

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

Oscar Sanchez, Marcus White, Tesmond McDonald, Marcelo Perez, Roger Morrison, Keith Baker, Paul Wright, Terry McNickels, and Jose Munoz; *on their own and on behalf of a class of similarly situated persons*;

Petitioners/Plaintiffs,

v.

DALLAS COUNTY SHERIFF MARIAN BROWN, *in her official capacity*; DALLAS COUNTY, TEXAS;

Respondents/Defendants

Civil Action No. 3:20-cv-00832

**Plaintiffs'/Petitioners' Motion for a
Temporary Restraining Order,
Preliminary Injunction and
Writ of Habeas Corpus**

Class Action

IMMEDIATE RELIEF SOUGHT

Plaintiffs/Petitioners (hereinafter "Plaintiffs") respectfully move the Court for entry of a writ of habeas corpus, temporary restraining order ("TRO") and preliminary injunction under 28 U.S.C. § 2241, 42 U.S.C. § 1983, and Federal Rule of Civil Procedure 65. Plaintiffs are at grave risk of contracting COVID-19, some with an imminent threat of dying if not provided medical treatment, due to the unconstitutional conditions in the Dallas County Jail.

Plaintiffs seek an immediate, emergency TRO and writ of habeas corpus requiring Defendants to: (1) identify and release all members of a subclass of medically vulnerable individuals, (2) provide all persons released with educational resources on COVID-19 including instructions that they should self-isolate for the CDC-recommended period of time (currently 14 days) following release, and (3) to submit a plan implementing further public health protocols, to be supervised by a qualified public health expert, to reduce the risk to class members of contracting COVID-19.

Plaintiffs further seek a preliminary and/or permanent injunction and writ of habeas corpus requiring that Defendants: (1) continue to release all current and future Medically-Vulnerable subclass members, (2) report weekly on the population of persons in the Dallas County Jail who are Medically-Vulnerable as defined in this action, (3) follow the terms of the public health expert

plan submitted pursuant to Fed. R. Evid. 706, (4) and release additional Class Members, including those not considered “Medically-Vulnerable,” as needed to ensure that all remaining persons incarcerated in the Dallas County Jail are under conditions consistent with CDC and public health guidance to prevent the spread of COVID-19, including requiring that all persons be able to maintain six feet or more of space between them.

As more fully presented in their brief in support of this motion and its accompanying evidentiary appendix, Plaintiffs state the following in support of their motion:

1. Plaintiffs are likely to succeed on the merits of their claims. Defendants’ deliberate indifference to the serious risk that COVID-19 poses to Plaintiffs and Class Members, and particularly members of the Medically Vulnerable Subclass, violates their rights under the Eighth and Fourteenth Amendments. Further, for Pre-Adjudication Class members, Defendants’ failures to ensure sufficient safety amounts to impermissible pretrial punishment in violation of the Fourteenth Amendment.

2. Without immediate injunctive relief from this Court, there is a substantial risk that Plaintiffs will suffer irreparable harm of serious illness and, in many cases, death.

3. Entry of an injunction poses no harm to Defendants and, indeed, will benefit Defendants because the currently prevailing conditions in the jail put jail staff at risk as well.

4. It is in the public interest to grant an injunction to prevent the spread of COVID-19 within the Dallas County Jail because an outbreak will have serious ramifications for people incarcerated in its walls, correctional and medical staff that carry the infection into their homes and communities, and Dallas County residents who will suffer from the ensuing rapid spread of this infectious disease through increased transmissions and the further taxing of local public health resources.

5. Plaintiffs respectfully request that the Court address their Motion on an emergency, expedited basis, and grant the relief set forth in the enclosed Memorandum and Proposed Orders.

6. If immediate release is not granted on the basis of this Motion alone, then Plaintiffs respectfully request expedited review of the Motion, including oral argument, via telephonic or videoconference if necessary.

Dated: April 9, 2020.

Respectfully submitted,

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**pro hac vice application forthcoming*

***N.D. Texas admission application forthcoming*

CERTIFICATE OF CONFERENCE

On April 9, 2020, I spoke by telephone and communicated by email with Kate David, counsel for defendants Dallas County Sheriff Marian Brown and Dallas County, Texas in *Daves v. Dallas County, Texas*, No. 3:18-cv-00154-N (N.D. Tex.), about the subject matter of and relief requested in this motion for temporary restraining order. Ms. David advised me that her clients are considering whether or not they will oppose the relief requested.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing was served via the Court's CM/ECF system on all counsel registered with that system, and via email, on April 9, 2020.

/s/ Barry Barnett

Barry Barnett

**UNITED STATES DISTRICT COURT
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v.

DALLAS COUNTY SHERIFF MARIAN BROWN, *in her official capacity*; DALLAS COUNTY, TEXAS;

Respondents/Defendants

Civil Action No. 3:20-cv-00832

**[PROPOSED] ORDER GRANTING PLAINTIFFS' MOTION FOR A TEMPORARY
RESTRAINING ORDER**

The Plaintiffs' Motion for Temporary Restraining Order is GRANTED:

1. It is ORDERED that within six hours of this order (by _____ [a.m./p.m.] today), Defendants shall provide the Plaintiffs and this Court with a list of all individuals who are currently detained at the Dallas County Jail who meet any of the following criteria:

- Have lung disease, including asthma, chronic obstructive pulmonary disease (e.g. bronchitis or emphysema), or other chronic conditions associated with impaired lung function;
- Have heart disease, such as congenital heart disease, congestive heart failure and coronary artery disease;
- Have chronic liver or kidney disease (including hepatitis and dialysis patients);
- Have diabetes or other endocrine disorders;
- Have epilepsy;
- Have hypertension;
- Have a compromised immune system (such as from cancer, HIV, receipt of an organ or bone marrow transplant, as a side effect of medication, or other autoimmune disease);

- Have blood disorders (including sickle cell disease);
- Have inherited metabolic disorders;
- Have a history of stroke;
- Have a developmental disability;
- Are now or have been pregnant within the last two weeks;
- Are 50 years of age or older; and/or
- Have any other condition identified either now or in the future as being a particular risk for severe illness and/or death caused by COVID-19.

2. Within 24 hours after that list has been submitted (by _____ [a.m./p.m.] tomorrow), Defendants shall release the persons on the list absent proof of judicially-recorded findings by clear and convincing evidence that the individual poses such a serious risk of flight or danger to others that no other conditions can mitigate. The Court will schedule a hearing at _____ [a.m./p.m.] on _____, 2020 to resolve any disputes about whether certain listed individuals are entitled to release.

3. Defendants shall provide all persons on the list described in Paragraph 1 educational resources on COVID-19 including instructions that they should self-isolate for the CDC-recommended period of time (currently 14 days) following release.

4. Defendants remain free to voluntarily release any person or group of people currently incarcerated at the Dallas County Jail to the extent allowed by law.

5. Following immediate release of all Medically-Vulnerable Subclass Members, a plan, to be submitted to the Court in three (3) days from the date of this Order and overseen by a qualified public health expert agreed upon by the parties or ordered by the Court pursuant to Fed. R. Evid. 706, which outlines:

- a. Specific mitigation efforts, in line with CDC guidelines, to prevent, to the degree possible, contraction of COVID-19 by all Class Members not immediately released;
 - b. A housing and/or public support plan for any released Class or Subclass Members whose testing confirms have been exposed to or infected with COVID-19 and who do not readily have a place to self-isolate for the CDC-recommended period of time (currently 14 days).
 - c. An evaluation of whether the release of the Subclass Members permits adequate social distancing and whether other categories of prisoners must be released to provide for compliance with CDC guidelines.
6. This Temporary Order is valid for a limited period of 14 days or until further order of this Court, and the Court's ruling is subject to change based on a more fully developed record at preliminary injunction proceedings.

DONE AND ORDERED this ____ day of April 2020.

United States District Judge

Copies furnished to: All Counsel of Record

**UNITED STATES DISTRICT COURT
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v.

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Respondents/Defendants

Civil Action No. 3:19-cv-00832

**[PROPOSED] ORDER GRANTING PLAINTIFFS' MOTION FOR A PRELIMINARY
INJUNCTION AND WRITS OF HABEAS CORPUS**

The Plaintiffs' Emergency Motion for a Preliminary Injunction is GRANTED:

1. The temporary restraining order/writs of habeas corpus of all Medically-Vulnerable Subclass Members as provided for in this Court's Order Granting Plaintiffs' Motion for a Temporary Restraining Order will continue until a final ruling on the merits of the case.

2. Defendants are hereby ordered to release additional Class Members, including those not considered "Medically-Vulnerable" as defined in Plaintiffs' Motion for a Temporary Restraining Order and Preliminary Injunction, as needed to ensure that all remaining persons incarcerated in the Dallas County Jail are under conditions consistent with CDC and public health guidance to prevent the spread of COVID-19, including requiring that all persons be able to maintain six feet or more of space between them.

3. Defendants are hereby enjoined from confining more than one person in a cell until such time as the danger of contagion from COVID-19 recedes sufficiently to lift social distancing requirements.

4. Each Monday, no later than 1 pm. Central Time, Defendants must submit to Plaintiffs and the Court a list of any persons who are in custody of the Dallas County Jail who meet any of the following criteria, along with proof of judicially-recorded findings by clear and convincing evidence that the individual poses such a serious risk of flight or danger to others that no other conditions can mitigate:

- Have lung disease, including asthma, chronic obstructive pulmonary disease (e.g. bronchitis or emphysema), or other chronic conditions associated with impaired lung function;
- Have heart disease, such as congenital heart disease, congestive heart failure and coronary artery disease;
- Have chronic liver or kidney disease (including hepatitis and dialysis patients);
- Have diabetes or other endocrine disorders;
- Have epilepsy;
- Have hypertension;
- Have a compromised immune system (such as from cancer, HIV, receipt of an organ or bone marrow transplant, as a side effect of medication, or other autoimmune disease);
- Have blood disorders (including sickle cell disease);
- Have inherited metabolic disorders;
- Have a history of stroke;
- Have a developmental disability;
- Are now or have been pregnant within the last two weeks;
- Are 50 years of age or older; and/or

- Have any other condition identified either now or in the future as being a particular risk for severe illness and/or death caused by COVID-19.

5. Defendants are hereby ordered, for the pendency of this case, to adhere to the plan submitted by a qualified public health expert agreed upon by the parties pursuant to Fed. R. Evid. 706 pursuant to this Court's Order Granting Plaintiffs' Motion for a Temporary Restraining Order, including following:

- a. Specific mitigation efforts, in line with CDC guidelines, to prevent, to the degree possible, contraction of COVID-19 by all Class Members not immediately released;
- b. A housing and/or public support plan for any released Class or Subclass Members whose testing confirms infection with COVID-19 and who do not readily have a place to self-isolate for the CDC-recommended period of time (currently 14 days).
- c. An evaluation of whether the release of the Subclass Members permits adequate social distancing and whether other categories of prisoners must be released to provide for compliance with CDC guidelines.

6. For the reasons explained in the attached opinion, the Court finds that the preliminary injunctive relief requested by Plaintiffs is narrowly drawn, extends no further than necessary to correct the harm this Court finds requires preliminary relief, and is the least intrusive means necessary to correct the harm. Further, this Court has reached its conclusion after giving substantial weight to any possible adverse impact on public safety and the operation of the criminal legal system that could possibly be caused by preliminary relief.

DONE AND ORDERED this ____ day of April 2020.

United States District Judge

Copies furnished to: All Counsel of Record

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**Memorandum in Support of Motion for
Temporary Restraining Order,
Preliminary Injunction, and Writ of
Habeas Corpus**

Class Action

IMMEDIATE RELIEF SOUGHT

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In accordance with Rule 7.1 of the Local Civil Rules of the Northern District of Texas, Petitioners/Plaintiffs (hereinafter “Plaintiffs”) and Putative Class Members file this brief in support of their Petition for Habeas Corpus and Motion for Temporary Restraining Order and Preliminary Injunction, and would respectfully show the following:

INTRODUCTION

Oscar Sanchez has a history of severe, chronic asthma that has required hospitalization in the past. Sanchez Dec. ¶ 4. On April 5, 2020 he reported hard chest pains and difficulty breathing to the medical staff at the Dallas County Jail and was told there was nothing to be done. *Id.* Several times a day, he comes into close contact with the dozens of other men housed in his pod at the Jail, and several new people are moved into his pod each week. ¶ 6–14. In the face of the highly contagious and deadly COVID-19 pandemic that is spreading in the Dallas County Jail, Mr. Sanchez’s health is at serious risk. Upon asking to be tested for COVID-19, Mr. Sanchez was told by Dallas County Jail staff that he would first have to put in a sick call costing \$10: the staff member relaying this information commiserated with Mr. Sanchez by saying, “I don’t know what these people want you to do. Die first?” *Id.* at ¶ 17.

Terry McNickles is a fifty-eight (58) year old man recovering from an operation for kidney cancer. McNickles Dec. ¶¶ 1–2. After his kidney removal surgery, his doctor told him he would have to take extra precautions to fight off infections—such as a special diet and increased hand-washing—because his immune system had been compromised. *Id.* ¶ 2. Mr. McNickles is unable to protect himself from a highly-dangerous infection in the Dallas County Jail environment.

Tesmond McDonald’s oxygen levels recently reached a dangerously low point and he has had such difficulty breathing that on at least one occasion “he thought he was going to die.” McDonald Dec. ¶¶ 4–6. Mr. McDonald’s condition is critical and he requires immediate medical intervention. *Id.*

Defendant Sheriff Marian Brown (the “Sheriff”) of Dallas County, Texas (the “County”) is currently confining close to 5,300 people within the North, South, and West Towers of the Lew Sterrett Justice Center, Dallas County Jail (the “Jail”) in conditions that threaten their lives. As of the filing of the Petition for Temporary Restraining Order and Preliminary Injunction (Petition), at least 20 detainees and seven staff members in the Jail have tested positive for the novel coronavirus that causes COVID-19.

The Defendants are not taking reasonable, appropriate measures consistent with public health guidelines to halt the further spread of this deadly and highly contagious virus, putting the lives and health of thousands of people in the Jail, and countless others in the community, at risk. The Eighth and Fourteenth Amendments to the United States Constitution forbid this.

Because of the grave risk to health and life at stake, and the viable opportunity for a remedy is “a matter of days, not weeks,”¹ Plaintiffs respectfully request the Court consider this Petition on an emergency basis and that the Court grant a temporary restraining order requiring the immediate release of all of the medically-vulnerable class members Plaintiffs seek to represent pending briefing and argument. Plaintiffs’ counsel emailed counsel for the Sheriff and the County on April 9, 2020 at 2:00 p.m. central time to alert them that an emergency filing is forthcoming and have already provided defense counsel with copies of this Petition and Plaintiffs’ Complaint. Plaintiffs’ counsel is prepared to appear by telephone immediately. Each day—indeed each hour—that passes risks the lives of the Plaintiffs and the lives of the putative class members. Absent immediate action by this Court, some will likely face the ultimate irreparable harm: death. This case cannot wait.

¹ See Declaration of Eric Lofgren, Ph.D., App. 1-43, ¶ 34.

I. CLASS DEFINITIONS

Plaintiffs seek to represent two classes² of all individuals jailed by the Sheriff. Plaintiffs Oscar Sanchez, Marcus White, Keith Baker, and Tesmond McDonald seek to represent a class of all current and future detainees in pretrial custody, including alleged violations of probation or parole, at the Jail (“Pre-Adjudication Class”), including one subclass: (1) persons who, by reason of age or medical condition, the Centers for Disease Control and Prevention (CDC) and other public health experts have identified as particularly vulnerable to injury or death if they were to contract COVID-19 (“Medically-Vulnerable Pre-Adjudication Subclass”).

Plaintiffs Marcelo Perez, Paul Wright, Jose Munoz, Roger Morrison, Terry McNickles seek to represent a class of all current and future detainees in post-adjudication custody, including those serving a term of incarceration pursuant to an adjudicated violation of probation or parole, at the Jail (“Post-Adjudication Class”), including a subclass of persons who, by reason of age or medical condition, are particularly vulnerable to injury or death if they were to contract COVID-19 (“Medically-Vulnerable Post-Conviction Subclass”).

The “Medically-Vulnerable” subclasses are defined as all current and future persons held at the Jail over the age of 50, as well as all current and future persons held at the Jail of any age who experience (a) lung disease, including asthma, chronic obstructive pulmonary disease (e.g. bronchitis or emphysema), or other chronic conditions associated with impaired lung function; (b) heart disease, such as congenital heart disease, congestive heart failure and coronary artery disease; (c) chronic liver or kidney disease (including hepatitis and dialysis patients); (d) diabetes or other

² Plaintiffs’ Motion for Class Certification will be filed shortly. Plaintiffs file this Petition on behalf of the putative class members, but for ease of reference, describe them as “Class members” throughout this brief. Although this is a prototypical case for which the class action vehicle was created, the Court need not rule on Plaintiffs’ class certification motion or formally certify a class in order to issue the requested relief. *See, e.g.,* Newberg on Class Actions § 24:83 (4th ed. 2002) (“The absence of formal certification is no barrier to classwide preliminary injunctive relief.”); Moore’s Federal Practice § 23.50, at 23-396, 23-397 (2d ed. 1990) (“Prior to the Court’s determination whether plaintiffs can maintain a class action, the Court should treat the action as a class suit.”).

endocrine disorders; (e) epilepsy; (f) hypertension; (g) compromised immune systems (such as from cancer, HIV, receipt of an organ or bone marrow transplant, as a side effect of medication, or other autoimmune disease); (h) blood disorders (including sickle cell disease); (i) inherited metabolic disorders; (j) history of stroke; (k) a developmental disability; and/or (l) a current or recent (last two weeks) pregnancy.

II. THE FACTS THAT NECESSITATE THIS PETITION

A. COVID-19 Presents a Lethal Threat to Detainees in the Dallas County Jail.

Lives have been upended around the world by the unprecedented health emergency caused by the rapid spread of COVID-19. The disease is highly contagious and deadly; it is thought to spread through respiratory droplets or by touching a surface or object that has the virus on it. There is no known cure, and development of a vaccine is likely at least 12 months away.³

On March 11, 2020, the World Health Organization announced that that the outbreak of COVID-19 is a pandemic. “[W]e are deeply concerned both by the alarming levels of spread and severity, and by the alarming level of inaction.”⁴ Current estimations are that between 20% and 80% of the world’s population will contract the virus. The current estimations of the rate of fatality fall between 1% and 6% of those who contract the virus—several times more fatal than the common flu that kills tens of thousands of Americans each year.⁵ The United States has officially declared a national emergency in the face of the COVID-19 pandemic,⁶ and the World Health

³ Saralyn Cruickshank, *Experts Discuss Covid-19 and Ways to Prevent Spread of Disease*, John Hopkins Mag. (Mar. 17, 2020), <https://cutt.ly/VtKoV9N>.

⁴ World Health Organization, *Rolling updates on Coronavirus Disease (COVID-19)* (updated April 7, 2020), <https://cutt.ly/VtKoMRK>.

⁵ As of April 8, 2020, there were 1,484,811 confirmed cases globally, with 88,0538 deaths and 329,876 recoveries. Johns Hopkins University of Medicine, *Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering at Johns Hopkins University*, <https://cutt.ly/StEyn2U>; see also “Coronavirus disease 2019 (COVID-19)”, UpToDate, <https://cutt.ly/GtJYSkj> (as of April 7, 2020, estimated overall fatality rate of 2.3 percent globally).

⁶ Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak, (March 13, 2020), <https://cutt.ly/EtJLQZQ>.

Organization warned that the United States could well become the next global epicenter of the deadly virus⁷—a forecast that has unfortunately proved accurate. As of April 8, 2020, nearly 1.5 million people worldwide have confirmed diagnoses of COVID-19, including over 430,000 people in the United States.⁸ As of April 7, 2020, confirmed cases of COVID-19 in the United States were more than double the number in any other country.⁹ The Fifth Circuit noted on the same day that “‘Texas faces it[s] worst public health emergency in over a century.’” *In re Abbott*, No. 20-50264, at *4 (5th Cir. Apr. 7, 2020) (quoting district court).

The risk posed by COVID-19 is especially threatening to persons over 50 years of age, as well as persons of any age with certain underlying medical conditions, including lung disease, heart disease, chronic liver or kidney disease (including hepatitis and dialysis patients), diabetes, epilepsy, hypertension, compromised immune systems (such as from cancer, HIV, or autoimmune disease), blood disorders (including sickle cell disease), inherited metabolic disorders, stroke, developmental delay, and asthma. These and other health conditions make detainees “particularly vulnerable to severe illness from COVID-19.” *United States v. Muniz*, No. 4:09-CR-0199, 2020 WL 1540325, at *1 (S.D. Tex. Mar. 30, 2020) (granting compassionate release to federal prisoner suffering from renal disease, diabetes, and arterial hypertension); *see* CDC, Coronavirus Disease 2019 (COVID-19): At Risk for Severe Illness.¹⁰ These health conditions are more common among incarcerated persons¹¹:

⁷ Kim Bellware, et al., *White House asks everyone who left NYC area to self-quarantine for coronavirus; Trump pushes to ease restrictions by mid-April against expert advice*, Wash. Post (March 24, 2020), <https://cutt.ly/xtKjpF>.

⁸ Johns Hopkins University of Medicine, *Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering at Johns Hopkins University*, <https://cutt.ly/StEyn2U>.

⁹ Jennifer Calfas, Chong Koh Ping, and Drew Hinshaw, *Global Coronavirus Death Toll Passes 81,000 as Some Lockdowns Tighten*, The Wall Street Journal (Apr. 7, 2020), <https://cutt.ly/ztJLM0q>.

¹⁰ Available at <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html>.

¹¹ Peter Wagner & Emily Widra, *No need to wait for pandemics: The public health case for criminal justice reform*, Prison Policy Initiative (Mar. 6, 2020), <https://cutt.ly/7tJXmIC>.

Health condition	Prevalence of health condition by population			
	Jails	State prisons	Federal prisons	United States
Ever tested positive for Tuberculosis	2.5%	6.0%		0.5%
Asthma	20.1%	14.9%		10.2%
Cigarette smoking	n/a	64.7%	45.2%	21.2%
HIV positive	1.3%	1.3%		0.4%
High blood pressure/hypertension	30.2%	26.3%		18.1%
Diabetes/high blood sugar	7.2%	9.0%		6.5%
Heart-related problems	10.4%	9.8%		2.9%
Pregnancy	5.0%	4.0%	3.0%	3.9%

Health conditions that make respiratory diseases like COVID-19 more dangerous are far more common in the incarcerated population than in the general U.S. population. Pregnancy data come from our report, [Prisons neglect pregnant women in their healthcare policies](#), the CDC's [2010 Pregnancy Rates Among U.S. Women](#), and data from the [2010 Census](#). Cigarette smoking data are from a 2016 study, [Cigarette smoking among inmates by race/ethnicity](#), and all other data are from the 2015 BJS report, [Medical problems of state and federal prisoners and jail inmates, 2011-12](#), which does not offer separate data for the federal and state prison populations. Cigarette smoking [may be part of the explanation](#) of the higher fatality rate in China among men, who are far more likely to smoke than women.

