hubei Province; 4.2% overall among a group of 82 countries, territories, and areas; and 3.4% thus far in the U.S.

12. Transmission of COVID-19 is thought to occur mainly from person-to-person; specifically, between those who are in close contact with each other and become exposed when an infected person coughs or sneezes, passing the virus through respiratory droplets. Mostly, these droplets may travel as far as 6 feet and land on surfaces where the virus can live for several days if not sanitized. Relatively new data suggest that the virus is more contagious than thought previously and can in some cases be aerosolized, leading to governmental recommendations that all persons wear protective face coverings. Most transmission of the virus can occur when a person comes into contact with surfaces or objects that contain the virus. COVID-19 can remain in the air and on surfaces for several hours to several days, respectively. Consequently, the virus is more likely to spread rapidly in congregate settings like healthcare settings, nursing homes, cruise ships, homeless shelters, schools, workplaces, and any closed detention setting including prisons and jails.

Unique Vulnerabilities to Infectious Disease in Carceral Settings

13. Prisons and jails are congregate settings that are particularly susceptible to the spread of infectious diseases like COVID-19. For example, other infectious diseases, such as HIV, Hepatitis B and C virus, and tuberculosis are substantially concentrated in prisons and jails relative to the community-at-large and have resulted in impressive outbreaks of infectious diseases. Of the 10.5 million people incarcerated annually in the U.S., approximately 4% have HIV, 15% have hepatitis C, and 3% have active tuberculosis. These prevalences are far higher than found in the general population.

14. Spread of infectious diseases is a serious problem within prisons worldwide. In addition to HIV, viral hepatitis and tuberculosis, we have previously experienced endemic outbreaks of strains of staphylococcus aureus bacteria that are resistant to methicillin

(MRSA), which occurs in crowded, congregate settings. Even now, early COVID-19 outbreaks in correctional settings have been reported among both prisoners and staff, including deaths. There is the perception that carceral settings are impervious to COVID-19 because they are able to stop visitation and separate beds by 6 feet. This strategy alone, is insufficient because of the inability to truly physically distance people, the inadequacy of shared common spaces, the regular connection to the community by officers and medical staff and the lack of personal protective equipment for personnel and prisoners alike.

15. Carceral settings are dense facilities with generally poor and unsanitary conditions. Due to overcrowding, people in prison are in close proximity to one another on a constant basis. High density of people exists within common areas and dining areas. Cells are generally small areas that people in prison must share with one or multiple other individuals. Due to overcrowding, people in prison are often housed in dormitory settings. Furthermore, people in prison often must share limited showers, toilets and urinals, and sinks with hundreds of other people in prison on a regular basis.

16. It is almost inevitable that COVID-19 will enter carceral settings more widely than reported early in the pandemic in the U.S. Prisons are porous, congregate settings where a number of people enter and exit regularly. The dynamics of 10.5 million people entering and leaving jails and prisons annually alongside the 2.2 million people who are housed there on a daily basis make these settings especially vulnerable. Entry and exit of massive numbers of correctional and medical staff who enter and leave prisons three shifts per day increases the likelihood of a COVID-19 outbreak. Settings like these are a formula for disaster for spread of COVID-19. Physical distancing is absolutely necessary to reducing the spread of the virus to prevent a public health crisis; however, this can be nearly impossible in prison without swift action now. At almost any given time, people in prison are always within a couple feet of other people in prison (whether it is where they sleep or through shared common spaces), increasing the likelihood that infected persons will quickly spread the virus to other people in prison and correctional and medical staff.

17. Prisons are poorly equipped to handle COVID-19 when it makes its way into prisons. Generally, outbreaks of tuberculosis in prisons, a bacterial infection that is much less infectious relative to COVID-19, has proven hazardous and in some cases deadly in prisons due to lack of ability to efficiently diagnosis, isolate and treat people in prison. COVID-19 differs substantially from tuberculosis due to its higher prevalence in the community, its more efficient mode of transmission, the inability to rapidly isolate people with or at risk for COVID-19, and the increased likelihood that correctional officers and staff will be at substantially higher risk for COVID-19 than for TB.

