

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

Maria Alejandra Celimen Savino, *et. al.*,

Petitioners-Plaintiffs,

v.

THOMAS HODGSON, *et. al.*,

Respondents-Defendants.

Civil Action No. 1:20-cv-10617-PBS

DECLARATION OF GREGG GONSALVES

I, **GREGG S. GONSALVES**, upon my personal knowledge, and in accordance with 28 U.S.C. § 1746, declare as follows:

1. I am an epidemiologist at the Yale School of Medicine and School of Public Health. I have worked at the schools of medicine and public health since 2017. Attached as Exhibit A is my CV.
2. COVID-19 is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), a virus closely related to the SARS virus. In its least serious form, COVID-19 can cause illness including fever, cough, and shortness of breath. However, for individuals who become more seriously ill, a common complication is bilateral interstitial pneumonia, which causes partial or total collapse of the lung alveoli, making it difficult or impossible for patients to breathe. Thousands of patients have required hospital-grade respirators, and COVID-19 can progress from a fever to life-threatening pneumonia with what are known as “ground-glass opacities,” a lung abnormality that inhibits breathing.
3. In about 16% of cases of COVID-19, illness is severe including pneumonia with respiratory failure, septic shock, multi organ failure, and even death.
4. Certain populations of people are at particular risk of contracting severe cases of COVID-19. People over the age of fifty are at higher risk, with those over seventy at serious risk. As the Center for Disease Control and Prevention has advised, certain medical conditions increase the risk of serious COVID-19 for people of any age. These medical conditions

include: those with lung disease, heart disease, diabetes, blood disorders, chronic liver or kidney disease, inherited metabolic disorders, developmental delays, those who are immunocompromised (such as from cancer, HIV, autoimmune diseases), those who have survived strokes, and those who are pregnant.¹

5. There is no vaccine against COVID-19 and there is no known cure. No one is immune. The only known effective measures to prevent injuries or deaths resulting from COVID-19 are to prevent individuals from being infected with the virus. In fact, young and healthy individuals may be more susceptible than originally thought. New data from the CDC show that up to one-fifth of infected people ages 20-44 have been hospitalized, including 2%-4% who required treatment in an intensive care unit.²
6. The number of people infected is growing exponentially. The death toll in, for instance, the nation of Italy, which began experiencing this epidemic about a week earlier than the first diagnosed American cases, rose by 30% overnight in the 24 hours between March 5, 2020 and March 6, 2020.³ On March 17, 2020, Italy reported 345 new coronavirus deaths in the previous 24 hours, an increase in the death toll of 16%.⁴ Experts predict similar rapid growth will soon occur in the United States. Without effective public health interventions, a COVID-19 response team at the Imperial College in the United Kingdom projected 2.2 million or more deaths in the United States.⁵
7. For all people, even in advanced countries with very effective health care systems, the case fatality rate of COVID-19 is about ten fold higher than that observed from a severe seasonal influenza. In the more vulnerable groups, both the need for care, including intensive care, and death is much higher than we observe from influenza infection. In the highest risk populations, the case fatality rate is about 15%. For high risk patients who do not die from COVID-19, a prolonged recovery is expected to be required, including the need for extensive rehabilitation for profound deconditioning, loss of digits, neurologic damage, and loss of respiratory capacity that can be expected from such a severe illness.
8. Based on data collected by the Centers for Disease Control and Prevention, World Health Organization, and National Center for Biotechnology Information on the speed at which

¹ Centers for Disease Control and Prevention, *Coronavirus Disease 2019 (COVID-19): People Who May Be at Higher Risk for Severe Illness*, <https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-risk-complications.html> (last accessed Mar. 18, 2020).

² Centers for Disease Control and Prevention, *Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) — United States, February 12–March 16, 2020* (Mar. 26, 2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6912e2.htm?s_cid=mm6912e2_w

Sharon Begley, *New analysis breaks down age-group risk for coronavirus — and shows millennials are not invincible* (March 18, 2020)

<https://www.statnews.com/2020/03/18/coronavirus-new-age-analysis-of-risk-confirms-young-adults-not-invincible/>

³ Worldometer, *Italy*, <https://www.worldometers.info/coronavirus/country/italy/> (last accessed Mar. 26, 2020).

⁴ *Id.*

⁵ Imperial College COVID-19 Response Team, *Impact of non-pharmaceutical Interventions (NPIs) to reduce COVID-19 mortality and healthcare demand* (Mar. 16, 2020),

<https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf>.