The spread of the virus is accomplished through both airborne mechanisms (sneezing), touching of surfaces that are contaminated, and most commonly through close contact with other humans carrying the virus. The virus can remain viable on surfaces like plastic or steel for two to three days. It then enters the body through the mouth, nose, or eyes and infects the respiratory system.¹²

There is currently no vaccine or cure. The most effective strategies to prevent spread is thorough hand washing and sanitizing with alcohol-based cleaners, avoiding touching of the face, and physical or “social distancing,” which requires all persons stay a minimum of six feet away from one another.¹³

“In Texas, the virus has spread rapidly over the past two weeks [as of April 7, 2020] and is predicted to continue spreading exponentially in the coming days and weeks.” *In re Abbott*, No. 20-50264, at *4. Nationally, the CDC projects that over 200 million people in the United States

¹² Declaration of Dr. Robert L. Cohen In Support of Plaintiffs’ Motion for a Temporary Restraining Order, App. 44-59, at ¶¶ 9-11.

¹³ *Id.* at ¶¶ 2, 45.

could be infected with COVID-19 over the course of the pandemic without effective public health intervention, and that as many as 240,000 people in the U.S. will die from COVID-19 even accounting for interventions taken to date.¹⁴

Care around personal hygiene will not be enough to slow the spread of this disease. Public health officials in Dallas County and across the country are asking that people engage in social and physical distancing to help “flatten the curve.”¹⁵ Social and physical distancing involves avoiding human contact with all but a few other people. State and local leaders, as well as private event organizers, are cancelling group events across the country. Colleges, universities, and local public schools are cancelling classes.¹⁶

The same factors that make cruise ships hotbeds¹⁷ for contagion spread, are present in jails: many people living in a closed space, shared ventilation, common food preparation space, communal living/bathing/toileting/eating, limited medical facilities, and limited ability to leave the facility when symptomatic or after potential exposure to the virus. As Judge Keith Ellison noted a week ago in granting compassionate release of a federal prisoner, “individuals housed within our prison systems nonetheless are particularly vulnerable to infection” by COVID-19. *Muniz*, No. 4:09-CR-0199, 2020 WL 1540325, at *1. Further, the jails face the additional challenge of “jail churn”¹⁸ where members of the community, including both detainees and jail

¹⁴ Rick Noack, et al., *White House Task Force Projects 100,000 to 240,000 Deaths in U.S., Even With Mitigation Efforts*, Wash. Post. (April 1, 2020, 12:02 a.m.), <https://cutt.ly/5tYT7uo>.

¹⁵ Denise Chow and Jason Abbruzzese, *What is ‘flatten the curve’? The chart that shows how critical it is for everyone to fight coronavirus spread* (March 11, 2020, 2:15 pm.), <https://cutt.ly/wtKayjh>.

¹⁶ See, e.g., , Centers for Disease Control, *Interim Guidance for Administrators of US K-12 Schools and Child Care Programs*, <https://cutt.ly/ltRPq5n>.

¹⁷ The CDC is currently recommending that travelers defer cruise ship travel worldwide. “Cruise ship passengers are at increased risk of person-to-person spread of infectious diseases, including COVID-19.” *COVID-19 and Cruise Ship Travel*, Centers for Disease Control and Prevention, <https://cutt.ly/7tEEQvT>.

¹⁸ “The pathway for transmission of pandemic influenza between jails and the community is a two-way street. Jails process millions of bookings per year. Infected individuals coming from the community may be housed with healthy inmates and will come into contact with correctional officers, which can spread infection throughout a facility. On release from jail, infected inmates can also spread infection into the community where they reside.” *Pandemic Influenza and Jail Facilities and Populations*, American Journal of Public Health, October, 2009.

staff, regularly move in and out of the facility bringing illnesses with them into the jail and then, after infection, out to the community.

Numerous public health experts, including Dr. Gregg Gonsalves,¹⁹ Ross MacDonald,²⁰ Dr. Marc Stern,²¹ Dr. Oluwadamilola T. Oladeru and Adam Beckman,²² Dr. Anne Spaulding,²³ Homer Venters,²⁴ Jaimie Meyer,²⁵ the faculty at Johns Hopkins schools of nursing, medicine, and public health,²⁶ and Josiah Rich²⁷ have all strongly cautioned that people booked into and held in jails are likely to face serious, even grave, harm due to the outbreak of COVID-19. These experts are united in their recommendation that jails like the Dallas County Jail significantly downsize its population and reduce new incoming bookings.

B. Without Immediate Intervention, the Dallas County Jail will Experience a Large-Scale Outbreak of COVID-19 and Increase the Spread of COVID-19 in the Dallas Community.

The epidemiologist Eric Lofgren, Ph.D. describes the probability of massive COVID-19 infections and hundreds of deaths in the Dallas County Jail in the absence of immediate, emergency intervention. Declaration of Dr. Eric Lofgren, Ph.D. App. 1-43, ¶¶ 7–9. Dr. Lofgren used, as a model, a jail with approximately half the number of detainees as are presently confined in the

¹⁹ Kelan Lyons, *Elderly Prison Population Vulnerable to Potential Coronavirus Outbreak*, Connecticut Mirror (March 11, 2020), <https://cutt.ly/BtRSxCF>.

²⁰ Craig McCarthy and Natalie Musumeci, *Top Rikers Doctor: Coronavirus 'Storm is Coming,'* New York Post (March 19, 2020), <https://cutt.ly/ptRSnVo>.

²¹ Marc F. Stern, MD, MPH, *Washington State Jails Coronavirus Management Suggestions in 3 "Buckets,"* Washington Assoc. of Sheriffs & Police Chiefs (March 5, 2020), <https://cutt.ly/EtRSm4R>.

²² Oluwadamilola T. Oladeru, et al., *What COVID-19 Means for America's Incarcerated Population – and How to Ensure It's Not Left Behind*, (March 10, 2020), <https://cutt.ly/QtRSYNA>.

²³ Anne C. Spaulding, MD MPH, *Coronavirus COVID-19 and the Correctional Jail*, Emory Center for the Health of Incarcerated Persons (March 9, 2020).

²⁴ Madison Pauly, *To Arrest the Spread of Coronavirus, Arrest Fewer People*, Mother Jones (March 12, 2020), <https://cutt.ly/jtRSPnk>.

²⁵ *Velesaca v. Decker*, 20-cv-1803 (S.D.N.Y.) at Doc. No. 42 (March 16, 2020) (Declaration of Dr. Jaimie Meyer).

²⁶ Letter from Faculty at Johns Hopkins School of Medicine, School of Nursing, and Bloomberg School of Public Health to Hon. Larry Hogan, Gov. of Maryland, March 25, 2020, <https://cutt.ly/stERiXk>.

²⁷ Amanda Holpuch, *Calls Mount to Free Low-risk US Inmates to Curb Coronavirus Impact on Prisons*, The Guardian (March 13, 2020 3:00 p.m.), <https://cutt.ly/itRSDNH>.

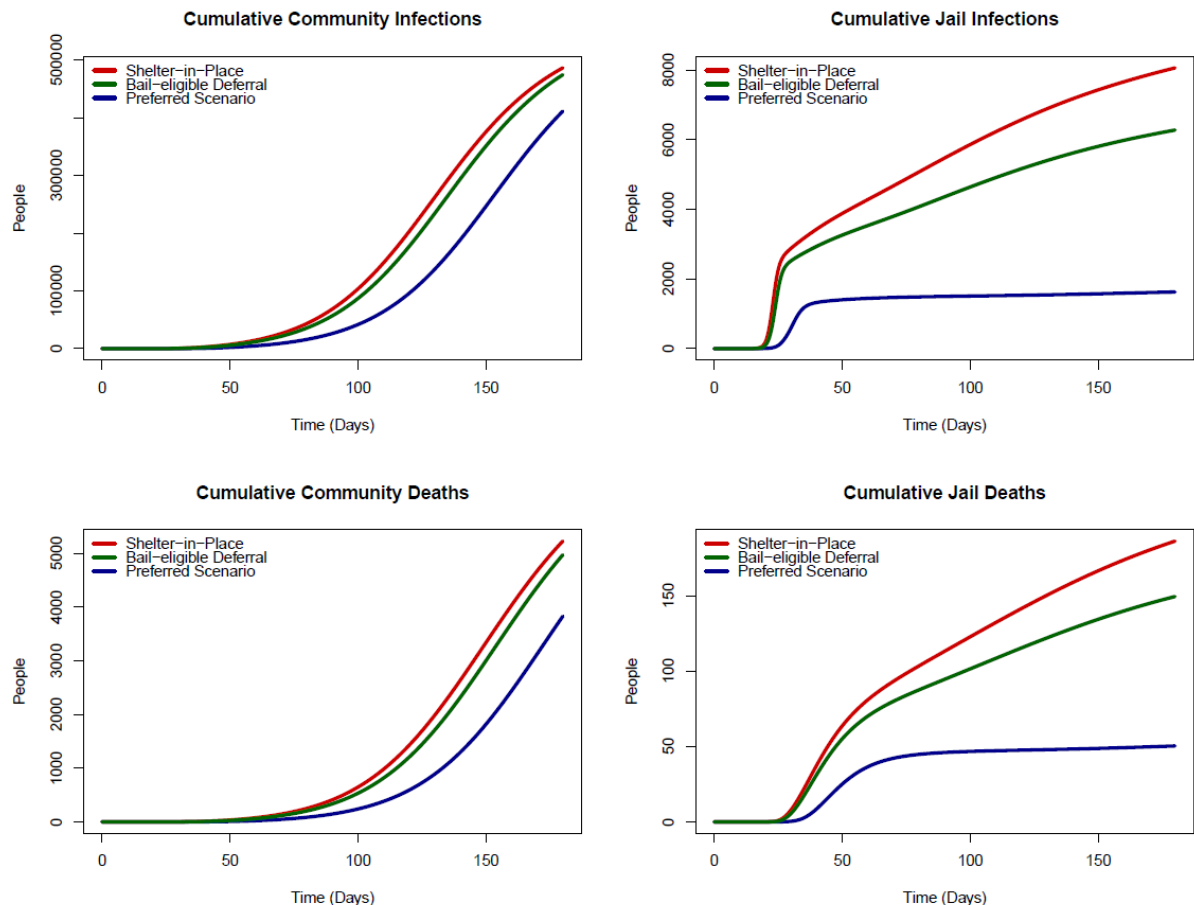
Dallas County Jail as the baseline. *Id.* ¶ 8. Dr. Lofgren provided a number of forecasts, based on (1) no intervention of any kind to slow the spread of COVID-19, (2) a community intervention of a shelter in place order, and (3) a shelter-in-place order plus a reduction in the jail population by reducing intakes by 25%. *Id.* at ¶ 10.

With a general shelter-in-place order in effect in the community but no intervention in the jail, Dr. Lofgren projects that a jail *half* the size of the Dallas County Jail would see 8,058 infections, 634 hospitalizations, and 186 deaths among incarcerated people over a six-month period. Lofgren Dec., Ex. B, App. 19-43. This would also yield 373 infections, 25 hospitalizations, and 3 deaths for jail staff. *Id.* Under this model, 486,193 infections, 25,579 hospitalizations, and 5,230 deaths would be realized in the surrounding community. With a shelter-in-place order and a reduction in the jail population by ceasing intakes for people eligible for bail (an approximately 25% reduction in intake), outcomes improve, but the results are still catastrophic: over six months, 6,273 incarcerated people would get infected (1,785 fewer), 508 would require hospitalization (126 fewer), and 149 would die (37 fewer). *Id.* Similar modest reductions would be seen among jail staff and the community. *Id.*

Put differently, a scenario of releasing bail-eligible arrestees without more would result in a 22.1 percent reduction in infections in the incarcerated population, and only a 2.7 percent reduction in infections within the community. Lofgren Dec. at ¶ 16, App. 4. Reducing jail admissions by approximately 25 percent will thus improve matters, but will not achieve the necessary public health intervention of downsizing and curbed jail admissions public health experts recommend: with “broader, more sweeping” deferrals of arrest and downsizing, far better outcomes will be achieved. *Id.* at ¶ 17 (noting that if jail admissions were reduced by approximately 83.4 percent, a 71.8 percent reduction in infections within the incarcerated

population and a 12.1 percent reduction in infections in the community could be achieved, a 90 percent reductions in arrests would yield a 76.6 percent reduction in infections in the jail and a 13.7 percent reduction in infections in the community).

Dr. Lofgren's projections are shown in the attached graphs:



Dr. Lofgren concludes that arrest deferral and release of detainees substantially improved outcomes for detainees, jail staff, and the community at large. Lofgren Decl. ¶¶ 33–35. Facilitating the release of persons who are medically vulnerable if they contract COVID-19 would also result in a 27.2 percent decrease in infections in a jail, and a 56.1 decrease in deaths in the jail. *Id.* at ¶ 17.

There is no effective way for jails to accomplish the important task of creating the recommended social and physical distance between incarcerated people. In virtually all jails, including the Dallas County Jail, people are required to share sinks and toilets, and are very unlikely to be able to maintain the requisite six feet or more of physical distance from others, let alone wear face masks, in accordance with public health guidelines.²⁸ While incarcerated people might have access to water, they may not have soap with which to wash their hands.²⁹ Hand sanitizer is often considered prohibited contraband due to its alcohol content.³⁰ While specifics vary by jail, the spread of COVID-19 is exacerbated by other common practices in jail administration, including: the use of communal showers and toilets; infrequent laundering of bedsheet and clothes, or laundering with water and no soap; poor ventilation and/or heat; shared cells or other over-capacity issues; or limitations on access to toilet paper, tissues, and other sanitary supplies. *See Muniz*, No. 4:09-CR-0199, 2020 WL 1540325, at *1 (pointing to “densely populated living conditions, dearth of soap, hand sanitizer, and protective gear, and impossibility of maintaining safe distance between inmates and guards as reasons prisoners are at particular risk of infection” by novel coronavirus).

None of the critical measures for mitigating the spread of COVID-19 is available for persons confined in the Dallas County Jail. The Jail is a congregate environment, in which people are confined in close proximity to one another and to Jail staff.³¹ Proper hygiene, as urgently recommended by the CDC, cannot be practiced in the absence of soap, cleaning materials, and

²⁸ *See, e.g.,* Nathalie Baptiste, *Correctional Facilities are the Perfect Incubators for the Coronavirus* (March 6, 2020), <https://cutt.ly/XtKsSRu>.

²⁹ *Id.*

³⁰ *Id.*

³¹ One report indicates that the highest known person-to-person transmission rate for COVID-19 to date took place in similar congregate environments: a skilled nursing home facility in Kirkland, Washington, and in the Cook County Jail in Chicago. *Coronavirus in the U.S.: Latest Map and Case Count*, NY TIMES (last visited April 8, 2020, 1:00 PM), <https://cutt.ly/LtK2Xnv>.

hand sanitizer. Many of those detained suffer from underlying health conditions, including, among many others, asthma, diabetes, and hypertension, that place them at elevated risk for contracting and dying from COVID-19.³² The dangers COVID-19 presents to persons in the Dallas County Jail are illustrated by the rate of transmission in other U.S. jails once the virus was present in the jail environment: on Rikers Island in New York City, the rate of infection among incarcerated people is over seven times the rate of infection in New York City generally, and 25 times higher than the rate in Wuhan, China.³³ Reports indicate that the Cook County Jail in Chicago is currently the largest known source of U.S. infections.³⁴

The Dallas County Jail consists of the North Tower Detention Facility, the West Tower Detention Facility, and the Suzanne Lee Kays (South Tower) Detention Facility.³⁵ They respectively hold up to 3,292, 1,530, and 2,304 detainees. The North Tower has 188 single cells, and the West Tower contains 25.³⁶ Each tower houses dozens of “tanks” in which multiple detainees routinely mix and use common facilities. Single cells are rare.

Dr. Robert L. Cohen, an expert in public health in jails and prisons, notes in support of this motion, “the current conditions in the Dallas County Jail create a high risk of contributing to an outbreak of COVID-19... Everyone who lives and works in a jail is at the highest risk.” *See* Declaration of Robert L. Cohen, M.D., Regarding the Spread of COVID-19 in and from the Dallas County Jail (Cohen Dec. ¶¶ 4-5, App. 46). This is due to a number of factors, including, among

³² *See Are You at Higher Risk for Severe Illness?*, Centers for Disease Control (Mar. 20, 2020), <https://cutt.ly/stKs4ty>.

³³ These numbers likely underestimate the infection rate on Rikers Island, as they do not include the number of people contracted COVID-19 on Rikers Island but who have already been released. The rates of infection rely on publicly released data collected by the Legal Aid Society. *See* LEGAL AID SOCIETY, *Analysis of COVID-19 Infection Rate in NYC Jails* (last visited March 30, 2020, 11:00 AM), <https://cutt.ly/RtYTbWd>.

³⁴ NBC Chicago, *Report: Cluster of COVID-19 Cases at Cook County Jail the Largest in the Nation*, (April 7, 2020 4:40 p.m.), <https://cutt.ly/HtLmMDs>.

³⁵ *See* Dallas County Sheriff: Detention Centers, <https://cutt.ly/mtKdwj2>.

³⁶ *Id.*

others, the inability to engage in physical distancing inside the jail, the inability to isolate and manage known and suspected cases of COVID-19, and the endemic problems of hygiene and sanitation that universally plague contemporary U.S. jails and prisons. *Id.* ¶¶ 6–10, 19, 27–28.³⁷

As a result of these stark realities, the CDC has issued Guidance on the Management of COVID-19 in Correctional and Detention Facilities, specifying steps that must be taken in light of the “unique challenges for control of COVID-19 transmission” that are present in correctional and detention settings.³⁸ These steps include, among many others, specified actions to ensure sanitation of frequently touched surfaces, the provision of protective gear to staff and to infected persons, screening of those entering the facility, isolation of those with COVID-like symptoms, and quarantine of those who are known to be infected.³⁹ The Guidance states that “adequate levels of custody and healthcare staffing must be maintained to ensure safe operation of the facility.” *Id.*

These steps are by no means the equivalent of the precautions recommended for those in the free community. They are the absolute bare minimum that must be done to prevent a severe outbreak of contagion within the Jail. The Guidance recognizes the well-known facts that options for medical isolation of COVID-19 patients are “limited” in a carceral setting and the ability to sanitize is compromised. *Id.* at 2. Further, as Drs. Cohen and Lofgren emphasize, these measures

³⁷ See also Matthew Impelli, *Alcohol-Free Sanitizer Given to Prisoners to Prevent Them from Making ‘Moonshine,’* Newsweek (Mar. 16, 2020), <https://cutt.ly/0tKdQoX> (reproducing comments of Sherif Sultan, president of the International Society of Vascular Surgery); Jennifer Gonnerman, *A Rikers Island Doctor Speaks Out to Save Her Elderly Patients from Coronavirus*, New Yorker (Mar. 20, 2020), <https://cutt.ly/ttKdW16>; Amanda Klonsky, Opinion, *An Epicenter of the Pandemic Will Be Jails and Prisons, If Inaction Continues* (Mar. 16, 2020), <https://cutt.ly/VtKdTeA> (“The pathway for transmission of pandemic influenza between jails and the community is a two-way street. Jails process millions of bookings per year. Infected individuals coming from the community may be housed with healthy inmates and will come into contact with correctional officers, which can spread infection throughout a facility. On release from jail, infected inmates can also spread infection into the community where they reside.”); *Pandemic Influenza and Jail Facilities and Populations*, American Journal of Public Health, October, 2009; see also Dr. Anne Spaulding, *Coronavirus and the Correctional Facility: for Correctional Staff Leadership*, Mar. 9, 2020, <https://cutt.ly/ztKdY6B>.

³⁸ Centers for Disease Control, *Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities* (March 23, 2020), <https://cutt.ly/atJPt5B>.

³⁹ *Id.*, at 9–22, e.g.

must be taken *in addition to* a downsizing of jail populations, including at the Dallas County Jail: no intervention will be effective without the release of the Medically-Vulnerable Subclass Members and additional persons as needed to achieve physical distancing. Cohen Dec. at ¶¶ 30–31, App. 55 (noting that “less urgent action” than “considerable downsizing” will not be sufficient); Lofgren Dec. at ¶¶ 29 – 34, App. 8-9 (noting that immediate decrease of population density, as well as reduced intake, is “both necessary and urgent”).

Any outbreak within the Jail cannot be confined to those incarcerated there. Jails are not—and cannot become—isolated facilities. Each day, jail staff enter the facility, touch detained individuals or surfaces which detained individuals have touched, and return home to their families and communities. *See* Lofgren Dec. ¶ 35, App. 9. A sudden influx of serious COVID-19 cases from the Jail risks overwhelming the County’s public hospital. The outbreak in the Jail cannot be contained. And it puts the wider community at risk.

C. Medically -Vulnerable Plaintiffs are at Extreme Risk of Harm Given the Likelihood of Exposure to COVID-10 in the Dallas County Jail; They Should be Immediately Released.

Seven of the nine Named Plaintiffs are at high risk of injury or death if exposed to COVID-19 due to their medical-vulnerability.

Oscar Sanchez has a history of severe, chronic asthma that has required hospitalization in the past. Sanchez Dec. ¶ 4. On April 5, 2020 he reported hard chest pains and difficulty breathing to the medical staff at the Dallas County Jail and was told there was nothing to be done. *Id.* Mr. Sanchez’s condition could become very serious in the coming day.

Tesmond McDonald has tested positive for COVID-19 and should be released immediately to receive proper medical care. McDonald Dec. ¶ 5. Mr. McDonald suffers from asthma and high blood pressure, and his COVID-19 symptoms are extremely serious. ¶ 2. Mr. McDonald recently developed body aches, has difficulty breathing and on multiple occasions had

so much trouble catching his breath that he “thought he was going to die.” ¶ 6. His oxygen levels were recently tested at a dangerously low level. ¶ 5.

Marcelo Perez has high blood pressure and diabetes. Perez Dec. ¶ 2. He has not had his sugar levels tested recently, and his metformin doses now keep him awake at night. *Id.*

Roger Morrison suffers from severe allergies, high blood pressure, hepatitis C, and cirrhosis of the liver. Morrison Dec. ¶ 2. These conditions cause Mr. Morrison to have a weakened immune system. *Id.* Mr. Morrison knows that he is at a high risk if he were to contract COVID-19 but does not know how to prevent himself from getting the virus while incarcerated in the Dallas County Jail. *Id.* ¶ 3.