18. Recent outbreaks of COVID-19 underscore challenges that arise when the infection is introduced. In one facility, transmission occurred in over 400 people, including those who were incarcerated and correctional staff. Lack of COVID-19 testing has thwarted our ability to understand the extent to which outbreaks are occurring, but the observation that people who are incarcerated are dying of this disease suggests that this is these deaths are the tip of the iceberg. Once introduced, COVID-19 may have devastating consequences

including widespread transmission between people who are incarcerated and to correctional staff. This transmission extends to the community as infected individuals are transported to hospitals and correctional staff return to their homes.

19. Many of the people in prison who contract the virus – particularly those who are most vulnerable to exposure to COVID-19 – will need to be transported to community hospitals and likely to intensive care units (ICU) beds at high rates as prisons do not have the adequate facilities or equipment to treat seriously ill patients. Most prison health care systems are more akin to outpatient health care clinics. They do not have the necessary level of emergency medical equipment, personal protective equipment and other necessary supplies to treat those in respiratory distress. Community health systems are likewise not prepared to handle this influx of patients from prisons and this influx could be substantial, as we have seen from skilled nursing facilities, should an outbreak start.

20. Physical distancing, the practice of increasing the physical space between people to avoid spreading illness, is among the most important measures that can be taken to curb the spread of a highly infectious and contagious disease like COVID-19. Staying at least six feet away from other people lessens your chances of catching or transmitting COVID-19 to others. This strategy, however, cannot be effectively accomplished in any prison setting by virtue of the arrangement of beds and the inability to create physical barriers between beds, the use of common space like dining halls, showers, bathrooms, the lack of sanitary equipment to regularly disinfect surfaces, the lack of personal protective equipment for personnel and prisoners alike, and the inability to identify infectious persons before they become symptomatic, should they become symptomatic at all.

21. COVID-19 has created an extraordinary public health emergency, which will require an extraordinary response now to prevent widespread fatalities in prisons and the community. As such, urgent and drastic action is required to immediately reduce the prison population. Reducing the prison population immediately is the primary way to achieve recommended physical distancing within those facilities. This, in turn, will reduce exposure to COVID-19 prisoners and the staff who work there and the need for providing life-saving medical care.

Current Understanding of Bristol County House of Corrections

22. My understanding of the conditions at Bristol County House of Corrections are informed by Judge Young's April 8 order (ECF 64) and declarations of detained individuals and an attorney (ECF 12-3, 12-4, 12-5, 12-9, 33-2). The following are salient excerpts from those documents.

    - "The Detainees assert that they 'find it impossible to maintain the recommended distance of 6 feet from others' and they 'must also share or touch objects used by others.' Pet. ¶ 67. They specifically allege that their beds 'are situated only 3 feet apart' and that '[m]eals are inadequate and eaten in close quarters.' Pet. ¶ 68. Indeed, the government has provided the Court with photos of the sleeping quarters in the facility and this appears to be an accurate description. In one unit the 'cell size' is

listed as 30 feet by 10 feet (300 square feet), and the photo shows three bunk beds (sleeping six people) lining the wall. Other images supplied include a photo labeled 'Bunk Area' that shows a large room packed with rows of bunk beds. None appears to enjoy anything close to six feet of isolation." ECF 64, at 6.

- "My clients have informed me that the Unit has access to six showers, of which four are currently operational. Additionally, they have access to four urinals, of which two are operational. My clients have told me that soap is watered down and inadequate for proper hygiene." ECF 12-3, at 2.

- "The bathroom is disgusting. There's no toilet paper, no napkins in the bathroom. No one has been able to wipe any surfaces. The soap that we use is watered down. When the officers bring it out for us to wash our hands, we are pretty much just washing our hands with water. We do not have any supplies to keep things clean here – no bleach, no disinfectant, nothing. I help out with sweeping and mopping before lunch and I help clean the bathroom, so I know the cleaning supplies. When you clean bathrooms, you are supposed to use bleach. But we don't have that – just watered-down soap and hot water. What good is that for stopping germs?" ECF 12-4, at 1-2.

- "Upstairs, there are regular inmates, who are not detained by ICE. We share common areas, including the bathroom and a common room, where we eat." ECF 12-9, at 1.

23. Of the 149 detainees for whom medical information was provided as of April 8, 2020, a substantial number would meet threshold criteria for having a serious comorbid condition and the conditions provided did not include other conditions like obesity, which appears to elevate risk for more severe disease.