SARS-CoV-2 has spread since it is first known to have infected a human in November 2019, the virus is estimated to be twice as contagious as influenza.⁶ Unlike influenza, there are no known vaccines or antiviral medications to prevent or treat infection from COVID-19. Because the coronavirus that causes COVID-19 is passed through respiratory droplets and also appears to be able to survive on inanimate surfaces, it can be transmitted even when an infected person is no longer in the immediate vicinity. Data from China indicates that the average infected person passes the virus on to 2-3 other people at distances of 3-6 feet.⁷ Everyone is at risk of infection because our immune systems have never been exposed to or developed protective responses against this virus.

9. The current estimated incubation period of COVID-19 is between 2 and 14 days, meaning that a patient who begins showing symptoms today may have been contagious for as long as two weeks prior. The time course of the disease once symptoms appear can be very rapid. A patient's condition can seriously deteriorate in as little as five days (perhaps sooner) following initial detection of symptoms. The current estimated rate for life-threatening complications is approximately 20%, with a fatality rate estimated at between 1% and 5%. All of these risk assessment numbers, however, appear to be rising.
10. It is clear that, currently, the numbers of people diagnosed reflect only a portion of those likely infected; very few people have been tested, and many are asymptomatic, so they do not even know they should be tested. As a result, thousands of people are likely living day to day and carrying a potentially fatal disease that is easily transmitted—and no one is aware of it.
11. The Massachusetts (“MA”) Department of Public Health announced the first confirmed COVID-19 case in the state on February 1, 2020.⁸ As of March 26, the MA Department of Public Health has confirmed 2,417 cases of COVID-19 in the state.⁹ As of March 24, 2,147 residents of Massachusetts were under state-imposed quarantine following exposure to COVID-19 in community-based settings.¹⁰ According to the MA Department of Public Health, 1,655 additional residents have completed monitoring after possible exposure from group settings.¹¹ In the last few weeks, several entire nations have declared lockdowns, and cities and institutions across the United States are closing public events,

⁶ Brian Resnick & Christina Animashaun, *Why Covid-19 is worse than the flu, in one chart*, Vox (Mar. 18, 2020), <https://www.vox.com/science-and-health/2020/3/18/21184992/coronavirus-covid-19-flu-comparison-chart>.

⁷ Knvul Sheikh, Derek Watkins, Jin Wu & Mika Gröndahl, *How Bad Will the Coronavirus Outbreak Get? Here are 6 Key Factors*, NEW YORK TIMES (Feb. 28, 2020), <https://www.nytimes.com/interactive/2020/world/asia/china-coronavirus-contain.html>.

⁸ Joe Dwinell, Lisa Kashinsky & Stefan Geller, *UMass Boston student first confirmed case of coronavirus in Massachusetts*, BOSTON HERALD (Feb. 1, 2020), <https://www.bostonherald.com/2020/02/01/first-case-of-coronavirus-confirmed-in-massachusetts-dph/>.

⁹ Massachusetts Department of Public Health, *COVID-19 cases in Massachusetts* (Mar. 26, 2020), <https://www.mass.gov/doc/covid-19-cases-in-massachusetts-as-of-march-26-2020/download>.

¹⁰ Massachusetts Department of Public Health, *Massachusetts residents subject to COVID-19 quarantine*, <https://www.mass.gov/info-details/covid-19-cases-quarantine-and-monitoring#massachusetts-residents-subject-to-covid-19-quarantine-> (last accessed Mar. 26, 2020).

¹¹ *Id.*

workplaces, and schools in order to curb spread of COVID-19 by limiting person-to-person transmission in group settings.

12. On March 10, 2020 Governor Charlie Baker of Massachusetts declared a state of emergency, announcing aggressive recommendations to curb the spread of COVID-19 and finding the importance of taking steps to address the potentially disastrous impacts of the disease on the health, safety, and security of the public.¹² On March 13, 2020 President Donald J. Trump announced a national state of emergency in response to the disease's outbreak.¹³ On March 15, 2020, Governor Baker closed schools for three weeks, banned on-premise consumption of food or drinks at bars and restaurants, and limiting all gatherings to 25 individuals.¹⁴ On March 23, 2020, Governor Baker issued an emergency order closing all nonessential businesses, prohibiting gatherings of more than ten people, and urging everyone to remain in their homes as much as possible and to "practice social distancing at all times. . . to limit the spread of this highly contagious and deadly virus."¹⁵ On March 25, 2020, Governor Baker extended school closures until May 4.¹⁶
13. On March 11, 2020, the World Health Organization declared a global pandemic based on COVID-19. Citing "deep[] concern[] both by the alarming levels spread and severity, and by the alarming levels of inaction," it called for countries to take "urgent and aggressive action."¹⁷
14. As of March 26, 2020, according to the World Health Organization, over 462,684 people in over 200 countries and territories have been diagnosed with coronavirus and 20,834 people have died as a result.¹⁸ And as of March 26, according to the Center for Disease

¹² Massachusetts Department of Public Health, *COVID-19 State of Emergency*, Exec. Order No. 591 (Mar. 10, 2020), <https://www.mass.gov/executive-orders/no-591-declaration-of-a-state-of-emergency-to-respond-to-covid-19>.