Keith Baker suffers from severe asthma and required frequent use of an inhaler prior to his incarceration and the outbreak of COVID-19. Baker Dec. ¶ 2. On March 26, 2020, Mr. Baker suffered a severe asthma attack and could not breathe. *Id.* The only assistance the jail staff offered Mr. Baker was a sleeping pill. *Id.*

Paul Wright will turn forty-eight years old in two days, April 11, 2020. Wright Dec. ¶ 1. He has Hepatitis C, and comes into frequent contact with numerous people each day who increase his risk of illness through the coronavirus, including staff that has been in contact with detainees with confirmed COVID-19 cases. *Id.* ¶ 3.

Terry McNickles is a fifty-eight (58) year old man recovering from an operation for kidney cancer. McNickles Dec. ¶¶ 1–2. After his kidney removal surgery, his doctor told him he would have to take extra precautions to fight off infections—such as a special diet and increased hand-washing—because his immune system had been compromised. *Id.* ¶ 2.

In support of this motion, Plaintiffs also submit declarations from others—proposed class members—detained in the Dallas County Jail. Their stories further illustrate the urgency of

identifying and releasing all Medically-Vulnerable Subclass Members. *See, e.g.*, Yarborough Dec., App. 76-78, (Detainee susceptible to kidney infections housed in the South Tower of the Dallas County Jail); Hinojosa Dec., App. 61-62 (Detainee with high blood pressure, compromised kidney housed in the South Tower).

D. The Jail Is Not Taking Sufficient Precautions; an Uncontrolled Outbreak Is In Progress.

There is an escalating public health emergency in the Jail. Despite the public health guidelines issued by the national, state, and local government to prevent widespread transmission of COVID-19, the Jail has failed to take sufficient precautions to safeguard the Plaintiffs or putative class members and they face an immediate risk of harm as a result. Known conditions in the Dallas County Jail include a jump in a week's time from five reported COVID-19 infections of detainees and Jail employees to almost 30 as of April 7, 2020,⁴⁰ a general lack of testing for COVID-19 infection of detainees during detention or upon release,⁴¹ failure to begin "checking the temperatures of employees assigned to the jail" or asking detainees during the intake process "a set of preliminary questions recommended by Dallas County's healthcare partners" until March 27, 2020,⁴² failure of Jail employees to report for work, and routine use by Jail employees of single-use disposable surgical masks for a week or more. The number of known infections will

⁴⁰ Dallas County Health and Human Services, 2019 Novel Coronavirus (COVID-19) Table 4 (Apr. 7, 2020), <https://cutt.ly/ztJZwXa>. Editorial, *COVID-19 spreads with close contact, so what do we do about those in jail?*, The Dallas Morning News (Apr. 5, 2020), <https://cutt.ly/8tJOi67> ("At the time of this writing, 20 inmates had tested positive for the virus, along with six detention officers and one deputy."); Ashley Paredez, *Confirmed COVID-19 cases at Dallas County Jail now up to 28*, Fox 4 (April 4, 2020), <https://cutt.ly/0tJSenr> ("The number of coronavirus cases at the Dallas County jail has increased from five cases last week, to now a total of 28" and noting that "six [of those testing positive] are detention officers and two are clerks"); *COVID-19 Live Updates*, KERA News (quoting Director of Dallas County Health and Human Services on April 5, 2020 as saying "the jail has 24 cases, which includes 22 inmates and two detention officers," presenting approximately 25% of all new cases in Dallas County that day), <https://cutt.ly/itJSsiy>.

⁴¹ Dallas County Sheriff's Office, "COVID-19 Initiatives," (March 27, 2020), <https://cutt.ly/NtJO7zY> (stating that "COVID-19 tests are administered after meeting the Dallas County Health and Human Services criteria" but not at intake or release and apparently only if potentially infected person comes to attention of "health care professionals").

⁴² *Id.*

continue to rise. Indeed, there are likely now many more infections in the Jail than are known because of the limited availability of COVID-19 tests.

Staff are also falling ill. At least six detention officers and one deputy have tested positive for COVID-19.⁴³ As infections continue to rise in the Jail, the CDC COVID Prison Guidance is not being implemented, and it will continue to become increasingly ignored.

1. Physical and Social Distancing is not Possible

The Jail is failing in its responsibility to enable social distancing. The Jail continues to house detainees in dormitory-style settings (or “tanks”) and in multiple-person cells where detainees are in close physical contact with one another. Many of the detainees sleep in shared bunk dorm “pods” with up to 64 beds. Sanchez Dec. ¶ 2 (all pods in the South Tower have 64 beds in a common room); Perez Dec. ¶ 3; McNickles Dec. ¶ 1. Even though the bunks are only between 1 and 4 feet apart, far closer than the recommended six or more feet, the shared bunk rooms have been almost full to capacity with between 48 and 60 men at any given time in the last few weeks in a single common dorm. Wright Dec. ¶ 6; Morrison Dec., ¶ 4, Munoz Dec., ¶ 8; Perez Dec. ¶ 3; Sanchez Dec. ¶. 2; McKnickles Dec. ¶¶ 1. 5. Neither the detainees nor the staff practice—or are able to practice—social distancing. Sanchez Dec. ¶ 7; McKnickles Dec. ¶ 4.

2. Insufficient Measures to Quarantine and Cohort Detainees.

There are also multiple reports that the Jail’s system for quarantine and medical isolation is flawed. Detainees who tested positive remained in group dorms next to detainees who did not have symptoms and who had not been tested. See Baker Dec. ¶ 4 (describing Plaintiff Baker’s repeated requests to be moved when held next to individuals with confirmed cases of the virus). Even when the Dallas County Jail officials determined that positive cases required movement of

⁴³ Dallas County HHS, 2019 Novel Coronavirus (COVID-19), *supra* note 40 at Table 4. *Dallas Morning News* Editorial, *supra* note 40; Paredez, *supra* note 40; KERA News Updates, *supra* note 40.

exposed detainees, they transferred the individuals who had been exposed in closed proximity with persons with confirmed cases to different dorms without any testing. *See* Sanchez Dec. ¶ 3 (describing his transfer to from the dorm with a number of confirmed cases to a new dorm without testing); Baker Dec. ¶¶ 4-5 (describing being transferred to a new cell, connected to two other cells, after being in proximity with the confirmed cases and not receiving testing despite the fact that he had a sore throat and cough).

3. Insufficient Provide Personal Protective Equipment.

Further, the Jail has no functioning system to enable prisoners to protect themselves from exposure. *See* Perez ¶ 6 (“When Mr. Perez asked for a mask, he was told that the jail staff have to buy their own masks, so they would not give him one.”); Sanchez ¶ 5 (“When Mr. Sanchez asked guards for a facemask, he was told the only people that need masks are the guards.”); McKnickles ¶ 7 (“He also asked for face masks. The jail staff haven’t. . . given him any personal protective gear.”). *See also*, Morrison ¶5; Munoz ¶ 3; White ¶ 3. Those that are denied staff masks are also prevented from creating their own from materials they have access it in their cells. Perez ¶ 6 (“Some detainees tried wrapping bath towels around their heads to cover their faces, but the jail staff told them they were not allowed to do that.”). When detainees are given masks, they are expected to wear the same mask for the remaining period of their detention, regardless of how long. Baker ¶ 9 (“Mr. Baker was provided with a mask only after he asked for one. He has had to use the same one repeatedly because he was not given replacements.”). Most egregiously, when a detainee is removed from a pod because he is sick, the guards require his cellmates to collect the sick man’s belongings and clean his bunk without first providing them with any personal protective gear. Sanchez Dec. ¶ 3; Perez Dec. ¶ 9.

4. Insufficient Hygienic and Cleaning Supplies.

The Dallas County Jail has also fallen far short of ensuring sufficient stocks of hygiene and cleaning supplies or providing detainees with no-cost access to these supplies. Wright Dec. ¶8. (“Sometimes the guards just don’t have the soap and other cleaning agents.”) Some detainees are given 3-4 single use bars of soap once a week that don’t last one day. McDonald ¶ 11. Others are not given any soap at all. White ¶ 6. The only way to obtain additional soap is to purchase it through commissary, which is either irregularly available or shut down completely, depending on the Tower. McDonald ¶ 11; Baker ¶ 6; Sanchez 11. *See* Munoz ¶6, “Mr. Munoz requested soap today and was told that the detainees were using excessive soap. He did not want to argue with the guards, so he did not receive any soap.” As a result, detainees and the cells in which they are forced to live are anything but clean. *See* Morrison ¶6 (“The pod is filthy”); McDonald ¶10 (“The walls in his cell are so dirty that he is afraid to touch them.”). While some pods have access to shower daily, detainees in pods holding people who have either tested positive for COVID-19 or are suspected of exposure to COVID-19 have been denied showers for up to ten days in a row. Baker par 8. White ¶8. Sick detainees are therefore forced to either “take a bird bath in the sink” or forego bathing altogether. When they are finally allowed to take a shower, the water is cold. Baker ¶8.

The Dallas County Jail has failed to enforce adequate policies for disinfecting surfaces to prevent the spread of the virus. First, large numbers of detainees share a small number of phones, yet the phones are not regularly cleaned. Sanchez p7 (“All 60 men in both A and E pods share 8 phones, none of which are disinfected between use.”) Additionally, detainees themselves are responsible for cleaning the pods, including the toilets and showers. Volunteers are rewarded with larger portions of food regardless of the quality of their work. Because the jail has not adequately informed detainees about the virus and how to prevent its spread, cleaning volunteering often do

an insufficient job which goes unchecked. Sanchez par 8. (“Mr. Sanchez started volunteering because his bunk is 3 feet from the toilets and the other volunteers usually do not clean properly.”).

In the face of this dysfunction, COVID-19 will continue its unrelenting spread through the Jail. Lofgren Dec. ¶¶ 22–28, App. 6-8. Under accepted standards of medical care and the CDC COVID Prison Guidance, quarantine will be necessary for greater and greater numbers of detainees. As this happens, it will become more and more difficult to separate those who are infected (or might be infected) from those who are not. Cohen Dec. ¶ 22, App. 52. Necessary monitoring of the temperature and other symptoms of those who are or are suspected to be infected will become overwhelming. To the extent that medical management of these quarantined individuals is not already impossible, it will soon become so. *See* Cohen Decl. ¶¶ 17, 23, 28, App. 50, 53-55.

All of these problems are magnified by the risks to the health and safety of medical workers in the Jail, which will limit the Jail’s ability to manage and monitor those who are in quarantine and those in medical isolation. Cohen Dec. ¶¶ 5, 21, App. 46, 52. As the virus spreads and healthcare staff are increasingly infected, Dallas County’s public healthcare system will be stretched to its breaking point.⁴⁴ The Jail has limited facilities for isolating and caring for acutely ill detainees. The urgent necessity of focusing on the spread of COVID-19 and the treatment of those who are infected will limit the Jail’s ability to provide medication and other needed treatment to non-COVID-19 patients. Cohen Dec. ¶ 21–22, App. 52. If immediate action is not taken, Plaintiffs and members of the putative class, jail staff, and members of the broader Dallas County community may die as a result.

⁴⁴ *See e.g.,* Fox 4, *Dallas Hospitals Report having more than 2,00 beds, 563 ventilators available* (Apr. 5, 2020) <https://cutt.ly/ztJVCs1>.

III. ARGUMENT

A preliminary injunction is warranted if the movant demonstrates: (1) a substantial likelihood of success on the merits, (2) a substantial threat of irreparable injury if the injunction is not issued, (3) that the threatened injury if the injunction is denied outweighs any harm that will result if the injunction is granted, and (4) that the grant of an injunction will not disserve the public interest. *Janvey v. Alguire*, 647 F.3d 585, 595 (5th Cir. 2011); *Byrum v. Landreth*, 566 F.3d 442, 445 (5th Cir. 2009). The same factors apply to a motion for temporary restraining order (TRO). *Clark v. Prichard*, 812 F.2d 991, 993 (5th Cir. 1987). Plaintiffs satisfy each of these requirements.

Moreover, where circumstances are such that even the time needed to hear a request for a preliminary injunction is too long to prevent irreparable harm, a TRO may issue while a court considers a request for a preliminary injunction. *See* Charles Alan Wright, et al., *Temporary Restraining Orders*, 11A Federal Practice and Procedure § 2951 (3d ed. 2019); *see also Callet v. Callaway*, 496 F.2d 701, 702 (5th Cir. 1974) (Courts are authorized to enter habeas relief pending a full disposition on the merits of a petition). Such is true here – as Dr. Lofgren notes, the critical window to prevent both disastrous medical fallout and a violation of proposed Class Members’ constitutional rights is “a matter of days, not weeks.” Lofgren Dec. ¶ 34, App. 9.

Because the “purpose of a preliminary injunction is merely to preserve the relative positions of the parties until a trial on the merits can be held,” and “given the haste that is often necessary if those positions are to be preserved, a preliminary injunction is customarily granted on the basis of procedures that are less formal and evidence that is less complete than in a trial on the merits.” *Univ. of Tex. v. Camenisch*, 451 U.S. 390, 395 (1981). “A party thus is not required to prove his case in full at a preliminary-injunction hearing.” *Id.* (citation omitted). Instead, to “show a likelihood of success, the plaintiff must present a prima facie case”—“not prove that he is entitled to summary judgment.” *Daniels Health Scis., L.L.C. v. Vascular Health Scis., L.L.C.*, 710 F.3d

579, 582 (5th Cir. 2013). Indeed, the U.S. Supreme Court has cautioned against “improperly equat[ing] “likelihood of success” with “success” when considering requests for preliminary injunctions. *See Camenisch*, 451 U.S. at 394.

A. There is a Substantial Likelihood that Petitioners/Plaintiffs will Prevail on the Merits.

1. The Constitution is Violated by an Unreasonable Risk of Future Harm from Contagious Disease.

The government has an affirmative duty to provide conditions of reasonable health and safety to the people it holds in its custody. As the Supreme Court has made clear,

[W]hen the State takes a person into its custody and holds him there against his will, the Constitution imposes upon it a corresponding duty to assume some responsibility for his safety and general well-being The rationale for this principle is simple enough: when the State by the affirmative exercise of its power so restrains an individual’s liberty that it renders him unable to care for himself, and at the same time fails to provide for his basic human needs—*e.g.*, food, clothing, shelter, medical care, and reasonable safety—it transgresses the substantive limits on state action set by the Eighth Amendment

DeShaney v. Winnebago County Dept. of Soc. Servs., 489 U.S. 189, 199-200 (1989).⁴⁵ Conditions that pose an unreasonable risk of future harm violate the Eighth Amendment’s prohibition against cruel and unusual punishment, even if that harm has not yet come to pass.

That the Eighth Amendment protects against future harm to inmates is not a novel proposition. The Amendment, as we have said, requires that inmates be furnished with the basic human needs, one of which is “reasonable safety.” It would be odd to deny an injunction to inmates who plainly proved an unsafe, life-threatening condition in their prison on the ground that nothing yet had happened to them.

⁴⁵ Many of the cases discussed in the Motion involve the protections of the Eighth Amendment, which applies to convicted prisoners. As explained below, members of the Pre-Adjudication Class are entitled to even greater protection; as pretrial detainees they may not be punished at all, and are protected by the Fourteenth Amendment. *Bell v. Wolfish*, 441 U.S. 520, 535 (1979) (“[U]nder the Due Process Clause, a detainee may not be punished prior to an adjudication of guilt in accordance with due process of law.”); *id.* at n.16 (pretrial detainees retain greater protections than convicted counterparts); *Kingsley v. Hendrickson*, 135 S.Ct. 2466, 2473-74 (2015) (requiring pretrial detainees need only show the objective prong of the “deliberate indifference” test in excessive force context); *Alderson v. Concordia Par. Corr. Facility*, 848 F.3d 415 (5th Cir. 2017) (concurring opinion suggesting that *Kingsley* should be extended to all pretrial detainee medical claims). Because the legal protections for the Pre-Adjudication Class are stronger, as a practical matter if they too satisfy the Eighth Amendment test outlined here, Pre-Adjudication Plaintiffs will have necessarily also met their burden under the Fourteenth Amendment.

Helling, 509 U.S. at 33 (quoting *DeShaney*, 489 U.S. at 200). The Court in *Helling* specifically recognized that the risk of contracting a communicable disease could constitute such an “unsafe, life-threatening condition”:

In *Hutto v. Finney*, 437 U.S. 678, 682 (1978), we noted that inmates in punitive isolation were crowded into cells and that some of them had infectious maladies such as hepatitis and venereal disease. This was one of the prison conditions for which the Eighth Amendment required a remedy, even though it was not alleged that the likely harm would occur immediately and even though the possible infection might not affect all of those exposed Nor can we hold that prison officials may be deliberately indifferent to the exposure of inmates to a serious, communicable disease on the ground that the complaining inmate shows no serious current symptoms.

Id. at 33; *see also id.* at 34 (citing with approval *Gates v. Collier*, 501 F.2d 1291 (5th Cir. 1974), which held that prisoners were entitled to relief under the Eighth Amendment when they showed, *inter alia*, “the mingling of inmates with serious contagious diseases with other prison inmates”).

In this case, Plaintiffs and the Medically-Vulnerable Subclass members they seek to represent are at serious risk of severe illness or death from COVID-19. Non-Medically-Vulnerable Class members are at risk of serious illness, injury, death, and/or transmission to family members and loved ones.

2. Defendants Have Shown Deliberate Indifference to the Medical Needs of Both Pre- and Post-Adjudication Class Members.

Corrections officials have a constitutional obligation to protect incarcerated people from a substantial risk of serious harm. *Farmer v. Brennan*, 511 U.S. 825, 828 (1994). Indeed, under both the Eighth and Fourteenth Amendments, jail officials “must provide humane conditions of confinement; . . . must ensure that inmates receive adequate food, clothing, shelter, and medical care, and must take reasonable measures to guarantee the safety of the inmates[.]” *Id.* at 832 (internal quotation marks omitted). This obligation also requires corrections officials to address detainees’ serious medical needs. *See Estelle v. Gamble*, 429 U.S. 97, 104 (1976); *Brown v. Plata*,

563 U.S. 493, 531-32 (2011); *Hinojosa v. Livingston*, 807 F.3d 657, 666 (5th Cir. 2015) (plaintiff stated an Eighth Amendment claim when Defendants subjected him to conditions “posing a substantial risk of serious harm” to his health).

This obligation requires corrections officials to protect incarcerated people from infectious diseases like COVID-19; officials may not wait until a petitioner tests positive for the virus and an outbreak further spreads. *Helling*, 509 U.S. at 33-34; *Gates v. Cook*, 376 F.3d 323, 333 (5th Cir. 2004) (“It is also important to note that [an] inmate need not show that death or serious illness has [already] occurred.”); *see also Farmer*, 511 U.S. at 833 (“[H]aving stripped [prisoners] of virtually every means of self-protection and foreclosed their access to outside aid, the government and its officials are not free to let the state of nature take its course.”).

Government officials violate this affirmative obligation by showing “deliberate indifference” to the substantial risk of serious harm. *Farmer*, 511 U.S. at 828. With respect to an impending infectious disease like COVID-19, deliberate indifference is satisfied when corrections officials “ignore a condition of confinement that is sure or very likely to cause serious illness and needless suffering the next week or month or year,” even when “the complaining inmate shows no serious current symptoms.” *Helling*, 509 U.S. at 33, 36 (holding that a prisoner “*states a cause of action* . . . by alleging that [corrections officials] have, with deliberate indifference, exposed him to conditions that pose an unreasonable risk of serious damage to future health”) (emphasis added); *see also Ball v. LeBlanc*, 792 F.3d 584, 594 (5th Cir. 2015) (court “may conclude that a prison official knew of a substantial risk from the very fact that the risk was obvious”) (citing *Farmer*, 511 U.S. at 842); *Hinojosa*, 807 F.3d at 667 (“open and obvious nature” of dangerous prison conditions supported an inference of deliberate indifference); *Johnson v. Epps*, 499 F. App’x 583, 589-92 (5th Cir. 2012) (allegations that prisoner was exposed to “serious, communicable diseases”

and that prison officials were aware of the risk and did nothing to prevent it were sufficient to state a claim for violation of Eighth Amendment rights); *Gates*, 501 F.2d at 1300-03 (affirming district court’s holding that allowing “[s]ome inmates with serious contagious diseases . . . to mingle with the general prison population,” alongside maintaining a host of other unsanitary and inhumane conditions, “constitute[d] cruel and unusual punishment”) (cited with approval in *Rhodes v. Chapman*, 452 U.S. 337, 352 n.17 (1981)).

Here, COVID-19 is “sure or very likely to cause serious illness,” and even waiting until “next week” to attempt internal mitigation efforts may be too long. *See supra* Part II(D) (describing the Dallas County Jail’s failures to implement social distancing, quarantining, and hygienic practices thus far). COVID-19 is a “serious, communicable disease,” *Epps*, 499 F. App’x at 589-92 that is already present in the Dallas County Jail, and spreading as the Court reads this brief. The risk to the health and lives of Plaintiffs and Class Members is “open and obvious.” *Hinojosa*, 807 F.3d at 667.

3. Further, Defendants are Unconstitutionally Punishing Members of the Pre-Adjudication Class.

In the case of the Pre-Adjudication Class, Defendants’ inaction further constitutes unconstitutional punishment. *See, e.g., Bell*, 441 U.S. at 535 (“[U]nder the Due Process Clause, a detainee may not be punished prior to an adjudication of guilt in accordance with due process of law.”); *id.* at n.16 (pretrial detainees retain greater protections than convicted counterparts); *Parker v. Carpenter*, 978 F.2d 190, 193 (5th Cir. 1992) (ordering evidentiary hearing on whether transfer to more violent wing was punitive). Punishment—and therefore deliberate indifference—is established if the jailer’s conduct is either not rationally related to a legitimate, nonpunitive government purpose or excessive in relation to that purpose. *Bell*, 441 U.S. at 561; *Kingsley*, 135 S. Ct. at 2473–74; *see also Alderson*, 848 F.3d at 424. Both elements are satisfied here. Even if the

Jail's current spacing of detainees and provision of healthcare would serve the legitimate purpose of jail health and safety in normal times, those procedures, are now endangering health and safety in the wake of COVID-19 by keeping people in the Jail. Hence, continuing to detain Plaintiffs and putative class members is not rationally related to the goal of health and safety (both the Jail's and the public's) and is indeed excessive in relation to the course of conduct that would achieve that goal: release with any necessary supports identified according to a public health expert's plan. *See Plata*, 563 U.S. at 531-32 (ordering release of inmates to correct overcrowding that violated Eighth Amendment); Memorandum and Order, *Thakker v. Doll*, No. 20-CV-0480 (M.D.Pa. Mar. 31, 2020) (categorically releasing petitioners who "suffer[] from chronic medical conditions and face[] an imminent risk of death or serious injury if exposed to COVID-19).