Recommendations for Bristol County House of Corrections

24. As an immediate first step, carceral settings should prioritize immediately releasing individuals most at-risk of harm from COVID-19, specifically older individuals and those with health risks that would increase their likelihood of an adverse medical consequence. Not only would this strategy immediately reduce the risk of spread of the disease to other people in prison and staff alike, but would have the greatest impact on reducing transmission to those at the highest risk for hospitalization, intensive care use utilization and death, and consequently reduce further burden to the already substantial amount of community resources should they fall ill.

25. Releasing people in prison now will reduce prison density and thus the likelihood that infected people in prison will expose other people in prison to the virus. As an added physical distancing precaution, prisons should also consider further reducing total population density by releasing other younger individuals in prison who may not experience substantially elevated risk for morbidity or mortality from complications from COVID-19, especially considering more recent reports showing that many COVID-19 carriers are asymptomatic, especially those who are younger with intact immune systems. Substantially reducing the number incarcerated in such crowded places will provide

added physical distancing and further reduce the public health risk that prisons pose to fellow people in prison, custodial staff, and the community in light of the COVID-19 crisis. Decisions about who to release among this population at elevated, but lower risk, should balance the benefits between public health (i.e., blunting the volatile COVID-19 epidemic) and public safety risk (i.e., risk for criminal harms) these individuals pose when returned to the community. Many places nationwide are already doing this successfully.

26. The U.S. healthcare system is poorly equipped to handle a widespread outbreak of COVID-19. For reasons stated, utilizing Influenza A preparedness strategies is likely to fail. A burden on hospital beds already exists. Prisons could significantly contribute to the stresses on currently inadequate health care resources. Furthermore, prisons are often located in rural or outlying areas, where access to healthcare facilities and hospitals with appropriate levels of equipment and staff are already scarce. These hospitals are also least likely to be prepared for managing patients with COVID-19, especially those who must have custodial supervision at their bedside.

27. Additionally, prisons, absent reduction of the population, are not equipped to address a COVID-19 outbreak. Internally, they lack essential health care equipment needed to treat infected patients, such as sufficient numbers of isolation rooms and ventilators, which seldom, if ever, exist in prisons. Even on a more basic level, prisons lack the capacity to identify or treat an outbreak. For example, they do not possess personal protective equipment for staff and other people in prison that is necessary to protect themselves from transmission of the virus. There are essentially no testing kits and even assessing staff for symptoms is inadequate given that transmission may occur in those without symptoms or before symptoms develop. Custodial and medical staff rotates through the prison typically on 8-hour shifts and return to families, many of whom are susceptible to adverse health outcomes if infected with COVID-19.

28. Other methods for addressing a highly infectious disease like COVID-19 in prisons, aside from a vaccine that we do not expect to be available for another 12 to 18 months, will not be successful for containing the virus in any meaningful way. For instance, isolating people once they are screened has already proven futile in other settings; notably, the quarantining of individuals on cruise ships. In my opinion, efforts to isolate people in prison will likely fare far worse than cruise ship isolation efforts. Cruise ship efforts included taking measures like restricting people to their cabins and having helicopters available to drop off test kits. Restricting people in prison to their living units will not contain the virus because many prisoners live in dormitory-style housing and they share many common public spaces like showers, meals and restrooms. Providing massive testing in prison, as was done on cruise ships, has many logistical challenges in prisons and is a luxury that will not be afforded to most people in prison.

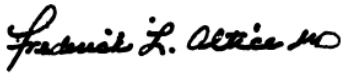
29. Release from prison is a necessary strategy for increasing physical distancing and reducing the risk of a fatal outbreak of COVID-19. It needs to be done thoughtfully, however, by balancing public health and public safety. People released from prison must have a safe place to go for an extended period of time upon release. Physical distancing

will need to continue while they are in the community as well and steps will have to be taken to ensure that can occur. Prisons will need to educate those being released as to these best practices and plan for how resources can be provided to assist this population to remain in safe settings where physical distancing can happen.

30. With Massachusetts being one of the national epicenters of the COVID-19 pandemic, its response is going to serve as a test case for how the country addresses widespread outbreak of this infectious disease. If the DOC takes bold action and thoughtfully incorporates into their response plan the exceptional but necessary public health recommendation to reduce the prison population, many lives can be saved.

I declare under penalty of perjury under the laws of the State of Massachusetts that the foregoing is true and correct.

Executed this 9th day in April 2020 in New Haven, Connecticut.



Frederick L. Altice, M.D.

Professor of Medicine and Public Health

Yale University