¹³ President Donald Trump, *Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak* (Mar. 13, 2020), <https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>.

¹⁴ Massachusetts Department of Public Health, *COVID-19 State of Emergency: Updates, Emergency Orders and Guidance*, <https://www.mass.gov/info-details/covid-19-state-of-emergency> (last accessed Mar. 17, 2020).

¹⁵ Office of the Governor, Commonwealth of Massachusetts, *Order Assuring Continued Operation of Essential Services in the Commonwealth, Closing Certain Workplaces, and Prohibiting Gatherings of More Than 10 People*, <https://www.mass.gov/doc/march-23-2020-essential-services-and-revised-gatherings-order/download> (last accessed Mar. 26, 2020).

¹⁶ CBS Boston, *Coronavirus Closures: Gov. Baker Orders All Mass. Schools Stay Closed Until May 4* (Mar. 25, 2020), <https://boston.cbslocal.com/2020/03/25/coronavirus-massachusetts-schools-closed/>.

¹⁷ World Health Organization, *WHO Director-General's opening remarks at the media briefing on COVID-19* (Mar. 11, 2020), <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.

¹⁸ World Health Organization, *Coronavirus disease 2019: Situation Report – 66* (Mar. 26, 2020), https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200326-sitrep-66-covid-19.pdf?sfvrsn=81b94e61_2.

Control (CDC), 68,440 people have been diagnosed in the United States, with 994 deaths confirmed. 50 states, the District of Columbia, Puerto Rico, Guam, and the US Virgin Islands have confirmed positive tests.¹⁹

15. The virus is thought to be transmitted mainly between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. It also may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes. What doctors and experts are calling “community spread” is at the root, and “containment” and “social distancing” are being enforced as the best methods of prevention. Containment requires intensive hand washing practices, decontamination and aggressive cleaning of surfaces, and identifying and isolating people who are ill or who have had contact with people who are ill. Social distancing means, in essence, isolating oneself from other people as much as possible: working from home, avoiding travel, avoiding crowds and contact with others, not touching common surfaces, and generally staying at least 6-12 feet from other people as much as possible.
16. In light of COVID-19, individuals in detention facilities are at risk of serious harm. Detention facilities are designed to maximize control of the incarcerated population, not to minimize disease transmission or to efficiently deliver health care. These facilities are enclosed environments, much like the cruise ships that were the site of the largest concentrated outbreaks of COVID-19. Detention facilities have even greater risk of infectious spread than other enclosed environments because of conditions of crowding, the proportion of vulnerable people detained, and often scant medical care resources. During the H1N1 influenza (“Swine Flu”) epidemic in 2009, jails and prisons were sites of severe outbreaks of viral infection.²⁰
17. People incarcerated in detention facilities live in close quarters and cannot achieve the “social distancing” needed to effectively prevent the spread of COVID-19. Toilets, sinks, and showers are shared, without disinfection between use. Food preparation and food service is communal, with little opportunity for surface disinfection. Spaces are poorly ventilated, which promotes highly efficient spread of diseases through droplets.
18. Many detention facilities lack the supplies and staff needed to perform cleaning procedures such as regular disinfection of high-touch surfaces, which is essential to preventing virus spread. Facilities often do not provide adequate opportunities to exercise necessary hygiene measures, such as frequent handwashing or use of alcohol-based sanitizers when handwashing is unavailable. Jails and prisons are often under-resourced

¹⁹ Centers for Disease Control and Prevention, *COVID-19: U.S. at a Glance*, https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcases-in-us.html (last accessed Mar. 26, 2020).

²⁰ David M. Reutter, *Swine Flu Widespread in Prisons and Jails, but Deaths are Few*, PRISON LEGAL NEWS (Feb. 15, 2010), <https://www.prisonlegalnews.org/news/2010/feb/15/swine-flu-widespread-in-prisons-and-jails-but-deaths-are-few/>.

and ill-equipped with sufficient hand soap and alcohol-based sanitizers for people detained in and working in these settings.