4. Faced with the Impossibilities of Safely Detaining Plaintiffs, a Temporary Restraining Order Releasing Medically-Vulnerable Class Members and Further Injunctive Relief is the Only Option.

As outlined in both the Cohen and Lofgren declarations, there are no mitigation efforts that the Jail could undertake that would better prevent the risk of contraction—and possible later spread to the non-jail community—than immediate release of the Medically-Vulnerable Subclass and additional Class Members to ensure physical distancing is maintained for those who remain in the Dallas County Jail. Cohen Dec., App. 44-59, at ¶ 30 – 31 ("less urgent action will not be sufficient"); Lofgren Dec., App. 1-43, at ¶ 34. In addition to the immediate release of all Medically-Vulnerable Class Members, the Jail must provide the additional conditions outlined by Dr. Cohen and the CDC (e.g., physical distancing, testing, quarantine, hygiene, medical care, personal protective equipment, public health information, etc.); including granting further release for additional class members to ensure sufficient physical distancing, if public health expertise so requires.

With more than 5,000 detainees in the North, South, and West Towers of the Lew Sterrett Justice Center, dozens of employees failing to report for work, the delay in starting to screen employees and detainees for COVID-19 until March 27, 2020, the general unavailability of COVID-19 test kits for detainees and employees, the shortage of N95 masks and other personal protective equipment (PPE) even for employees much less for detainees, the routine mingling of large groups of detainees (50 or more) within dozens of pods, and the impossibility of implementing social and physical distancing for detainees and employees, the Dallas County Jail cannot do the things necessary to protect detainees, employees, and the larger community against the racing spread of COVID-19. Thus, (1) immediate release of the most medically vulnerable persons, followed by (2) frequent reporting, improved health protocols, and—if public health still mandates—(3) further release of additional Class Members, are the necessary and least intrusive means of vindicating Class Members’ constitutional rights and preventing grave irreparable harm for the proposed Classes and the Dallas community.

Despite the unquestionable risk posed by COVID-19 to Plaintiffs and Class Members—and by extension, the public at large and its healthcare providers who will be required to care for more and more detainees who become seriously ill from COVID-19—Defendants have not taken such steps. These facts easily support “an inference of deliberate indifference.” *Id.*; *Ball*, 792 F.3d at 594; *Epps*, 499 F. App’x at 589-92; *Hare v. City of Corinth, Miss.*, 74 F.3d 633, 644 (5th Cir. 1996) (“[E]ven where a State may not want to subject a detainee to inhumane conditions of confinement or abusive jail practices, its intent to do so is nevertheless presumed when it incarcerates the detainee in the face of such known conditions and practices.”); *Gates*, 501 F.2d at 1300-03 (affirming district court’s holding that allowing “[s]ome inmates with serious contagious diseases . . . to mingle with the general prison population,” alongside maintaining a host of other

unsanitary and inhumane conditions, “constitute[d] cruel and unusual punishment”) (cited with approval in *Rhodes*, 452 U.S. at 352 n. 17). As Dr. Cohen notes, the conditions in the Dallas County Jail “create a high risk of contributing to an outbreak of COVID-19,” as the jail is not operationalizing public health guidance and is not equipped to slow transmission of the disease. Cohen Dec. at ¶¶ 4, 13–22, App. 46, 49–52.

B. A Substantial Threat Exists that Petitioners/Plaintiffs Will Suffer Substantial Irreparable Injury if the Court Does Not Issue the Requested Injunction.

Failing to grant Petitioners/Plaintiffs their requested injunction would result in a substantial threat of irreparable injury to them (and by extension, the public at large in north Texas)). As Dr. Lofgren notes, continuing to book, process, and incarcerated Class Members into the Dallas County Jail in the usual course of business, without releasing Class Members, will yield substantial additional cases of COVID-19 and deaths in the Dallas County over a six month period. Lofgren Dec. at ¶ 22–23, App. 6–7.

The need for immediate relief to prevent irreparable harm could not be clearer. Plaintiffs allege injuries that are irreparable and, therefore, not suitable for resolution in the ordinary course of litigation. *Girl Scouts of Manitou Council, Inc. v. Girl Scouts of the United States*, 549 F.3d 1079 (7th Cir. 2008). Injuries do not get more paradigmatically irreparable—that is any more truly beyond repair—than death. And even in non-fatal cases, COVID-19 can severely damage lung tissue, which requires an extensive period of rehabilitation, and in some cases, cause permanent loss of breathing capacity.⁴⁶ COVID-19 may also target the heart, causing a medical condition called myocarditis, or inflammation of the heart muscle. Myocarditis can reduce the heart’s ability

⁴⁶ *Dawson v. Asher*, 20-cv-409 (W.D. Wash.) at Doc. No. 5, Declaration of Dr. Jonathan Louis Golob ¶ 7.

to pump.⁴⁷ This reduction can lead to rapid or abnormal heart rhythms in the short term, and long-term heart failure that limits exercise tolerance and the ability to work.

Courts across the country, accordingly, have recognized that risk of exposure to the coronavirus constitutes an irreparable harm. *See* Petition/Complaint at ¶ 40 (collecting examples of jails responding to the COVID-19 crisis with emergency release of incarcerated people).

Further, the status quo deprives Plaintiffs and Class Members of an established liberty interest without procedural and substantive due process. The record clearly indicates that this constitutional deprivation is ongoing and wide-spread. Those currently detained under the current conditions in the Jail risk severe illness and the potential loss of their life. Without an injunction, the risk of these injuries will continue and likely increase, as discussed above.

C. The Threatened Injury to Plaintiffs/Petitioners and Class Members Outweighs the Potential Injury Posed by the Requested Injunction to Defendants, and the Public's Interest Favors the Requested Injunction.

Plaintiffs and Class Members seek relief to limit the spread of COVID-19 between and among them. The Jail is not an isolated environment. It cannot be contained or separated from the community at large. Moreover, it is in both the Defendants' and the broader public interest to provide the remedies Plaintiffs seek. Uncontrolled infection within the Jail therefore risks the health and safety of every person connected directly or indirectly to the many correctional officers, healthcare workers and other necessary staff who enter and leave the Jail environment on a daily basis. Therefore, any remedy that will protect the Petitioners/Plaintiffs and Class Members benefits the wider community as well and serves the public interest.

⁴⁷ *Id.*

D. The Balance of Injuries and the Public Interest Favor the Immediate Release of the Medically Vulnerable Subclass Members.

The members of the Medically Vulnerable Subclasses all have conditions that render them exceptionally vulnerable to death or serious harm if exposed to COVID-19. Because of their medical vulnerability, there is no practicable way to ensure that they receive reasonable medical treatment⁴⁸ within the Jail and, therefore, their continued detention violates the U.S. Constitution and they must be released.

Each class member faces a heightened risk of contracting a deadly virus merely because they are incarcerated, and additionally they face a heightened risk of dying if they do. Early reports estimate that the mortality rate for those with cardiovascular disease was 13.2 percent, 9.2 percent for diabetes, 8.4 percent for hypertension, 8.0 percent for chronic respiratory disease, and 7.6 percent for cancer. Cohen Dec. ¶ 26, App. 53. The World Health Organization estimates that one in five people who do require hospitalization.⁴⁹ and older people and those with underlying medical conditions, such as lung disease, heart disease, or diabetes, are more likely to develop serious illness.⁵⁰ In a February 29, 2020 preliminary report, individuals age 50-59 had an overall mortality rate of 1.3 percent; 60-69-year-olds had an overall 3.6 percent mortality rate, and those 70-79 years old had an 8 percent mortality rate.⁵¹

The number of cases and deaths from COVID-19 is increasing exponentially. This exponential growth is straining the health care system, which is struggling to care for the current and imminent influx of serious COVID-19 patients. An outbreak in the Jail will spread rapidly and

⁴⁸ As explained above, Plaintiffs need not show that the Defendants acted with deliberate indifference to their needs. But there can be no dispute that the Defendants are aware that an uncontrolled outbreak is threatening the jail and that people within it may die imminently as a result.

⁴⁹ World Health Organization, *Q&A on Coronaviruses (COVID-19)*, “Should I Worry About COVID-19?,” <https://cutt.ly/YtEyrxl>.

⁵⁰ World Health Organization, *Q&A on coronaviruses (COVID-19)* (Mar. 9, 2020), <https://cutt.ly/WtKhCcO>.

⁵¹ *Age, Sex, Existing Conditions of COVID-19 Cases and Deaths* Chart, <https://cutt.ly/ytEimUQ> (data analysis based on WHOChina Joint Mission Report).

further strain health care resources, resulting in a catastrophic loss of life, making it more likely that even people who may have ordinarily recovered from the virus will die.⁵² Lofgren Dec. ¶¶ 22; Cohen Dec. ¶¶ 23, 26, App. 53.

As a practical matter, there is no way to constitutionally confine Medically Vulnerable Subclass members in the Jail under present conditions. Cohen Dec. ¶ 17, 21, 30–31, App. 50, 52, 55. It is not possible for a jail to implement the social-distancing, sterilization, and other protective practices that the CDC requires in a jail without sufficiently reducing its population density and flow of new intakes. Cohen Dec. ¶ 30 – 31, App. 55; Lofgren Dec. ¶¶ 21–34, App. 6-9. While there are, in theory, a number of methods the Jail could take to adopt these measures, and some preliminary release requests have been granted, the Medically Vulnerable Subclass members are so vulnerable to death and serious injury from the disease that there is no time to await alternate methods to those measures now. And regardless, as explained below and in the contemporaneously filed Petition/Complaint, the Defendants have failed to implement those procedures to date. The Medically Vulnerable Subclass members, then, are jailed in conditions that will inevitably threaten their lives at least in the near term. They must be removed from those conditions.

For these reasons, in recent weeks, courts across the country have granted emergency habeas petitions ordering the release of medically vulnerable people from confinement. *See, e.g., Hernandez v. Wolf*, 20-cv-617 (TJH), Dkt. No. 17 (C.D. Cal. Apr. 1, 2020); *Thakker v. Doll*, No. 20-cv-480 (JEJ), Dkt. No. 47 (M.D. Pa. Mar. 31, 2020) (“Social distancing and proper hygiene are the only effective means by which we can stop the spread of COVID-19. Petitioners have shown that, despite their best efforts, they cannot practice these effective preventative measures in the

⁵² Sarah Kliff, *There Aren't Enough Ventilators to Cope With the Coronavirus* (Mar. 18, 2020), <https://cutt.ly/htKhNOK>; Austin Frakt, *Who Should Be Saved First? Experts Offer Ethical Guidance* (Mar. 24, 2020), <https://cutt.ly/XtKh12y>.

Facilities. Considering, therefore, the grave consequences that will result from an outbreak of COVID-19, particularly to the high-risk Petitioners in this case, we cannot countenance physical detention in such tightly-confined, unhygienic spaces.”); *Fraihat v. Wolf*, 20-cv-590 (TJH), (C.D. Cal. Mar. 30, 2020) (“This is an unprecedented time in our nation’s history, filled with uncertainty, fear, and anxiety. But in the time of a crisis, our response to those at particularly high risk must be with compassion and not apathy. The Government cannot act with a callous disregard for the safety of our fellow human beings.”); *Castillo v. Barr*, 20-cv-605 (TJH)(AFM), Dkt. No. 32 (C.D. Cal. Mar. 27, 2020); *Coronel*, 2020 WL 1487274; *Basank v. Decker*, 20-cv-2518 (AT), Dkt. No. 11 (S.D.N.Y. Mar. 26, 2020) (“The risk that Petitioners will face a severe, and quite possibly fatal, infection if they remain in immigration detention constitutes irreparable harm warranting a TRO.”); *Jovel v. Decker*, 12-cv-308 (GBD), Dkt. No. 27 (S.D.N.Y. Mar. 26, 2020).

E. The Balance of Injuries and the Public Interest Favor a Temporary Restraining Order Requiring the Defendants to Implement Constitutionally Sufficient Conditions at the Jail.

In addition to their request for a Temporary Restraining Order and Writ of Habeas Corpus requiring Defendants to immediately release all Medically-Vulnerable Subclass Members in both the Pre- and Post-Adjudication Classes, Plaintiffs and proposed class members seek a TRO requiring a plan be submitted to the Court in three (3) days and overseen by a qualified public health expert appointed by the Court under Fed. R. Evid. 706. This plan should outline:

- a. Specific mitigation efforts, in line with CDC guidelines, to prevent, to the degree possible, contraction of COVID-19 by all Class Members not immediately released;
- b. A housing and/or public support plan for any released Class or Subclass Members whose testing confirms have been exposed to or infected with COVID-19 and who do not readily have a place to self-isolate for the CDC-recommended period of time (currently 14 days).

- c. An evaluation of whether the release of the Subclass Members permits adequate social distancing and whether other categories of prisoners must be released to provide for compliance with CDC guidelines.

F. The Balance of Injuries and the Public Interest Favor a Preliminary Injunction Requiring the Defendants to Implement Constitutionally Sufficient Conditions at the Jail.

Finally, Plaintiffs and proposed Class Members seek a preliminary injunction:

- a. Requiring the continued release of any Medically-Vulnerable Subclass Members, including future members, during the pendency of this litigation;
- b. Requiring Defendants to release additional Class Members, including those not considered “Medically-Vulnerable” as defined in Plaintiffs’ Motion for a Temporary Restraining Order and Preliminary Injunction, as needed to ensure that all remaining persons incarcerated in the Dallas County Jail are under conditions consistent with CDC and public health guidance to prevent the spread of COVID-19, including requiring that all persons be able to maintain six feet or more of space between them;
- c. Enjoining Defendants from configuring more than one person in a cell in the Dallas County Jail during the period of time in which contagion of COVID-19 presents a danger;
- d. Requiring Defendants to maintain the actions set forth in the medical expert plan described above; and
- e. Requiring Defendants to regularly report to Plaintiffs and the Court the numbers of Medically-Vulnerable Subclass Members in the Dallas County Jail and their justification for continuing to detain them.

All Class members are currently at imminent risk of death or serious injury from exposure to COVID-19, and they are accordingly entitled to relief imminently. If this litigation is decided in the ordinary course, many Class members may die before final judgment is entered, and countless others will suffer severe pain or permanent lung damage. Class members are highly likely to succeed on their claims because, through the operation of the Jail under current conditions in the midst of the COVID-19 pandemic, the County and the Sheriff are knowingly exposing Plaintiffs to a severe risk of harm.

These steps are neither more nor less than what is required to mitigate the spread of COVID-19 within the Jail. Because the Jail is not an isolated environment—infections within the Jail can and will spread beyond the Jail’s walls—implementing these steps is essential to mitigate the spread of the Coronavirus and serves the public interest. As the Court has noted previously, “it is always in the public interest to prevent the violation of a party’s constitutional rights.”⁵³

CONCLUSION

For the foregoing reasons, this Court should grant the Classes’ Petition for writs of habeas corpus; grant the Classes’ request for a temporary restraining order and a preliminary injunction against Defendants and those in active concert or participation with them, and grant the following relief:

1. Certification of this action as a Class Action;
2. A temporary restraining order, preliminary injunction, permanent injunction, and/or writ of habeas corpus requiring Defendants to identify all Medically-Vulnerable Subclass Members in both the Pre- and Post-Adjudication Classes within six (6) hours of the Court’s order and release within twenty-four (24) hours after that all such persons absent proof of judicially-recorded findings by clear and convincing evidence that the individual poses such a serious risk of flight or danger to others that no other conditions can mitigate;
3. A temporary restraining order, preliminary injunction, permanent injunction, and/or writ of habeas corpus requiring Defendants to provide all persons released with educational resources on COVID-19 including instructions that they should self-isolate for the CDC-recommended period of time (currently 14 days) following release;
4. Following immediate release of all Medically-Vulnerable Subclass Members, a plan, to be submitted to the Court in three (3) days and overseen by a qualified public health expert agreed upon by the parties or ordered by the Court pursuant to Fed. R. Evid. 706, which outlines:
 - a. Specific mitigation efforts, in line with CDC guidelines, to prevent, to the degree possible, contraction of COVID-19 by all Class Members not immediately released;
 - b. A housing and/or public support plan for any released Class or Subclass Members whose testing confirms have been exposed to or infected with COVID-19 and who

⁵³ Court’s Memorandum Opinion and Order in *Daves v. County of Dallas*, Case No. 3:18-CV-00154-N, at 14 (citing *ODonnell v. Harris Cty.*, 251 F. Supp. 3d 1052, 1159 (S.D. Tex, 2018)).

do not readily have a place to self-isolate for the CDC-recommended period of time (currently 14 days).

- c. An evaluation of whether the release of the Subclass Members permits adequate social distancing and whether other categories of prisoners must be released to provide for compliance with CDC guidelines.
5. A preliminary injunction, permanent injunction, and/or writ of habeas corpus requiring Defendants to:
 - a. Continue to release all current and future Medically-Vulnerable subclass members absent proof of judicially-recorded findings by clear and convincing evidence that the individual poses such a serious risk of flight or danger to others that no other conditions can mitigate;
 - b. Report weekly on the population of persons in the Dallas County Jail who are Medically-Vulnerable as defined in this action;
 - c. Follow the terms of the public health expert plan submitted pursuant to Fed. R. Evid. 706;
 - d. Release additional Class Members, including those not considered “Medically-Vulnerable,” as needed to ensure that all remaining persons incarcerated in the Dallas County Jail are under conditions consistent with CDC and public health guidance to prevent the spread of COVID-19, including requiring that all persons be able to maintain six feet or more of space between them.
 6. If immediate release is not granted on the basis of this Motion alone, then expedited review of the Motion, including oral argument, via telephonic or videoconference if necessary;
 7. Any further relief to which Plaintiffs and Class Members may be entitled.

Dated: April 9, 2020

Respectfully submitted,

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ATTORNEYS FOR
PETITIONERS/PLAINTIFFS
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forthcoming*
***N.D. Texas admission
application forthcoming*

CERTIFICATE OF CONFERENCE

On April 9, 2020, I spoke by telephone and communicated by email with Kate David, counsel for defendants Dallas County Sheriff Marian Brown and Dallas County, Texas in *Daves v. Dallas County, Texas*, No. 3:18-cv-00154-N (N.D. Tex.), about the subject matter of and relief requested in this motion for temporary restraining order. Ms. David advised me that her clients are considering whether or not they will oppose the relief requested.

/s/ Barry Barnett
Barry Barnett

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing was served via the Court's CM/ECF system on all counsel registered with that system, and via email, on April 9, 2020.

/s/ Barry Barnett
Barry Barnett

Exhibit 1

Declaration of Eric Lofgren, Ph.D.

Declaration of Eric T. Lofgren, MSPH PhD

I. Background and Qualifications

1. My name is Eric T. Lofgren and I am an Assistant Professor at Washington State University in Paul G. Allen School for Global Animal Health. My research focuses on the computational and mathematical modeling of infectious diseases, with a focus on hospital epidemiology as well as emerging pathogens.
2. I have worked for the past fifteen years as a researcher of infectious diseases and epidemiology and hold both MS and PhD-degrees in Epidemiology from the University of North Carolina at Chapel Hill.
3. I was heavily involved in the response to the 2014 West African Ebola epidemic as well as the initial outbreak of Middle East Respiratory Syndrome (MERS), another novel coronavirus. This included leading the creation of a position paper on the role of modeling in public health response and working closely with federal agencies including the Defense Threat Reduction Agency (DTRA) and the Biomedical Advanced Research and Development Authority (BARDA). Additionally, my research group is one of five in the nation funded by the Centers for Disease Control and Prevention (CDC) to model the spread of healthcare-associated infections, and we have been actively working on COVID-19 related research.
4. My C.V., attached as **Exhibit A**, includes a full list of my honors, experience, and publications.
5. I am donating my time reviewing materials and preparing this report. Any live testimony I provide will also be provided *pro bono*.
6. I have not previously testified as an expert at trial or by deposition.

II. Materials Reviewed and Methodology

7. In forming the opinions expressed in this report, I rely on a mathematical model that I designed to explore the epidemiological consequences of allowing standard intake and unaltered within-jail operational dynamics to be maintained during the ongoing COVID-19 pandemic, and contrast this with proposed interventions to reduce the burden of negative health outcomes. The paper describing this model and the results is attached as **Exhibit B**.
8. This model was built to simulate an urban city and the accompanying jail and court systems. The size of the community population (1.2 million people) and the size of the jail (2500 people) were based on data from Allegheny County, PA. While different cities will necessarily have different raw numbers based on the size of the

community, the size of their jail, city-specific arrest rates, etc. the results of this model in terms of trends, patterns, and which interventions are most applicable are broadly generalizable.

9. The paper provides estimates of the infection risks, and likely loss of life, that arise from current incarceration practices. It also provides estimates for in-custody deaths and show how the within-jail dynamics lead to spill-over risks, not only affecting the incarcerated people, but increasing the exposure, infection, and death rates for both corrections officers with whom they interact within the jail system, and the broader community beyond the justice system.
10. We modeled the following scenarios:
 - a. “Business as usual” – an unmitigated COVID-19 outbreak
 - b. “Shelter in place” in the community – a COVID-19 outbreak where the community is under a “shelter in place” order, but no interventions are performed in the jail itself
 - c. “Shelter in place” in the community plus arrest reductions (from 25-90% reductions in number of bookings)
 - i. Not admitting any bond-eligible arrestees into the jail (estimated 25% of bookings bond eligible).
 - ii. Not admitting into the jail anyone charged with only a low-level offense – that is, those offenses not against persons (estimated 50-70% of bookings).
 - iii. Not admitting into the jail anyone at high risk for adverse outcomes from COVID-19 (i.e. anyone over 65 years of age, anyone who is immunocompromised, has underlying comorbid conditions, etc., estimated at 40% of bookings).
 - iv. 90% reduction in admissions.
 - d. Increased rate of release from jail
 - e. Getting jail population closer to “social distancing” seen in the public.
 - f. Allowing the jail population greater access to medical care for serious COVID-19 cases.
11. Our model shows that, given a typical jail-community dynamic, operating in a business as usual way will result in significant and rapid loss of life. Large scale reductions in arrest and speeding of releases are likely to save the lives of incarcerated people, staff and the community at large.

III. Opinion

12. From an epidemiologic perspective, it is my opinion that individuals who can safely and appropriately remain in the community not be placed in the Dallas jail at this time. I am also of the opinion that individuals who are already in those facilities should be evaluated for release, and that a careful evaluation of procedural and housing guidance is created for those who remain in the facilities during the “stay at home” mandate, and possibly until the epidemic is contained. These steps could

substantially reduce the number of COVID-19 infections in both the jail and the surrounding community.

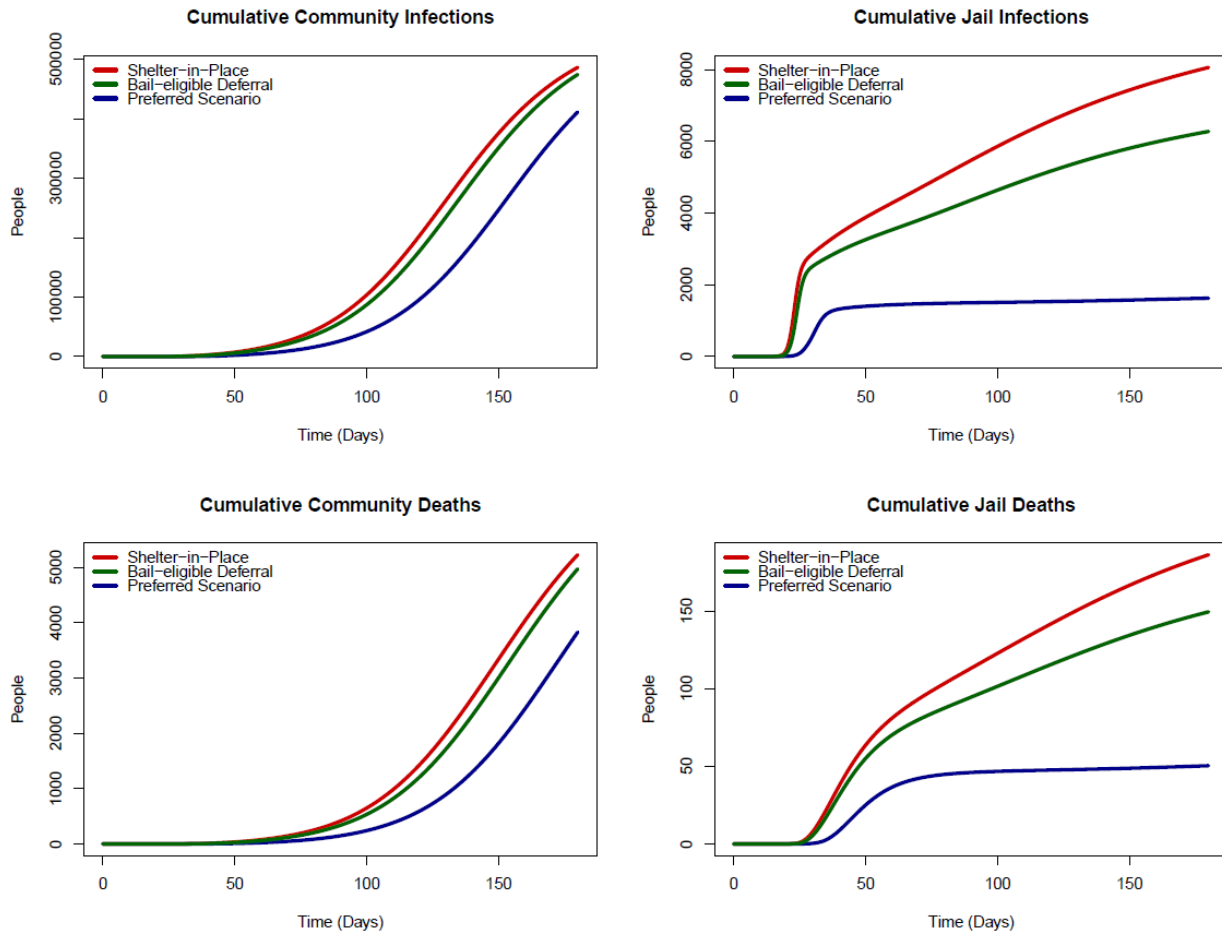
IV. Results of the Model

13. The model shows that, given the epidemiological dynamics of COVID-19, absent any intervention, there is a substantial outbreak in the community, causing 926,402 infections (both symptomatic and asymptomatic) as well as requiring over 50,000 hospitalizations and ultimately resulting in over 12,000 fatalities over the 180 days of the simulation, with the peak of infections occurring 83 days after the first infective case appeared in the population.
14. Among those incarcerated, the outbreak is considerably more severe, causing a cumulative 5,311 cases requiring 449 hospitalizations and 134 deaths in a population 0.2% the size of the unincarcerated population. The peak of this within-jail epidemic is also earlier, occurring 30 days after the first infective case appeared in the community.
15. Given the dominant approach to controlling COVID-19 in the community and the widespread calls to “flatten the curve,” for the remaining results we assumed the presence of a shelter-in-place order or similar social distancing intervention in the community. In line with the experience of communities undergoing such distancing interventions, this decrease in overall contacts results in a substantially delayed epidemic, with slightly less than 500,000 infections in the community as well as far lower burdens in terms of both hospitalizations and fatalities. In contrast, the early dynamics of the COVID-19 outbreak within the incarcerated population are identical, while in the latter half of the simulation the outbreak dynamics in the incarcerated population are worse, resulting in 8,058 infections after 180 days and proportionately more hospitalizations and COVID-19 related fatalities. Shelter-in-place orders had no discernable impact on the health outcomes of staff of the jail.
16. All four considered arrest deferral scenarios had substantial impacts on the course of the epidemic in the incarcerated population, while also lessening the impact of the epidemic on the community and, to a lesser extent, the jail’s staff. Discontinuing the incarceration of bail-eligible individuals, which corresponds to an approximately 25% reduction of admissions into the jail, resulted in a 22.1% reduction in infections in the incarcerated population, and a 2.7% reduction in infections within the community.
17. Broader, more sweeping arrest deferral programs resulted in correspondingly larger impacts in both the incarcerated population and the community. The discontinuation of arresting individuals for low-level offenses (~83.4% reduction) and the blanket reduction of arrests by 90% resulted in a 71.8% and 76.6% reduction in infections within the incarcerated population (with correspondingly fewer hospitalizations and deaths) respectively. These strategies also resulted in the greatest decrease in infections among staff (2.4% and 3.5%) and in the community at large (12.1% and 13.7%). Finally, a strategy built on deferring the incarceration of individuals at high

- risk of developing COVID-19 related complications by 90%, tailoring the intervention to groups of epidemiological importance rather than the nature of their offense, resulted in a 27.2% decrease in infections within the incarcerated population and a 56.1% decrease in deaths among the same population.
18. In comparison, a strategy deferring the same number of people with no regard to their underlying risk (~36.5%), resulted in a 6.8% decrease in overall infections within the incarcerated population, but a 61.7% increase in deaths among incarcerated persons compared to the scenario specifically targeting those at greatest risk of adverse outcomes for deferred incarceration. The deferral strategy targeting individuals for high risk outcomes caused 4,095 more infections in the community compared to the same proportionately large but broader strategy, and the decreased number of deaths among persons in jail was partially offset by this increase, with the targeted strategy resulting in a combined number of COVID-19 fatalities in both the population of persons in jail and in the community of 5,001 compared to 4,969 fatalities under a broader strategy. It is therefore more effective to reduce the intake rate across the entire population than to attempt to single out particular categories of individuals due to their likely susceptibility to severe morbidity or mortality from infection. The larger the reduction in overall intake, the greater the reduction in disease achieved for all populations (incarcerated people, the broader community, and jail staff, in decreasing proportion of effect). These broader interventions are also likely to be relatively straightforward to implement administratively, without knowledge of an individual's underlying comorbidities, if any.
 19. Pairing increased arrest deferral with a more rapid release of persons who were already incarcerated enhanced the impact of those interventions, reducing infections, hospitalizations, and deaths among the incarcerated—as well as the staff of the jails—as the rate of release increased. The one exception to this was the outcomes in the wider community, which, when paired with less aggressive incarceration deferral scenarios, experienced a slight increase in the number of infections, hospitalizations and deaths at lower levels of accelerated release schedules. This phenomenon peaks at a release rate 1.5 times faster than the default release rate, which a 0.3% increase in community infections. At rates faster than this, the effect is considerably reduced, with a release rate twice as fast as the default release rate resulting in a 0.02% increase in community infections.
 20. When accompanied by a deferred arrest of bail-eligible individuals to reduce the incarcerated population, supplementary measures to reduce transmission among incarcerated persons have a marked benefit in both reducing the amplitude of the epidemic curve in incarcerated people and jail staff, as well as shifting the overall community epidemic curve later. These interventions may be thought of as either measures to reduce mixing --- such as allowing greater space between individuals in common areas or the staggering of the use of shared facilities --- or the provision of supplies such as soap and hand sanitizer that reduces the level of viral contamination of patient's hands, physical surfaces, etc. Compared to the baseline mixing rate among persons in jail, a reduction to an equivalent level of mixing as the community while

sheltering in place reduced would reduce infections in this population by 10.9\% as well as delay the peak of the epidemic by close to two weeks

21. An increase in the detection of severe COVID-19 cases among incarcerated persons also had a pronounced positive benefit. Compared to missing one-in-twenty severe cases, a jail that successfully identifies all severe COVID-19 cases and routes them to appropriate treatment had a 72.2% decrease in fatalities within the model.



V. Discussion of the Results

22. The models clearly demonstrate that, in the absence of community mitigation such as strict social distancing, we can expect 2,886 infections among incarcerated people, resulting in nine in-custody deaths. When contrasted with a baseline model of the general population without interaction with a jail, we see that the existence of jail-driven disease dynamics increase the total number of cases in the population by 922 and the total number of deaths by 301.

23. These results follow from the features of the jail system themselves. While only 1% of the population entering into the jail system are elderly, incarceration in jail itself degrades the health of incarcerated people, leaving them more vulnerable to infection and severe outcomes from infection. As individual robustness to disease decreases, the epidemiological result is the increased vulnerability of the whole jail population.
24. Beyond the direct implications for the health of incarcerated people, jail populations have high rates of re-entry into the general community and they depend on people who regularly mix with the outside community. This level of porousness means the health of persons in jail and the health of the rest of the community are inherently and inextricably linked.
25. Jails with disease prevalence higher than the general populations they serve will therefore act as sources of infection, re-seeding infection into communities that may be striving to contain or mitigate ongoing outbreaks, or even reintroducing infection into otherwise disease-free populations. This would happen even if no one were released given the volume of people coming in and out of jails in staff and vendor roles, so should therefore not be construed as an implication that releases should be suspended or impeded.
26. New arrests of people of unknown disease status may be regularly brought into jails, increasing the likely severity of outbreaks both by the plausible continuous introduction of new sources of infection and by the maintenance of higher rates of contact among susceptible incarcerated people due to the density and structure of jail housing arrangements.
27. Critically, the factors that cause these outbreak dynamics and drive the resulting efficacy of proposed interventions are features implicit in the nature of the jail system itself. The living conditions within the jail foster disease spread. Incarcerated people are shuttled back and forth to court or, where court proceedings are halted due to this pandemic, forced to remain in their cells or dorms. Incarcerated people occupy shared spaces in which physical distancing is impossible either due to space, overcrowding, or the requirement of constant supervision. Incarcerated people are often not provided with the means to practice good personal hygiene or disinfect their surroundings. Improved facility sanitation, access to free personal hygienic care, such as warm water, free soap, free hand sanitizer, and free cleaning products, increased time spent outside, increased physical/social distancing measures, decreased population density achieved by releasing people, increased access to free medical care, and improved nutrition are all factors with instant and obvious resulting improvements in individual health outcomes for people incarcerated within the jail system.
28. Alterations to function and practice of the jail system that can correct for these challenges are unlikely to occur quickly enough or substantially enough to improve the epidemiological risks for the incarcerated people living within the jail system. As our results have shown, even when the within-jail transmission rates are improved by interventions such as reduction in intake from new arrests leading to a decrease in the

size of the incarcerated population, we cannot effectively reduce the outbreak of infection in either the staff or incarcerated people down to the levels of the broader community.

VI. Conclusion and Recommendations

29. For the reasons above, it is my professional judgment that reducing admissions into the Dallas jail and increasing rates of return home for individuals currently incarcerated in the Dallas jail could substantially reduce the number of COVID-19 infections in both the jail and the surrounding community.
30. If Dallas County reduces its jail intake by a significant percentage, our models demonstrate that it will meaningfully reduce the disease incidence in the incarcerated population. Moreover, these same strategies also clearly produced a reduction in the source of risk to incarcerated people's families and the broader community. These strategies could be enacted in a number of ways, such as replacing misdemeanor arrests with citations, avoiding recommendations for jail time or prohibitive terms for bail conditions, or refusing to detain anyone for nonpayment of fines or fees during the course of the outbreak.
31. In addition to reducing rates of intake into the jail system, another obvious, concrete step Dallas officials might take to reduce disease risks for everyone is to increase the rate of release from jails. This should be coupled with a decreased rate of intake rather than enacted in isolation, since increasing only release rates can simply turn jails into more efficient engines of disease exposure, increasing infection risks for incarcerated people, the staff who work at the jails and court systems, and the broader community. This may even still occur when expedited release is coupled with decreased rates of intake if the rate of release is insufficient. Again, our results clearly demonstrate that the greater the proportion of the incarcerated population we can include in such a policy, the more effective the intervention is at mitigating the outbreak.
32. To be maximally effective, each of these interventions should anticipate, rather than react to, widespread infection incidence in jail populations.
33. Conditions within jails must be immediately improved to decrease the probabilities of disease transmission and support better health for incarcerated people to protect not only themselves, but also jail staff and the community at large. Decreasing population density both directly decreases disease exposure, interrupting transmission dynamics, and also facilitates many other interventions. It is a natural result of reduced intake. We can achieve/enable many desired benefits with just that one, simple action, but to achieve maximal benefits to society, preventing the greatest burden from disease both within the jails and without, broad actions that include alterations to both intake and release and also many of the within-jail strategies for improving the individual means to enact personal hygiene, protection through social distancing, and access to medical care are all needed.

34. It is my professional opinion that these steps are both necessary and urgent. The horizon of risk for COVID-19 in these facilities is a matter of days, not weeks.

35. Health in jails and prisons is community health. Protecting the health of individuals who are detained in and work in these facilities is vital to protecting the health of the wider community.

I declare under penalty of perjury that the foregoing is true and correct to the best of my ability.

A handwritten signature in black ink, appearing to read 'Eric Lofgren', followed by a long horizontal flourish.

Eric Lofgren MSPH, PhD
Name

April 6, 2020
Date

Exhibit A to Lofgren Declaration

Eric T. Lofgren, MSPH PhD

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Research Interests

Computational and mathematical modeling of infectious diseases, with a focus on hospital epidemiology as well as emerging, enteric, and respiratory pathogens.

Education

Virginia Tech, Virginia Bioinformatics Institute, Blacksburg, Virginia
Network Dynamics and Simulation Science Laboratory
Postdoctoral Associate: September 2013 to December 2015
Supervisor: Dr. Stephen Eubank

University of North Carolina at Chapel Hill, UNC Gillings School of Global Public Health, Chapel Hill, North Carolina
Department of Epidemiology
PhD: May 2013 Advisor: Dr. David Weber
MSPH: December 2009 Advisor: Dr. Jennifer Smith

Tufts University, Medford, Massachusetts
BA: January 2007
Major: Biology with Highest Thesis Honors

Professional Appointments

Assistant Professor, Washington State University, Paul G. Allen School for Global Animal Health. December 2015 to present.

Postdoctoral Research, Virginia Tech, Virginia Bioinformatics Institute, Network Dynamics and Simulation Science Lab. September 2013 to December 2015.

Research Assistant, UNC Gillings School of Global Public Health, Department of Epidemiology. January 2009 to May 2009 and August 2011 to May 2013.

Teaching Assistant, UNC Gillings School of Global Public Health, Department of Epidemiology. August to December 2008, August to May 2010.

Summer Lab Manager, Rutgers University, Center for Discrete Mathematics and Theoretical Computer Science. Fefferman Lab. May 2008 to August 2013.

Research Assistant, Tufts University, Initiative for the Modeling and Forecasting of Infectious Disease. August 2005 to July 2007.

Teaching Experience

Instructor, College of Veterinary Medicine, Washington State University. 2018 to present.

- VetPath 571: Methods of Analysis in Epidemiology
- VetClin 570: Infectious Disease Journal Club

Session Organizer, “A gentle introduction to mathematical modeling: Lessons from the living-dead”, American Public Health Association Annual Meeting Learning Institute. November 2011, 2012 and 2014.

Teaching Assistant, UNC Gillings School of Global Public Health, Department of Epidemiology. 2008 – 2010.

- EPID 722: Epidemiologic Analysis of Time-to-Event Data
- EPID 750: Fundamentals of Public Health Surveillance

Publications

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Book Chapters

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C.S. Short, M.S. Mietchen, **E.T. Lofgren**. Transient Dynamics of Infection Transmission in a Simulated Intensive Care Unit. *In submission*. Preprint available at: arxiv.org/abs/1909.11878

Mietchen, M.S., C.S. Short, M. Samore, **E.T. Lofgren**. 2019. Population Structure Drives Differential Methicillin-resistant *Staphylococcus aureus* Colonization Dynamics in ICUs. *In submission*. Preprint available at medrxiv.org/content/10.1101/19002402v2.

Slayton, R.B., J.J. O'Hagan, S. Barnes, S. Rhea, R. Hilscher, M. Rubin, **E. Lofgren**, B. Singh. Modeling Infectious Diseases in Healthcare Network Framework for Describing Multidrug Resistant Organism and Healthcare-Associated Infections Agent Based Modeling Methods. *In submission*.

Myers, K., **E.T. Lofgren**, N.H. Fefferman. 2018. 30 Relaxed Fit vs. 32 Slim Cut: Structural Nonidentifiability in Outbreak Models. *In submission*.

Omulo, S.*, **E.T. Lofgren**, S. Lockwood, et al. 2017. Saturated prevalence of antimicrobial resistance in an informal urban community. *In submission*.

Invited Talks

Synthesizing the Clinical Literature using Approximate Bayesian Computation. 2019. SIAM Conference on Computational Science and Engineering. Spokane, WA.

Meet the Professor: Building a Virtual Laboratory to Inform Improved Infection Control with Facility-Level Mathematical Modeling. 2018. IDWeek, San Francisco, CA.

The Patient-Patch: Hospital Epidemiology as an Ecology Problem. 2017. National Institute for Mathematical and Biological Synthesis, University of Tennessee, Knoxville, TN.

Adventures in Modeling for Policy. 2017. University of Utah, Salt Lake City, UT.

Agent-based Models and Population Health. 2016. Center for Health and Society at the University of Copenhagen, Copenhagen, Denmark.

Beyond Forecasting: Modeling for Decision Support, Policy and Translational Research. 2015. Society for Vector Ecology, Albuquerque, NM.

Epidemiology on Networks: Human and Otherwise. 2014. Department of Mathematics, Tulane University, New Orleans, LA.

Mathematical Modeling of In-Hospital Transmission of Infectious Diseases. 2013. Infectious Disease Grand Rounds, Duke University School of Medicine, Durham, NC.

Defining Epidemics: Detection, Behavior, and Intervention. 2011. Department of Homeland Security US-Sweden Workshop "A Visualization and Analytics Approach to Flooding and Pandemics". Norrköping, Sweden.

The Plagues of Azeroth: Outbreaks and Epidemiology in Virtual Worlds. 2011. UNC Gillings School of Global Public Health, Chapel Hill, NC.

Funding

U01CK000533-01 Lofgren, Eric T. (PI) 08/01/17 – 07/31/20
Centers for Disease Control and Prevention
Model-driven Surveillance and Intervention Evaluation in Highly Stochastic Healthcare Settings
Role: PI

200-2018-96423 Lofgren, Eric T. (WSU PI) 01/01/2018 – 06/30/19
Centers for Disease Control and Prevention
Identifying Predictors of Antimicrobial Exposure for Application in the Standardized Antimicrobial Administration Ratio Risk Adjustment Strategy
Role: PI of WSU Subcontract from Duke University

1U01GH002143-01 Njenga, M. Kariuki (PI) 09/30/16-09/29/21
Centers for Disease Control and Prevention
Conducting Communicable Disease Research in Kenya
Role: Co-I

WSU College of Veterinary Medicine Lofgren, Eric (PI) 07/01/16 – 06/30/17
Intramural Award
Modeling Emerging Infections in Frontline Veterinary Care Settings
Role: PI

Awards and Honors

2007 University Merit Assistantship, UNC Gillings School of Global Public Health
2017 Finalist, Society for Healthcare Epidemiology of America Epi Project Competition

Professional Memberships

2010 - Member, Society for Epidemiological Research
2017 – Membership Committee
2010 - Member, Society for Industrial and Applied Mathematics
2012 - Member, Society for Healthcare Epidemiology of America
2017 – Journal Club
2018 – Research Committee
2015 - Member, Association for Computing Machinery
2017 - Member, American Association for the Advancement of Science

Other Experience and Service

Manuscript Referee: *Epidemiology, American Journal of Epidemiology, Infection Control and Hospital Epidemiology, BMJ, BMJ Open, Environmental Health Perspectives,*

Scientific Data, BMC Infectious Diseases, Clinical Infectious Diseases, Bulletin of Mathematical Biology, PLoS One, PLoS Computational Biology among others.

Editorial Boards: *Epidemiology*

U.S. Research Delegate: DHS US-Sweden Workshop 'A Visualization and Analytics Approach to Flooding and Pandemics'. Norrköping, Sweden. 2010.

Press Coverage

Television: BBC World News, CBS News, Canada Television, Discovery Channel

Radio: BBC UK News, National Public Radio, North Carolina Public Radio

Print/Online News: ABC News, ABS CBN News, Canadian Press, The Economist, Forbes, Fox News, New Scientist, Science News, Reuters, TIME, The Washington Post

Exhibit B to Lofgren Declaration

The Epidemiological Implications of Incarceration Dynamics in Jails for Community, Corrections Officer, and Incarcerated Population Risks from COVID-19

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Abstract

COVID-19 challenges the daily function of nearly every institution of society. It is the duty of any society to be responsive to such challenges by relying on the best tools and logic available to analyze the costs and benefits of any mitigative action. We here provide a mathematical model to explore the epidemiological consequences of allowing standard intake and unaltered within-jail operational dynamics to be maintained during the ongoing COVID-19 pandemic, and contrast this with proposed interventions to reduce the burden of negative health outcomes. In this way, we provide estimates of the infection risks, and likely loss of life, that arise from current incarceration practices. We provide estimates for in-custody deaths and show how the within-jail dynamics lead to spill-over risks, not only affecting the incarcerated people, but increasing the exposure, infection, and death rates for both corrections officers with whom they interact within the jail system, and the broader community beyond the justice system. We show that, given a typical jail-community dynamic, operating in a business as usual way will result in significant and rapid loss of life. Large scale reductions in arrest and speeding of releases are likely to save the lives of incarcerated people, staff and the community at large.