19. Many detention facilities lack the medical care infrastructure necessary to treat infected individuals and prevent the exponential spread of infection. For example, many detention facilities use practical nurses who practice beyond the scope of their licenses; have part-time physicians who have limited availability to be on-site; and facilities with no formal linkages with local health departments or hospitals. Detention facilities are also ill-equipped to provide sufficient personal protective equipment, such as gloves, masks, gowns, and eye-shields, for people who are incarcerated and caregiving staff, increasing the risk for everyone in the facility of a widespread outbreak.
20. The medical facilities at jails and prisons are almost never sufficiently equipped to handle widespread outbreaks of infectious diseases. To prevent transmission of droplet-borne infectious diseases, people who are infected and ill need to be isolated in specialized airborne negative pressure rooms. Most jails and prisons have few negative pressure rooms if any, and these may be already in use by people with other conditions (including tuberculosis or influenza). Resources will become exhausted rapidly and any beds available will soon be at capacity. As an outbreak spreads, medical personnel become sick and do not show up to work. Facilities can become dangerously understaffed with healthcare providers.
21. Jails and prisons often need to rely on outside facilities (hospitals, emergency departments) to provide intensive medical care given that the level of care they can provide in the facility itself is typically relatively limited. During an epidemic, this will not be possible, as those outside facilities will likely be at or over capacity themselves.
22. As health systems inside facilities are taxed, people with chronic underlying physical and mental health conditions may not be able to receive the care they need. Failure to provide individuals adequate medical care for their underlying chronic health conditions results in increased risk of COVID-19 infection and increased risk of infection-related morbidity and mortality if they do become infected.
23. Failure to provide adequate mental health care, as may happen when health systems in jails and prisons are taxed by COVID-19 outbreaks, can result in poor health outcomes. Moreover, mental health conditions may be exacerbated by the stress of incarceration during the COVID-19 pandemic, including isolation and lack of visitation.
24. As an outbreak spreads through jails, prisons, and communities, correctional officers and other security personnel become sick and do not show up to work. Absenteeism poses substantial safety and security risk to both the people inside the facilities and the public.
25. These risks have all been borne out during past epidemics of influenza in jails and prisons. For example, in 2012, the CDC reported an outbreak of influenza in 2 facilities

in Maine, resulting in two inmate deaths.²¹ Subsequent CDC investigation of 995 inmates and 235 staff members across the 2 facilities discovered insufficient supplies of influenza vaccine and antiviral drugs for treatment of people who were ill and prophylaxis for people who were exposed. During the swine flu outbreak in 2009, jails and prisons experienced a disproportionately high number of cases.²² Even facilities on “quarantine” continued to accept new intakes, rendering the quarantine incomplete. These scenarios occurred in the “best case” of influenza, a viral infection for which there was an effective and available vaccine and antiviral medications, unlike COVID-19, for which there is currently neither.

26. Due to the crowded conditions and scarcity of sanitary and medical resources, transmission of infectious diseases in jails and prisons, including the Bristol County House of Corrections, is incredibly common. These risks are magnified for those diseases, like COVID-19, that are transmitted by respiratory droplets. An outbreak of COVID-19 in detention facilities would be devastating.
27. The experiences of other nations fighting COVID-19 outbreaks demonstrate the particular risk of COVID-19 transmission present in detention facility settings. Prisons in China reported more than 500 cases of COVID-19 spread across four facilities, and these cases affected both correctional officers and incarcerated people.²³ Secretary of State Mike Pompeo has called for Iran to release U.S. citizens detained there because of “deeply troubling” “[r]eports that COVID-19 has spread to Iranian prisons,” noting that “[t]heir detention amid increasingly deteriorating conditions defies basic human decency.”²⁴
28. Of the 2,417 confirmed cases in the state of Massachusetts, 90 of those cases have been in Bristol County.²⁵ It is only a matter of time before we become aware of COVID-19 cases in the Massachusetts detention system, including Bristol County House of Corrections, in which inmates live in close quarters, with subpar infection control measures in place, and whose population represents some of the most vulnerable. On March 24, 2020, ICE announced that a detainee in Bergen County Jail in New Jersey had

²¹ *Influenza Outbreaks at Two Correctional Facilities – Maine, March 2011*, Centers for Disease Control and Prevention (2012), <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6113a3.htm>.

²² David M. Reutter, *Swine Flu Widespread in Prisons and Jails, but Deaths are Few*, PRISON LEGAL NEWS (Feb. 15, 2010), <https://www.prisonlegalnews.org/news/2010/feb/15/swine-flu-widespread-in-prisons-and-jails-but-deaths-are-few/>.