Introduction

As the COVID-19 pandemic sweeps the globe, one of the critical functions of epidemiology is to consider how society can transform current practice to increase the health and safety of the public. The widespread risk of infection and the high case fatality rates, especially in older or medically compromised populations, mean that we, as a society, must be willing to consider structural reforms to our institutions to promote an overall greater good. To these ends, we have already seen systemic shifts in institutional practices that would be unthinkable under normal conditions:

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shelter-in-place orders closing businesses and restricting freedom of individual movement [1], school closures to limit transmission compromising the ongoing education of children [2], etc. Another clearly important institution that affects a substantial portion of the public directly [3] and an even greater portion indirectly [4-7], is our criminal legal system. It would be unpardonable to allow the ongoing function of this institution to continue unchanged without performing rigorous analyses of the costs and benefits to society, including incarcerated people and their families, inherent in maintaining current practices. We therefore explore the epidemiological costs associated with our current system's functions as a necessary part of the policy conversation that must ensue to decide whether or not they should be maintained or altered in response to a growing global crisis. Analyzing incarcerated populations poses a unique epidemiological problem. The population experiences high rates of movement and turnover [8,9], incarcerated people are responsible for purchasing their own hygiene products with limited resources, [10,11] it is difficult or impossible for incarcerated people to practice CDC recommendations such as social distancing [12], the incarcerated population has a higher expected rate of existing health conditions than the community from which they come [13-15], jails are dependent completely on a workforce that moves in and out of the jail and the community including vendors, lawyers, corrections officers, medical staff, etc., and there is strong evidence that incarceration itself has profound adverse effects on the health of incarcerated people [16-18]. These descriptors make jails highly likely not only to place detained people at increased risk of infection and resulting severe outcomes, but also to function as a driver for increased infectivity, adversely impacting attempts to contain and mitigate disease spread in the broader communities in which jails are located. To study the dynamics of this system and provide quantitative metrics for risk to incarcerated populations and the populations with which incarcerated people necessarily interact, we construct and tailor a epidemiological model of COVID-19 transmission, and then use that model to consider how some possible reforms to the system (i.e. reduction in arrest intake, increased rates of returning incarcerated people to their homes, and improvement of conditions within the jails) will alter these baseline risks.

Model/Methods

Transmission Model

We begin by tailoring a standard SEIR model to the specific dynamics of COVID-19. We first split our total population into four categories of risk: Children under 18 (denoted with the subscript K), Low-risk adults (denoted with the subscript L), High-risk adults (denoted with the subscript H), and Elderly adults (denoted with the subscript E). We also designate a separate population category for jail staff, O (note: while O was the selected notation, it is meant to capture all staff working at the jail, not only the corrections officers). These populations are then assigned into disease-related health status compartments: Susceptible (S), Exposed (in which individuals are presymptomatic, but do already produce low levels of infection transmission to others, E), Infected (in which individuals are both symptomatic themselves and fully infectious to others, I), Medically Treated (those infectious individuals whose disease severity and healthcare access results in removal from the population into a medical care facility that prevents any further transmission of infection back into the population, M), and Removed (those who have either recovered from the infection and are now immune or those who have died, R). We also allow for the possibility that an Infected person with sufficient disease severity to warrant medical treatment is unable to obtain care, and designate rates associated with this case, U . For clarity of the results, we do not

consider death from any non-COVID-19 cause; this is done to highlight the COVID-19-specific dynamics. Additionally, as a simplifying assumption due to their low rates of both infections and complications, we do not model hospitalizations or deaths in children. Similarly, once hospitalized, patients are assumed not to spread COVID-19 further, as additionally modeling the impact of healthcare-associated COVID-19 cases is well beyond the scope of this model. Lastly, we split our population into segments depending on the subsection of the community or jail system in which they are currently functioning: the community at large, C , the processing system for the jail, P , the court system T , and the jail system, J .

A schematic for this model can be seen in [Fig 1](#), and the differential equations comprising the model are in SI Appendix 1. The model was implemented in R 3.6.3 using the deSolve package, with the visualization of results primarily using ggplot2. Statistical analysis of one parameter (see below) was done using the flexsurv package.

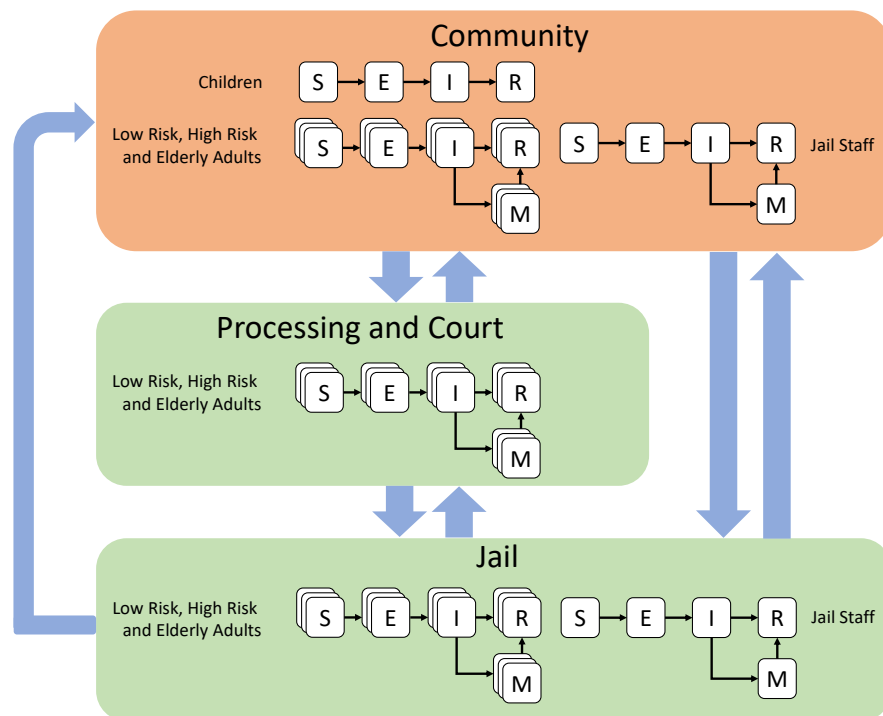


Fig 1. Schematic for a mathematical model of COVID-19 in a linked urban community - jail system. The population is represented in one of five possible compartments: Susceptible (S), Exposed (E), Infected (I), Needing Medical Care (M) and Recovered/Removed (R). Additionally, the population is divided into five distinct sub-populations: Children under 18 years of age, Elderly Adults over 65 years of age, Low Risk Adults between 18 and 65, High Risk Adults between 18 and 65 and Jail Staff (assumed to be between 18 and 65 years of age). Arrested adults move between the Community, Processing and the Court System and Jail, while Jail Staff move between the Community and Jail. Children are assumed not to be eligible for arrest.

Population Movement Into, Within, and Out Of the Jail System

Our model captures movement between the community (denoted with subscript, C), processing (P), jail (denoted with subscript, J), and court appointments (denoted with T for trial, though this is meant to encompass all court appointments). It assumes staff

move only between the community and jail; they are not arrested in our model. We base the parameters of movement into, within, and out of the jail on Allegheny County, Pennsylvania, where detailed data on the jail population and facilities are available, including an automatically updating dashboard giving statistics for the jail population.¹ In Allegheny County, the population at large is approximately 1.2 million people. The size of the jail population hovers around 2,500. We use these population figures to initialize our model.

In our model, individuals in the community are arrested at a rate of approximately 100 people per day.² Arrested individuals are brought to processing. From processing, individuals can either be released back into the community (60%) or taken to jail (40%).³ This results in an in-flow to the jail of approximately 40 individuals per day, which is consistent with Allegheny County's reporting. While in jail, individuals transition back and forth between the jail and court appointments. The number of movements between jail and court appointments is described as "well over 100" on the jail's website. We assume movement of approximately 150 people per day between the jail and court. For each court appointment, we assume individuals spend half a day on average at the court facility. Importantly, we also assume that there is mixing in the court facility between those who are there for processing after arrest and those that are present there for court appointments. From the jail, individuals are released back into the community at a rate that is consistent with the reported 62 day average length of stay. One limitation of our model is that we do not account for post-jail destinations that are not the community, i.e. we do not model people moving from jail to prison. According to [19], the yearly number of admissions to prison is about 600,000 while the yearly number of admissions to jail is around 10.6 million. So, assuming that all prison admissions first had one jail admissions, around 95% of all jail admissions do not go on to prison; they are released back into the community as in our model. Thus, we expect that the omission of prison from our model does not substantially impact the overall findings.

An online database of public employees salaries in Allegheny County shows a population of 384 people whose job title is corrections officer, whose job location is the jail, and who are listed as active. Although this is certainly an underestimate of the total number of the jail's staff, which includes other types of employees, we think this is a useful approximation to the total number of staff. We use this figure as the number of staff members moving between community and jail. Staff transition between community and jail at a rate that assumes 8 hour shift lengths in the jail per day with the remaining 16 hours per day spent in the community.

Estimation Population Mixing and Contact Rates

We estimate parameters that describe the relative rate of transmission between each of the community categories: Children, Low-risk adults, High-risk adults, and Elderly adults from other studies. We use β_{qr}^{C*} to denote the relative rate of transmission to category q from category r . We estimate this as

$$\beta_{qr}^{C*} = m_{qr} c_q p_q^{-1} t_q.$$

m_{qr} is the number of times a person in category q is in contact with a person in category r . We use the category-category contact rates given in [20]. c_q is the proportion of COVID-19 cases that occurred for people in category q and p_q is the proportion of the total population in category q . The ratio of these two terms, $c_q p_q^{-1}$, is meant to capture the relative proclivity for people in group q to be infected by the virus.

¹<https://perma.cc/93RG-4WZ8>

²<https://perma.cc/K992-KHCH>

³<https://perma.cc/93RG-4WZ8>

We use case counts and population information for South Korea as reported by Statista⁴⁵ t_i is the number of daily contacts for individuals in category q , as reported in [21]. The β^* s are normalized such that the Child-Child transmission is equal to one. The resulting values of β^{C*} is shown in Table 1.

	child	adult	elderly
child	1.00	0.51	0.08
adult	0.57	2.43	1.05
elderly	0.02	0.30	0.49

Table 1. Relative transmission rates of COVID-19, scaled so that the Child-Child rate is one.

Within the jail and processing, we assume that mixing patterns are not category-dependent. We set $\beta^{J*} = \beta_{qr}^{J*} = \beta_{LL}^{C*} c_j$ and $\beta^{P*} = \beta_{qr}^{P*} = \beta_{LL}^{C*} c_p$, where β_{LL}^{C*} is the low risk adult to low risk adult base transmission rate in the community and c_j and c_p are factors that denotes how times more contacts per day a person in jail or processing, respectively, has than a person in the community. We set these values to be $c_j = 3$ and $c_p = 6$, corresponding to an assumption of three and six times more contact in jail and processing, respectively, than take place in the community.

The β^* s are defined on an arbitrary scale. To get simulations that resemble the real spread of the virus, we calibrated the model. We set $\beta_{qr}^C = \frac{c_0 \beta_{qr}^{C*}}{n_c}$, $\beta^J = \frac{c_0 \beta^{J*}}{n_j}$, and $\beta^P = \frac{c_0 \beta^{P*}}{n_p}$, where $n_c = 1,200,000$, $n_j = 2,600$, and $n_p = 250$ is the size of the population in the community, jail, and processing, respectively, and c_0 is a calibration parameter. Scaling each of the β terms in the model by the population sizes amounts to the assumption that transmission is contact-based. This assumption leads to conservative estimates of the speed of the spread in the jail system relative to a fomite-based transmission model. To calibrate the model, we then find a c_0 such that approximately 80% of the population is ultimately infected by the time the spread dies out in our model. We selected an 80% final infection rate for consistency with predictions of the spread of COVID-19 under the assumption of no mitigation measures in place from an influential micro-simulation model [22].

Estimation of Other Model Parameters

Parameters concerning the natural history of COVID-19, patient progression, etc. were primarily obtained from existing estimates in the modeling literature, where possible using estimates from as close to the modeled catchment area as possible (i.e. CHIME from UPenn Medicine, <https://penn-chime.phl.io/>). Citations for specific parameter values may be found in Table 2.

In one case, $\hat{\gamma}$, or the asymptomatic period⁻¹, the original source reported that their estimate was likely an underestimation due to censoring. However, given that the authors provided the data within their manuscript [23], the data was re-estimated to account for censoring using a parametric survival model assuming an exponential distribution (the distribution typically implied by the uniform hazard of transitioning from one compartment to another within a compartmental model). The fit for this exponential model may be found in SI Appendix 2.

⁴COVID-19 case proportions: <https://www.statista.com/statistics/1102730/south-korea-coronavirus-cases-by-age/>

	Parameter	Value	Description
1	σ	0.50	Percent reduction in transmission during asymptomatic period (compared to symptomatic) [24]
2	γ^{-1}	5.1 days	Incubation Period [25]
3	$\hat{\gamma}^{-1}$	6.7 days	Asymptomatic Period [23]
4	δ^{-1}	10 days	Symptomatic Period [24]
5	$\delta_{Discharge}^{-1}$	9 days	Hospitalization Length of Stay (Discharged Alive) [26] [6]
6	δ_{Death}^{-1}	4.2 days	Hospitalization Length of Stay (Discharge Dead) [26]
7	δ_{DeathU}^{-1}	4.2 days-1	Time to Death for Unhospitalized Critical Cases
8	ω_L^{-1}	5.9 days * 0.0625	Time from Symptom Onset to Hospitalization * Probability of Needing Hospitalization (low risk) [26] [27]
9	ω_H^{-1}	5.9 days * 0.118	Time from Symptom Onset to Hospitalization * Probability of Needing Hospitalization (high risk) [26] [27]
10	ν	95%	Hospitalized Case Survival Rate (low risk) [28]
11	ν_H	66.6%	Hospitalized Case Survival Rate (high risk) [28]
12	ν_U	0.0%	Unhospitalized Critical Case Survival Rate (low risk)
13	ν_{UH}	0.0%	Unhospitalized Critical Case Survival Rate (high risk)
14	α_L	3.57e-06	Per Capita Hourly Arrest Rate (low risk). Equates to 60 arrests per day.
15	α_E	7.35e-06	Per Capita Hourly Arrest Rate (elderly). Equates to 1 arrest per day.
16	α_H	1.11e-03	Per Capita Hourly Arrest Rate (high risk). Equates to 40 arrests per day.
17	ψ_C^{-1}	12 hours*0.60	Processing Time from Arrest to Returning to Community * Probability of Release After Arrest
18	ψ_J^{-1}	12 hours*0.40	Processing Time from Arrest to Jail * Probability of Jail After Arrest
19	κ	2.60e-03	Per Capita Hourly Probability of Scheduled Court Appearance
20	τ	12 hours	Time from Scheduled Court Appearance to Return to Jail
21	ρ^{-1}	62 days	Length of Stay in Jail [7]
22	μ_C^{-1}	8 hours	Shift Length for Jail Staff
23	μ_J^{-1}	16 hours	Time Spent in the Community for Jail Staff
24	ζ	1.00	Probability an Incarcerated Person Needing Treatment Will Receive It
25	pop	1.22 million people	Population of Jail Catchment Area

Table 2. Parameter values, meanings and sources for a community-jail transmission model of COVID-19.

Modeled Scenarios and Interventions

We represented the effects of several policy interventions or failures as changes to various parameters in this model. We consider four categories of scenarios that could vary the rate of spread: in addition to modeling shelter-in-place (reduced mixing) conditions in the community, we modeled scenarios related to reductions in arrest rates, increases in release rates, and changes to within-jail conditions. These scenarios are detailed below in Table 3. Most scenarios are additive; that is, all arrest reduction interventions assume a baseline scenario of shelter-in-place in the community. The scenarios involving faster release of individuals in jail all assume both shelter-in-place in the community, and were each run under each of the "Arrest Reduction" scenarios to determine the cumulative effects of arrest reduction, increased release rates, and community shelter-in-place conditions. The mixing reduction scenario in the jail assumes shelter-in-place in the community as well as a 25% reduction in arrests (equivalent to the "Bail Eligible" Arrest Reduction scenario), as it is unlikely that jails will be able to effectively reduce contact rates without reducing their average daily population. Finally, in the reduced detection scenario, we assume shelter-in-place, but vary the likelihood that serious cases of COVID-19 is caught and treated in a timely manner.

Below, vulnerable populations are defined as individuals over the age of 65 or at increased risk of complications from COVID-19 due to other co-morbidities. We estimate that 40% of the jail population is vulnerable by this definition, according to information from the Bureau of Justice Statistics [29]. We estimate that around 25% of those arrested are bail eligible, based on information from Allegheny county that cash bail was used in 28% of cases between February and June of 2019 [30].

Results

Unsurprisingly given the epidemiological dynamics of COVID-19, absent any intervention there is a substantial outbreak in the community, causing 926,402 infections (both symptomatic and asymptomatic) as well as requiring 51,578 hospitalizations and ultimately resulting in 12,161 fatalities over the 180 days of the simulation, with the peak of infections occurring 83 days after the first infective case appeared in the population. Among those incarcerated, the outbreak is considerably more severe, causing a cumulative 5,311 cases requiring 449 hospitalizations and 134 deaths among those incarcerated, the 2500 person jail being 0.2% the size of the wider community (Fig 2). The peak of this within-jail epidemic is also considerably earlier, with the peak of the epidemic occurring 30 days after the first infective case appeared in the community.

Scenario Name	Parameters	Multiplier of Baseline	Scenario Description
Shelter in Place	β_*^C	0.625	Effective contact rate in the community is reduced by a factor of 1/1.65.
<i>Arrest Reduction</i>			
Bail Eligible	$\alpha_L, \alpha_H, \alpha_E$	0.75	Divert all bail-eligible arrests (estimated at 25% of all arrests)
Vulnerable Only	α_H, α_E	0.10	Divert arrests of 90% of vulnerable populations. [9]
Low Level	$\alpha_L, \alpha_H, \alpha_E$	0.17	Divert all low-level arrests (estimated at 83% of arrests).
Arrest Fewer People	$\alpha_L, \alpha_H, \alpha_E$	0.10	Divert 90% of current arrests.
<i>Faster Release</i>			
Increase Release Speed	ρ^{-1}	2	2x rate of release from jail
Vulnerable Only	ρ_H^{-1}	2	2x rate of release for vulnerable only
<i>In-Jail Scenarios</i>			
Mixing Reduction	$\beta_T, \beta_P, \beta_J$	0.625	Reduction of baseline contact rates in jails by the same factor as the community under shelter-in-place
Reduced Detection	ζ	0.99,0.95,0.90	Reduction in infection detection and timely hospitalization in jails by 1- ζ

Table 3. Scenarios and parameter adjustments for a number of policy-based interventions to curtail COVID-19 in jail and the community.

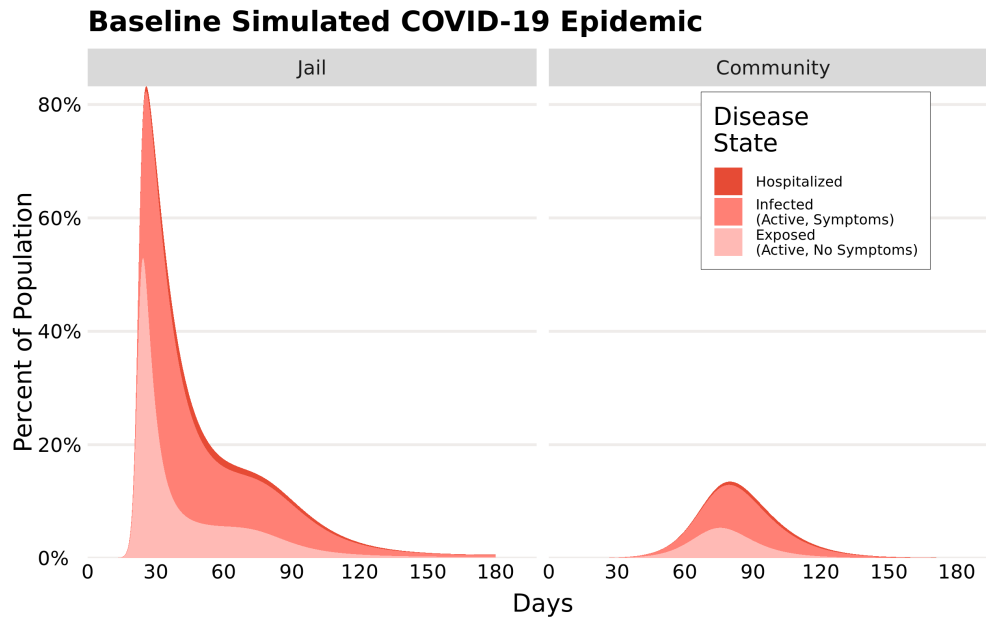


Fig 2. Epidemic curves from a simulated COVID-19 epidemic in an urban community (right) and the connected population of persons in a jail (left). The magnitude of the peak in the population in jail is much higher and shifted a full 63 days earlier.

Given the dominant approach to controlling COVID-19 in the community and the widespread calls to "flatten the curve", for the remaining results we assume the presence of a shelter-in-place order or similar social distancing intervention *only in the community* as the comparator scenario, represented as a halving in the mixing frequency of all age groups in the community. In line with the experience of communities undergoing such distancing interventions, this decrease in overall contacts results in a substantially delayed epidemic, with 486,193 infections in the community as well as far lower burdens in terms of both hospitalizations and fatalities. In contrast, the early dynamics of the COVID-19 outbreak within the incarcerated population are identical, while in the latter half of the simulation the outbreak dynamics in the incarcerated population are markedly worse, resulting in 8058 infections after 180 days and proportionately more hospitalizations and COVID-19 related fatalities (Fig 3). Shelter-in-place orders had no discernible impact on the health outcomes of the staff of the jail.

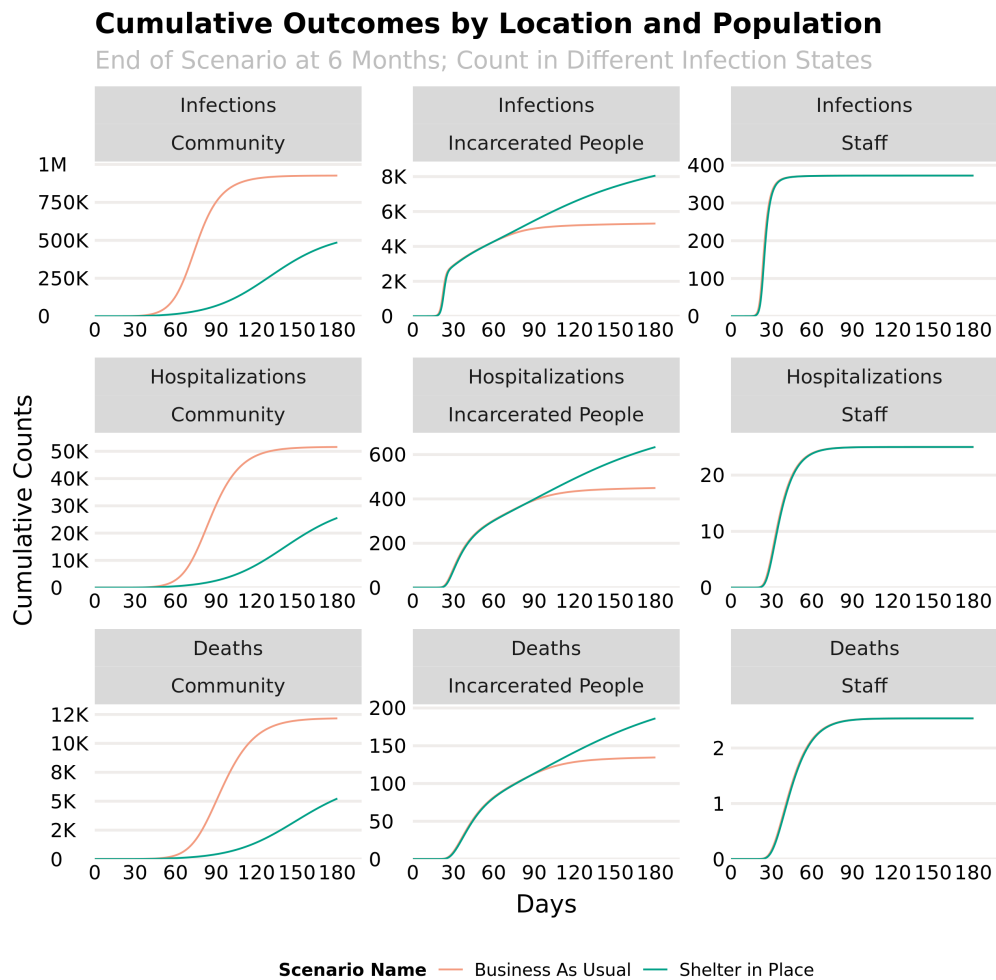


Fig 3. Cumulative infections, hospitalizations and deaths in the community (first column), among persons in jail (second column) and among jail staff (third column) for scenarios with (green) and without (orange) a shelter-in-place social distancing intervention. Such social distancing dramatically reduces the burden of infections and resulting adverse outcomes in the community, but results in a larger and more prolonged outbreak among persons in jail.

All of the four considered arrest deferral scenarios had substantial impacts on the course of the epidemic in the incarcerated population, while also lessening the impact of the epidemic on the community and, to a lesser extent, the jail's staff. Discontinuing the arrest of bail-eligible individuals, which corresponds to a $\approx 25\%$ reduction of admissions into the jail, resulted in a 22.1% reduction in infections in the incarcerated population, and a 2.4% reduction in infections within the community.

Broader, more sweeping arrest deferral programs resulted in correspondingly larger impacts in both the incarcerated population and the community as a whole. The discontinuation of arresting individuals for low level offenses ($\approx 83.4\%$ reduction) and the blanket reduction of arrests by 90% resulted in a 71.8% and 76.6% reduction in infections within the incarcerated population (with correspondingly fewer hospitalizations and deaths) respectively. These strategies also resulted in the greatest decrease in infections among staff (2.4% and 3.5%) and in the community at large (12.1% and 13.7%). Finally, a strategy built off deferring the arrest of individuals at

high risk of developing COVID-19 related complications by 90%, tailoring the
intervention to groups of epidemiological importance rather than the nature of their
offense, resulted in a 27.2% decrease in infections within the incarcerated population
and a 56.1% decrease in deaths among the same population.

In comparison, a strategy deferring the same number of people with no regard to
their underlying risk ($\approx 36.5\%$), resulted in a 6.8% decrease in overall infections within
the incarcerated population, but a 61.7% increase in deaths among incarcerated persons
compared to the scenario specifically targeting those at greatest risk of averse outcomes
for deferred arrest (Fig 4). The deferral strategy targeting individuals for high risk
outcomes caused 4095 more infections in the community compared to the same
proportionately large but broader strategy, and the decreased number of deaths among
persons in jail was partially offset by this increase, with the targeted strategy resulting
in a combined number of COVID-19 fatalities in both the population of persons in jail
and in the community of 5001 compared to 4969 fatalities under the broader strategy.

Outcomes by Arrest Reduction Scenarios

End of Scenario at 6 Months, Baseline of Shelter in Place in Community

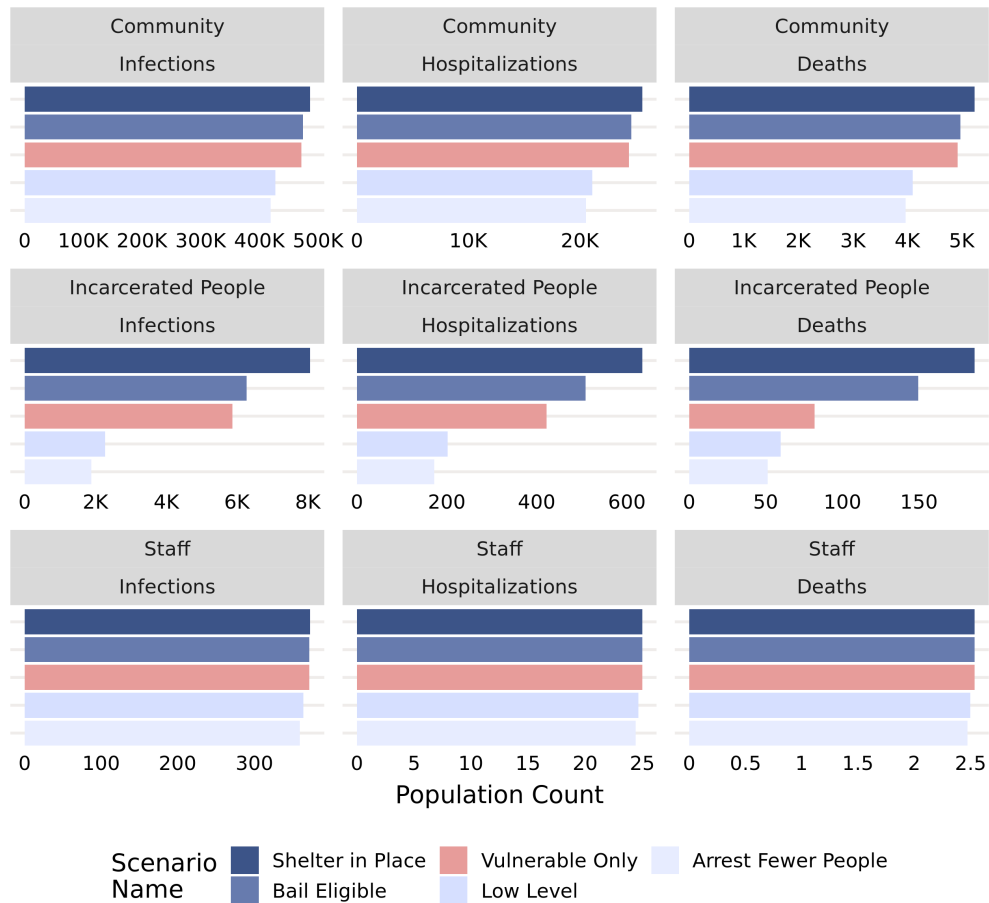


Fig 4. Cumulative infections, hospitalizations and deaths in the community (first row), among persons in jail (second row) and among jail staff (third row) for several incarceration deferment scenarios. More aggressive scenarios, such as a 90% decrease in all incarcerations or discontinuing incarceration for low level offenses result in large improvements in the epidemic within the jail, with a smaller impact among staff and the community. Deferring incarceration for people particularly at risk for adverse outcomes results in a markedly pronounced decrease in deaths among persons in jail.

Pairing increased arrest deferral with a more rapid release of persons who were already incarcerated enhanced the impact of those interventions, reducing infections, hospitalizations and deaths among the incarcerated — as well as the staff of the jails — as the rate of release increased (Fig 5). The one exception to this was the outcomes in the wider community, which, when paired with less aggressive arrest deferral scenarios, experienced a slight increase in the number of infections, hospitalizations and deaths at lower levels of accelerated release schedules. This phenomenon peaks at a release rate 1.5 times faster than the default release rate, with a 0.3% increase in community infections. At rates faster than this, the effect is considerably reduced, with a release rate twice as fast as the default release rate resulting in a 0.02% increase in community infections.

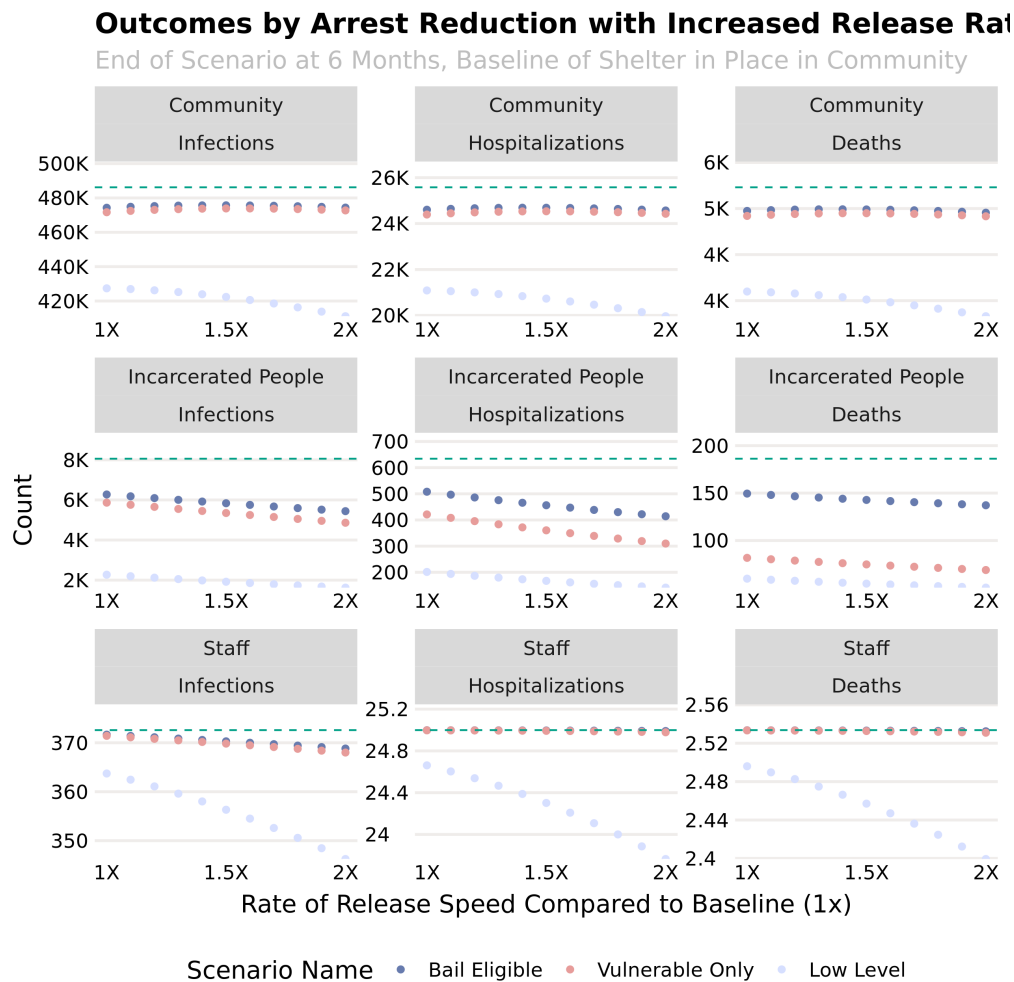


Fig 5. Cumulative infections, hospitalizations and deaths in the community (first row), among persons in jail (second row) and among jail staff (third row) for several combinations of incarceration deferment and accelerated release. Negative outcomes among persons in jail as well as staff improve with faster levels of release, while the community experiences slightly higher rates of negative outcomes, especially in moderate release scenarios, peaking at a release rate 1.5 times normal.

When accompanied by the deferred arrest of bail-eligible individuals to reduce the incarcerated population, supplementary measures to reduce transmission among incarcerated persons have a marked benefit in both reducing the amplitude of the epidemic curve in incarcerated people and jail staff, as well as shifting the overall community epidemic curve later (Fig 6). These interventions may be thought of as either measures to reduce mixing — such as allowing greater space between individuals in common areas or the staggering of the use of shared facilities — or the provision of supplies such as soap and hand sanitizer that reduces the level of viral contamination of patient's hands, physical surfaces, etc. Compared to the baseline mixing rate among persons in jail, a reduction to an equivalent level of mixing as the community while sheltering in place would reduce infections in this population by 10.9% as well as delay the peak of the epidemic by close to two weeks.

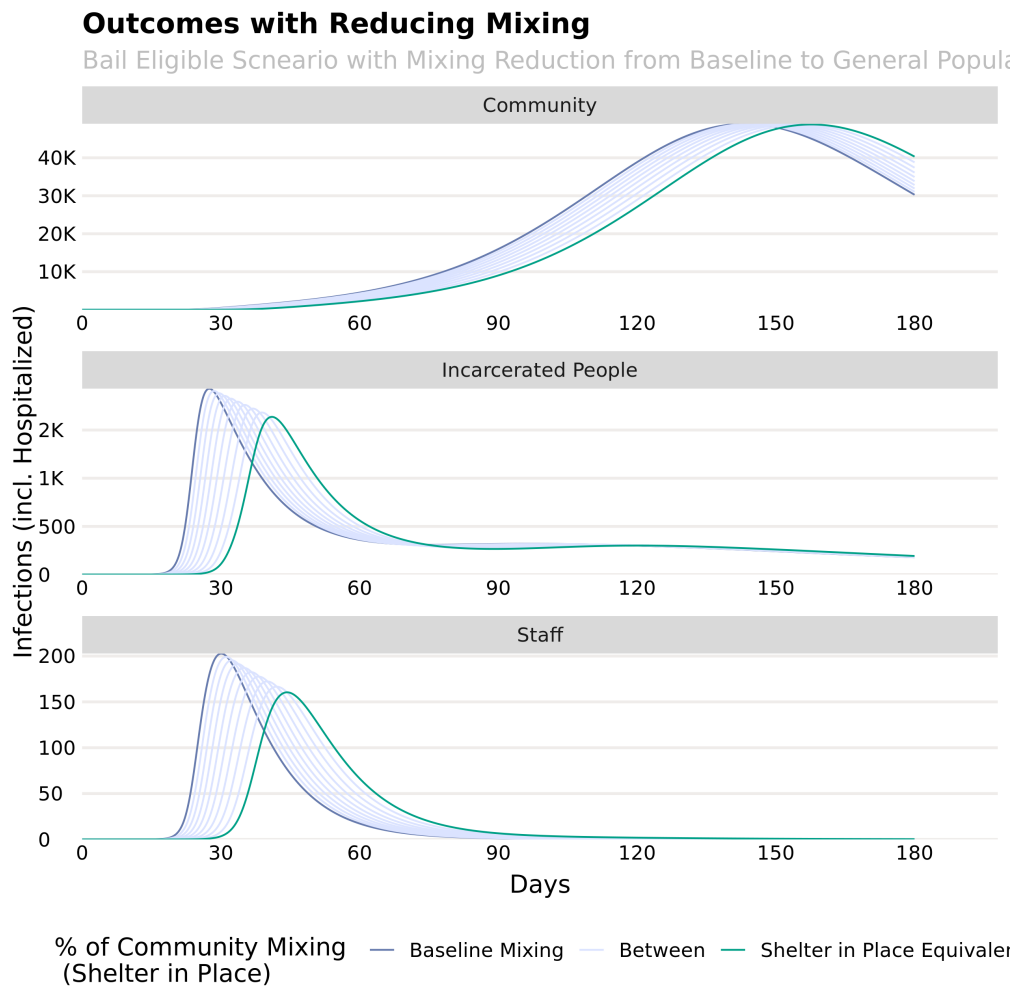


Fig 6. Epidemic curves for the community (top panel), persons in jail (middle panel) and jail staff (bottom panel) under a shelter in place order as well as the deferment of bail-eligible persons. The curves show the impact of increased reduction in mixing (e.g. from the ability to physically distance persons in jail while in common areas) from baseline (dark blue) to identical to the community's shelter-in-place order (green). This shifts the epidemic curve in the community slightly, and results in both a shifted and decreased curve among persons in jail as well as staff.

An increase in the detection of severe COVID-19 cases among incarcerated persons from 95% to 100% (equivalent to the same detection of the need for medical treatment available in the community) unsurprisingly increased the number of hospitalizations, as 5 out of every 100 incarcerated persons needing hospitalization were no longer missed, either for lack of access to care, insufficient diagnostic capacity, or other reasons. Similarly, owing to the vast reduction in the case fatality rate between hospitalized (CFR = 5% for low risk and 33.3% for high risk) severe cases and unhospitalized severe cases (CFR = 100% for both groups), the number of deaths dropped by 72.2% when the detection of severe cases rose to the same level as the community. Between these scenarios, the number of infections rose slightly with better detection, increasing by 0.6% (Fig 7). This is likely due to the slightly longer time an untreated severe case spends in the incarcerated population before they are removed due to death vs. when a treated case is transferred for hospitalization. This effect will only be present if the level

of viral shedding is constant (or increasing) over the course of a clinical infection. If instead the mechanism by which a severe COVID-19 patient dies is a cytokine storm or other process not involving the virus overwhelming the immune system, we would not expect this effect to be observed. However, even in the pessimistic case wherein viral shedding is constant throughout the clinical course of infection, the slight rise in infections is offset by the decrease in the number of COVID-19 related fatalities.

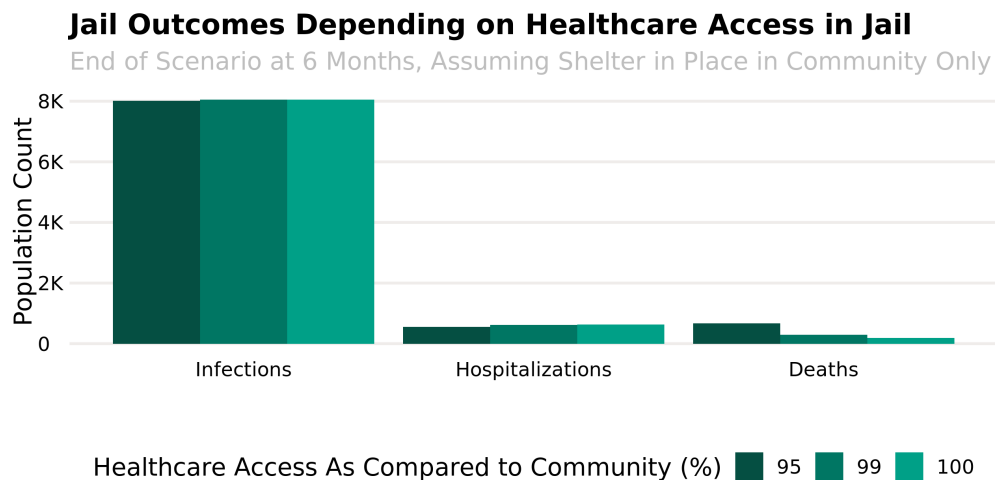


Fig 7. Infections, hospitalizations and deaths from COVID-19 among incarcerated persons under three scenarios of the probability that a severe case will be detected and receive adequate medical care. Increasing this probability results in more hospitalizations, dramatically reduced deaths, and a slight rise in the number of infections among incarcerated persons.

Discussion

Failure to adequately protect jail populations will have a profound impact on the health of incarcerated people, corrections officers, workers in the judicial system, and members of the general population. Our models clearly demonstrate that, in the absence of community mitigation such as strict social distancing, by only 30 days after the introduction of the first infection to the community, we can expect 2886 infections among incarcerated people, resulting in eight in-custody deaths. When contrasted with a baseline model of the general population without interaction with a jail, we see that the existence of jail-driven disease dynamics increase the total number of cases in the population by 922 and the total number of deaths by 301.

These results clearly follow from the features of the jail system themselves in challenging ways. While only 1% of the population entering into the jail system are elderly [31], incarceration in jail itself degrades the health of incarcerated people [16-18], leaving them more vulnerable to infection and severe outcomes from infection [32]. As individual robustness to disease decreases, the epidemiological result is the increased vulnerability of the whole jail population.

Beyond the direct implications for the health of incarcerated people, jail populations have high rates of re-entry into the general community and they depend on people who regularly mix with the outside community. Jail populations are largely composed of individuals who have not been convicted of a crime, and therefore will be released quickly back into the general community rather than to further incarceration within the carceral system. Jails with disease prevalence higher than the general populations they

serve will therefore act as sources of infection, re-seeding infection into communities that may be striving to contain or mitigate ongoing outbreaks, or even reintroducing infection into otherwise disease-free populations. It is important to note that this would happen even if no one were released given the volume of people coming in and out of jails in staff and vendor roles, so should therefore not be construed as an implication that releases should be suspended or impeded.

We are not helpless to effect change. Some obvious potential courses of action suggest themselves immediately. New arrests of people of unknown disease status may be regularly brought into jails, increasing the likely severity of outbreaks both by the plausible continuous introduction of new sources of infection and by the maintenance of higher rates of contact among susceptible incarcerated people due to the density and structure of jail housing arrangements. If jurisdictions across the country reduce their intake by significant percentages, our models demonstrate that we will meaningfully directly reduce the disease incidence in the incarcerated population (as seen in Fig 4). Moreover, these same strategies also clearly produced a reduction in the source of risk to incarcerated people's families and the broader community (Fig 4). These strategies could be enacted in a number of ways, such as (but not limited to) replacing misdemeanor arrests with citations, avoiding recommendations for jail time or prohibitive terms for bail conditions, or refusing to detain anyone for nonpayment of fines or fees during the course of the outbreak.