²³ Evelyn Cheng & Huileng Tan, *China says more than 500 cases of the new coronavirus stemmed from prisons*, CNBC (Feb. 20, 2020), <https://www.cnbc.com/2020/02/21/coronavirus-china-says-two-prisons-reported-nearly-250-cases.html>.

²⁴ Michael R. Pompeo, *United States Calls for Humanitarian Release of All Wrongfully Detained Americans in Iran*, U.S. Dep’t of State (Mar. 10, 2020), <https://www.state.gov/united-states-calls-for-humanitarian-release-of-all-wrongfully-detained-americans-in-iran/>.

²⁵ Massachusetts Department of Public Health, *COVID-19 cases in Massachusetts* (Mar. 26, 2020), <https://www.mass.gov/doc/covid-19-cases-in-massachusetts-as-of-march-26-2020/download>.

tested positive for COVID-19.²⁶ COVID-19 has already entered the detention systems of several other states.²⁷ In this setting, we can expect the spread of COVID-19 in a manner similar to that at the Life Care Center of Kirkland, Washington, at which over 50% of residents have tested positive for the virus and over 20% have died in the past month. Such an outbreak would further strain the community's health care system.

29. COVID-19 threatens the well-being of detained individuals, the corrections staff who shuttle between detention facilities and outside communities, and members of those outside communities. Staff, visitors, contractors, and vendors who pass between communities and facilities and can bring infectious diseases into facilities. Moreover, rapid turnover of jail and prison populations means that people often cycle between facilities and communities. People often need to be transported to and from facilities to attend court and move between facilities. Strains on the medical systems of detention facilities have implications for the outside hospitals and emergency departments on which detention facilities already depend for intensive medical care services. Prison health is public health.
30. The only viable public health strategy available is risk mitigation. In my opinion, from an epidemiological perspective, the Court should immediately take the steps necessary to provide for the release of any detainees in Bristol County House of Corrections, absent extraordinary circumstances. Such steps are necessary for the safety of detained individuals and the broader community as we address the rapid global outbreak of COVID-19.
31. Releasing detainees has a number of valuable effects on public health and public safety: it allows for greater social distancing, which reduces the chance of spread if virus is introduced; it allows easier provision of preventive measures such as soap for handwashing, cleaning supplies for surfaces, frequent laundering and showers, etc.; and it helps prevent overloading the work of detention staff such that they can continue to ensure the safety of detainees. The United Nations High Commissioner for Refugees, recognizing the serious public health risks posed by prisons and detention centers, has urged governments to release prisoners and detainees in order to protect their safety and as part of larger efforts to quell the spread of the virus.²⁸

²⁶News Release, U.S. Immigration and Customs Enforcement, ICE detainee tests positive for COVID-19 at Bergen County Jail (March 24, 2020) (<https://www.ice.gov/news/releases/ice-detainee-tests-positive-covid-19-bergen-county-jail>).

²⁷ See, e.g., *Rikers Inmate Tests Positive for Coronavirus*, Spectrum News NY1 (Mar. 18, 2020), <https://www.ny1.com/nyc/all-boroughs/coronavirus/2020/03/18/rikers-inmate--correction-officer-test-positive-for-coronavirus>; *Rikers officer infected with coronavirus*, Fox 5 NY (Mar. 18, 2020), <https://www.fox5ny.com/news/rikers-officer-infected-with-coronavirus>; Mark Sundstrom, *Inmate at Nassau County jail tests positive for coronavirus: officials*, Pix 11 (Mar. 16, 2020), <https://www.pix11.com/news/coronavirus/inmate-at-nassau-county-jail-long-island-tests-positive-for-coronavirus-officials>.

²⁸ Michelle Bachelet, UN High Commissioner for Refugees, Urgent action needed to prevent COVID-19 “rampaging through places of detention” (Mar. 25, 2020) (<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx>).

32. The public health crisis requires each and every one of us to re-evaluate how we conduct our lives and care for one another. Institutions responsible for the care and custody of vulnerable populations must take unique steps to “flatten the curve” and slow the spread of this virus. Incarcerating as few individuals as possible will help mitigate the harm from a COVID-19 outbreak.
33. Conditions related to COVID-19 are changing rapidly and may change between the time I execute this Declaration and when this matter appears before the Court.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my information and belief.



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Date: March 26, 2020

CERTIFICATE OF SERVICE

I hereby certify that on March 27, 2020, the above-captioned document was filed through the ECF system and will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF), and paper copies will be sent to those indicated as non-registered participants.

/s/ Oren M. Sellstrom