Having considered these potential strategies for categorical reduction in intake into jails, we also considered the case in which the categorical consideration for reduction in intake stemmed instead from the health of the arrested person. In this case, we get the expected reduction in the within-jail outbreak that would have been associated with a general reduction of the same percent intake ($\approx 36.9\%$, allowing for a small number of incarcerations in these groups), but we fail to achieve any significant reduction in disease burden in the broader community by taking this action. It is therefore more effective to reduce the intake rate across the entire population than to attempt to single out particular categories of individuals due to their likely susceptibility to severe morbidity or mortality from infection. The larger the reduction in overall intake, the greater the reduction in disease achieved for all populations (incarcerated people, the broader community, and jail staff, in decreasing proportion of effect). These broader interventions are also likely to be relatively straightforward to implement administratively, without knowledge of an individual's underlying comorbidities, if any.

In addition to reducing rates of intake into the jail system, another obvious, concrete step we might take to reduce disease risks for everyone is to increase the rate of release from jails. This should clearly be coupled with a decreased rate of intake rather than enacted in isolation, since increasing release rates while maintaining the same rate of intake would increase infection risks for incarcerated people, the staff who work at the jails and court systems, and the broader community. This may even still occur when expedited release is coupled with decreased rates of intake if the rate of release is insufficient; see Fig 5. Again, our results clearly demonstrate that the greater the proportion of the incarcerated population we can include in such a policy, the more effective the intervention is at mitigating the outbreak.

To be maximally effective, each of these interventions should anticipate, rather than react to, widespread infection incidence in jail populations.

Critically, the factors that cause these outbreak dynamics and drive the resulting efficacy of proposed interventions are features implicit in the nature of the jail system itself. The living conditions foster disease spread. Incarcerated people are shuttled back and forth to court or, where court proceedings are halted due to this pandemic, forced to remain in their cells or dorms. Incarcerated people occupy shared spaces in which physical distancing is impossible either due to space, overcrowding, or the requirement

of constant supervision. Incarcerated people are often not provided with the means to disinfect their surroundings or practice all of the hygiene guidelines suggested by the CDC. Improved facility sanitation, access to free personal hygienic care, such as warm water, free soap, free hand sanitizer, and free cleaning products, increased time spent outside, increased physical/social distancing measures, decreased population density achieved by releasing people, increased access to free medical care, and improved nutrition are all factors with instant and obvious resulting improvements in individual health outcomes for people incarcerated within the jail system. Alterations to function and practice of the jail system that can correct for these challenges are unlikely to occur quickly enough or substantially enough to improve the epidemiological risks for the incarcerated people within the jail system. As our results have shown, even when the within-jail transmission rates are improved by interventions such as reduction in intake from new arrests leading to a decrease in the size of the incarcerated population, we cannot effectively reduce the outbreak of infection in either the staff or incarcerated people down to the levels of the broader community.

As with all models, the conclusions of this study depend on an accurate representation of the flow of individuals between the jail system and the wider community, either due to arrests or due to their employment as jail staff, as well as the values of the parameters used to determine how swiftly this flow occurs. The inherent nature of emerging epidemics makes both of these things uncertain — the clinical and biological aspects of the pathogen might not be fully understood, and the data needed to parameterize these models is often sparse and incomplete. This problem is especially acute in models of this sort, which seek to present a "what-if" scenario to stave off a public health crisis, rather than analyze how that crisis unfolded after the fact. Nevertheless, while the exact projected magnitudes may be sensitive to these unknowns, in truth, the greatest utility of models such as these in determining best courses of action and likely magnitudes of the effects that can be gained from those actions, rather than exact predictions of precise numbers of individuals [33]. Due to the logical nature of the processes studied, so long as errors in the parameters used are consistent across scenarios, they will not impact the understanding that results from our projections about which courses of action achieve the best outcomes, even if those errors would alter our understanding of the precise amount of effect achieved by each intervention.

Conclusion

Conditions within jails must be immediately improved to decrease the probabilities of disease transmission and support better health for incarcerated people to protect not only themselves, but also jail staff and the community at large. Decreasing population density both directly decreases disease exposure, interrupting transmission dynamics, and also facilitates many other interventions. It is a natural result of reduced intake. We can achieve/enable many desired benefits with just that one, simple action, but to achieve maximal benefits to society, preventing the greatest burden from disease both within the jails and without, broad actions that include alterations to both intake and release and also many of the within-jail strategies for improving the individual means to enact personal hygiene, protection through social distancing, and access to medical care are all needed.

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Supporting information

SI Appendix 1. According to the logic presented in the Model/Methods section [1](#) define the following system of equations to capture the epidemiological dynamics of our system:

Within the Broader Community:

$$\begin{aligned}
 \frac{dS_K^C}{dt} &= -\beta_{KK}^C S_K^C (I_K^C + C_K) - \beta_{KL}^C S_K^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) \\
 &\quad - \beta_{KE}^C S_K^C (I_E^C + C_E) - \beta_{KH}^C S_K^C (I_H^C + C_H) \\
 \frac{dE_K^C}{dt} &= \beta_{KK}^C S_K^C (I_K^C + \sigma E_K^C) + \beta_{KL}^C + \beta_{KH}^C S_K^C (I_H^C + \sigma E_H^C) - \gamma E_K^C - \hat{\gamma} E_K^C \\
 \frac{dI_K^C}{dt} &= \gamma E_K^C - \delta I_K^C \\
 \frac{dR_K^C}{dt} &= \delta I_K^C + \hat{\gamma} E_K^C \\
 \frac{dS_L^C}{dt} &= -\beta_{LK}^C S_L^C (I_K^C + C_K) - \beta_{LL}^C S_L^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) \\
 &\quad - \beta_{LE}^C S_L^C (I_E^C + \sigma E_E^C) - \beta_{LH}^C S_L^C (I_H^C + \sigma E_H^C) - \alpha_L S_L^C + \psi_C S_L^P + \rho S_L^J \\
 \frac{dE_L^C}{dt} &= \beta_{LK}^C S_L^C (I_K^C + \sigma E_K^C) + \beta_{LL}^C S_L^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) \\
 &\quad + \beta_{LE}^C S_L^C (I_E^C + \sigma E_E^C) + \beta_{LH}^C S_L^C (I_H^C + \sigma E_H^C) - \gamma E_L^C - \hat{\gamma} E_L^C \\
 &\quad - \alpha_L E_L^C + \psi_C E_L^P + \rho E_L^J \\
 \frac{dI_L^C}{dt} &= \gamma E_L^C - \delta I_L^C - \omega I_L^C - \alpha_L I_L^C + \psi_C I_L^P + \rho I_L^J \\
 \frac{dM_L^C}{dt} &= \omega I_L^C - \delta_{Discharge} \nu M_L^C - \delta_{Death} (1 - \nu) M_L^C \\
 \frac{dR_L^C}{dt} &= \delta I_L^C + \hat{\gamma} E_L^C + \delta_{Discharge} \nu M_L^C + \delta_{Death} (1 - \nu) M_L^C - \alpha_L R_L^C + \psi_C R_L^P \\
 &\quad + \rho R_L^J \\
 \frac{dS_E^C}{dt} &= -\beta_{EK}^C S_E^C (I_K^C + C_K) - \beta_{EL}^C S_E^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) \\
 &\quad - \beta_{EE}^C S_E^C (I_E^C + \sigma E_E^C) - \beta_{EH}^C S_E^C (I_H^C + \sigma E_H^C) - \alpha_E S_E^C + \psi_C S_E^P + \rho S_E^J \\
 \frac{dE_E^C}{dt} &= \beta_{EK}^C S_E^C (I_K^C + C_K) + \beta_{EL}^C S_E^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) + \beta_{EE}^C S_E^C (I_E^C + C_E) \\
 &\quad + \beta_{EH}^C S_E^C (I_H^C + C_H) - \gamma E_E^C - \hat{\gamma} E_E^C - \alpha_E E_E^C + \psi_C E_E^P + \rho E_E^J
 \end{aligned}$$

$$\begin{aligned}
\frac{dI_E^C}{dt} &= \gamma E_E^C - \delta I_E^C - \omega_H I_E^C - \alpha_E I_E^C + \psi_C I_E^P + \rho I_E^J \\
\frac{dM_E^C}{dt} &= \overset{C}{E} - \delta_{Discharge} \nu_M M_E^C - \delta_{Death} (1 - \nu_H) M_E^C \\
\frac{dR_E^C}{dt} &= \delta I_E^C + \hat{\gamma} E_E^C + \delta_{Discharge} \nu_H M_E^C + \delta_{Death} (1 - \nu_H) M_E^C - \alpha_L R_L^C + \psi_C R_L^P + \\
&\quad \rho R_L^J \\
\frac{dS_H^C}{dt} &= -\beta_{HK}^C S_H^C (I_K^C + \sigma E_K^C) - \beta_{HL}^C S_H^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) \\
&\quad - \beta_{EH}^C S_H^C (I_E^C + \sigma E_E^C) - \beta_{HH}^C S_H^C (I_H^C + \sigma E_H^C) - \alpha_H S_H^C + \psi_C S_H^P + \rho S_H^J \\
\frac{dE_H^C}{dt} &= \beta_{HK}^C S_H^C (I_K^C + \overset{C}{K}) + \beta_{HL}^C S_H^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) + \beta_{EH}^C S_H^C (I_E^C + \overset{C}{E}) \\
&\quad + \beta_{HH}^C S_H^C (I_H^C + \sigma E_H^C) - \overset{C}{H} - \hat{\gamma} E_H^C - \alpha_H E_H^C + \psi_C E_H^P + \rho E_H^J \\
\frac{dI_H^C}{dt} &= \gamma E_H^C - \delta I_H^C - \omega_H I_H^C - \alpha_H I_H^C + \psi_C I_H^P + \rho I_H^J \\
\frac{dM_H^C}{dt} &= \omega_H I_H^C - \delta_{Discharge} \nu_H M_H^C - \delta_{Death} (1 - \nu_H) M_H^C \\
\frac{dR_H^C}{dt} &= \delta I_H^C + \hat{\gamma} E_H^C + \delta_{Discharge} \nu_H M_H^C + \delta_{Death} (1 - \nu_H) M_H^C - \alpha_H R_H^C + \psi_C R_H^P \\
&\quad + \rho R_H^J \\
\frac{dS_O^C}{dt} &= -\beta_{OK}^C S_O^C (I_K^C + \overset{C}{K}) - \beta_{OL}^C S_O^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) - \beta_{OE}^C S_O^C (I_E^C + \overset{C}{E}) \\
&\quad - \beta_{OH}^C S_O^C (I_H^C + \overset{C}{H}) - \mu_J S_O^C + \mu_C S_O^J \\
\frac{dE_O^C}{dt} &= \beta_{OK}^C S_O^C (I_K^C + \sigma E_K^C) + \beta_{OL}^C S_O^C (I_L^C + I_O^C + \sigma (E_L^C + E_O^C)) \\
&\quad + \beta_{OH}^C S_O^C (I_E^C + \sigma E_E^C) + \beta_{OH}^C S_O^C (I_H^C + \sigma E_H^C) - \gamma E_O^C - \hat{\gamma} E_O^C - \mu_J E_O^C + \mu_C E_O^J \\
\frac{dI_O^C}{dt} &= \gamma E_O^C - \delta I_O^C - \omega_I O^C - \mu_J I_O^C + \mu_C I_O^J \\
\frac{dM_O^C}{dt} &= \omega (I_O^C + I_O^J) - \delta_{Discharge} \nu M_O^C - \delta_{Death} (1 - \nu) M_O^C \\
\frac{dR_O^C}{dt} &= \overset{C}{O} + \hat{\gamma} E_O^C + \delta_{Discharge} \nu M_O^C + \delta_{Death} (1 - \nu) M_O^C \mu_J - \mu_J R_O^C + \mu_C R_O^J
\end{aligned}$$

Within the Processing System:

$$\begin{aligned}
\frac{dS_L^P}{dt} &= -\beta_{LL}^P S_L^P (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) - \beta_{LE}^P S_L^P (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad - \beta_{LH}^P S_L^P (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) + \alpha_L S_L^C - \psi_C S_L^P - \psi_J S_L^P \\
\frac{dE_L^P}{dt} &= \beta_{LL}^P S_L^P (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) + \beta_{LE}^P S_L^P (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad + \beta_{LH}^P S_L^P (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) - \gamma E_L^P + \alpha_L E_L^C - \psi_C E_L^P - \psi_J E_L^P \\
\frac{dI_L^P}{dt} &= \gamma E_L^P - \delta I_L^P + \alpha_L I_L^C - \psi_C I_L^P - \psi_J I_L^P \\
\frac{dR_L^P}{dt} &= \alpha_L R_L^C - \psi_C R_L^P - \psi_J R_L^P + \delta I_L^P
\end{aligned}$$

$$\begin{aligned}
\frac{dS_E^P}{dt} &= -\beta_{EL}^P S_E^P (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) - \beta_{EE}^P S_E^P (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad - \beta_{EH}^P S_E^P (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) + \alpha_E S_E^C - \psi_C S_E^P - \psi_J S_E^P \\
\frac{dE_E^P}{dt} &= \beta_{EL}^P S_E^P (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) + \beta_{EE}^P S_E^P (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad + \beta_{EH}^P S_E^P (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) - \gamma E_E^P + \alpha_E E_E^C - \psi_C E_E^P - \psi_J E_E^P \\
\frac{dI_E^P}{dt} &= \gamma E_E^P - \delta I_E^P + \alpha_E I_E^C - \psi_C I_E^P - \psi_J I_E^P \\
\frac{dR_E^P}{dt} &= \alpha_E R_E^C - \psi_C R_E^P - \psi_J R_E^P + \delta I_E^P \\
\frac{dS_H^P}{dt} &= -\beta_{HL}^P S_H^P (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) - \beta_{HE}^P S_H^P (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad - \beta_{HH}^P S_H^P (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) + \alpha_H S_H^C - \psi_C S_H^P - \psi_J S_H^P \\
\frac{dE_H^P}{dt} &= \beta_{HL}^P S_H^P (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) + \beta_{HE}^P S_H^P (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad + \beta_{HH}^P S_H^P (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) - \gamma E_H^P \\
\frac{dI_H^P}{dt} &= \gamma E_H^P - \delta I_H^P + \alpha_H I_H^C - \psi_C I_H^P - \psi_J I_H^P \\
\frac{dR_H^P}{dt} &= \alpha_H R_H^C - \psi_C R_H^P - \psi_J R_H^P + \delta I_H^P
\end{aligned}$$

Within the Trial System:

$$\begin{aligned}
\frac{dS_L^T}{dt} &= -\beta_{LL}^T S_L^T (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) - \beta_{LE}^T S_L^T (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad - \beta_{LH}^T S_L^T (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) + \kappa \tau S_L^J - \kappa S_L^T \\
\frac{dE_L^T}{dt} &= \beta_{LL}^T S_L^T (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) + \beta_{LE}^T S_L^T (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad + \beta_{LH}^T S_L^T (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) - \gamma E_L^T + \kappa \tau E_L^J - \kappa E_L^T \\
\frac{dI_L^T}{dt} &= \gamma E_L^T - \delta I_L^T + \kappa \tau I_L^J - \kappa I_L^T \\
\frac{dR_L^T}{dt} &= \kappa \tau R_L^J - \kappa R_L^T + \delta I_L^T \\
\frac{dS_E^T}{dt} &= -\beta_{EL}^T S_E^T (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) - \beta_{EE}^T S_E^T (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad - \beta_{EH}^T S_E^T (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) + \kappa \tau S_E^J - \kappa S_E^T \\
\frac{dE_E^T}{dt} &= \beta_{EL}^T S_E^T (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) + \beta_{EE}^T S_E^T (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad + \beta_{EH}^T S_E^T (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) - \gamma E_E^T + \kappa \tau E_E^J - \kappa E_E^T \\
\frac{dI_E^T}{dt} &= \gamma E_E^T - \delta I_E^T + \kappa \tau I_E^J - \kappa I_E^T \\
\frac{dR_E^T}{dt} &= \kappa \tau R_E^J - \kappa R_E^T + \delta I_E^T
\end{aligned}$$

$$\begin{aligned}
\frac{dS_H^T}{dt} &= -\beta_{HL}^T S_H^T (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) - \beta_{HE}^T S_H^T (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad - \beta_{HH}^T S_H^T (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) + \kappa \tau S_H^J - \kappa S_H^T \\
\frac{dE_H^T}{dt} &= \beta_{HL}^T S_H^T (I_L^P + I_L^T + \sigma (E_L^P + E_L^T)) + \beta_{HE}^T S_H^T (I_E^P + I_E^T + \sigma (E_E^P + E_E^T)) \\
&\quad + \beta_{HH}^T S_H^T (I_H^P + I_H^T + \sigma (E_H^P + E_H^T)) - \gamma E_H^T + \kappa \tau E_H^J - \kappa E_H^T \\
\frac{dI_H^T}{dt} &= \gamma E_H^T - \delta I_H^T + \kappa \tau I_H^J - \kappa I_H^T \\
\frac{dR_L^T}{dt} &= \kappa \tau R_H^J - \kappa R_H^T + \delta I_H^T
\end{aligned}$$

Within the Jail System:

$$\begin{aligned}
\frac{dS_L^J}{dt} &= -\beta_{LL}^J S_L^J (I_L^J + \sigma E_L^J) - \beta_{LE}^J S_L^J (I_E^J + \sigma E_E^J) - \beta_{LH}^J S_L^J (I_H^J + \sigma E_H^J) \\
&\quad - \beta_{LO}^J S_L^J (I_O^J + \sigma E_O^J) + \psi_J S_L^P - \kappa \tau S_L^J - \rho S_L^J + \kappa S_L^T \\
\frac{dE_L^J}{dt} &= \beta_{LL}^J S_L^J (I_L^J + \sigma E_L^J) + \beta_{LE}^J S_L^J (I_E^J + \sigma E_E^J) + \beta_{LH}^J S_L^J (I_H^J + \sigma E_H^J) \\
&\quad + \beta_{LO}^J S_L^J (I_O^J + \sigma E_O^J) - \gamma E_L^J + \psi_J E_L^P - \kappa \tau E_L^J - \rho E_L^J + \kappa E_L^T \\
\frac{dI_L^J}{dt} &= \gamma E_L^J - \delta I_L^J - \omega \zeta I_L^J - (1 - \nu_U) (1 - \zeta) \delta_{Death_U} I_L^J - \nu_U (1 - \zeta) \delta_{Discharge} I_L^J + \\
&\quad \psi_J I_L^P - \kappa \tau I_L^J - \rho I_L^J + \kappa I_L^T \\
\frac{dM_L^J}{dt} &= \omega \zeta I_L^J - \delta_{Discharge} \nu M_L^J - \delta_{Death} (1 - \nu) M_L^J \\
\frac{dR_L^J}{dt} &= \delta I_L^J + \delta_{Discharge} \nu M_L^J + \delta_{Death} (1 - \nu) M_L^J + \delta_{Death_U} (1 - \nu) (1 - \zeta) I_L^J \\
&\quad + \delta_{Discharge} \nu_U (1 - \zeta) I_L^J + \psi_J R_L^P - \kappa \tau R_L^J - \rho R_L^J + \kappa R_L^T \\
\frac{dS_E^J}{dt} &= -\beta_{EL}^J S_E^J (I_L^J + \sigma E_L^J) - \beta_{EE}^J S_E^J (I_E^J + \sigma E_E^J) - \beta_{EH}^J S_E^J (I_H^J + \sigma E_H^J) \\
&\quad - \beta_{EO}^J S_E^J (I_O^J + \sigma E_O^J) + \psi_J S_E^P - \kappa \tau S_E^J - \rho S_E^J + \kappa S_E^T \\
\frac{dE_E^J}{dt} &= \beta_{EL}^J S_E^J (I_L^J + \sigma E_L^J) + \beta_{EE}^J S_E^J (I_E^J + \sigma E_E^J) + \beta_{EH}^J S_E^J (I_H^J + \sigma E_H^J) \\
&\quad + \beta_{EO}^J S_E^J (I_O^J + \sigma E_O^J) - \gamma E_E^J + \psi_J E_E^P - \kappa \tau E_E^J - \rho E_E^J + \kappa E_E^T \\
\frac{dI_E^J}{dt} &= \gamma E_E^J - \delta I_E^J - \omega_H \zeta I_E^J - (1 - \nu_{UH}) (1 - \zeta) \delta_{Death_U} I_E^J - \nu_{UH} (1 - \zeta) \delta_{Discharge} I_E^J + \\
&\quad \psi_J I_E^P - \kappa \tau I_E^J - \rho I_E^J + \kappa I_E^T \\
\frac{dM_E^J}{dt} &= \omega_H \zeta I_E^J - \delta_{Discharge} \nu_H M_E^J - \delta_{Death} (1 - \nu_H) M_E^J \\
\frac{dR_E^J}{dt} &= \delta I_E^J + \delta_{Discharge} \nu_H M_E^J + \delta_{Death} (1 - \nu_H) M_E^J + \delta_{Death_U} (1 - \nu_{UH}) (1 - \zeta) I_E^J \\
&\quad + \delta_{Discharge} \nu_{UH} (1 - \zeta) I_E^J + \psi_J R_E^P - \kappa \tau R_E^J - \rho R_E^J + \kappa R_E^T \\
\frac{dS_H^J}{dt} &= -\beta_{HL}^J S_H^J (I_L^J + \sigma E_L^J) - \beta_{HE}^J S_H^J (I_E^J + \sigma E_E^J) - \beta_{HH}^J S_H^J (I_H^J + \sigma E_H^J) \\
&\quad - \beta_{HO}^J S_H^J (I_O^J + \sigma E_O^J) + \psi_J S_H^P - \kappa \tau S_H^J - \rho S_H^J + \kappa S_H^T
\end{aligned}$$

$$\begin{aligned}
\frac{dE_H^J}{dt} &= \beta_{HL}^J S_H^J (I_L^J + \sigma E_L^J) + \beta_{HE}^J S_H^J (I_E^J + \sigma E_E^J) + \beta_{HH}^J S_H^J (I_H^J + \sigma E_H^J) \\
&\quad + \beta_{HO}^J S_H^J (I_O^J + \sigma E_O^J) - \gamma E_H^J + \psi_J E_H^P - \kappa \tau E_H^J - \gamma E_H^J + \kappa E_H^T \\
\frac{dI_H^J}{dt} &= \gamma E_H^J - \delta I_H^J - \omega_H \zeta I_H^J - (1 - \nu_{UH}) (1 - \zeta) \delta_{Death_U} I_H^J - \nu_{UH} (1 - \zeta) \delta_{Discharge} I_H^J + \\
&\quad \psi_J I_H^P - \kappa \tau I_H^J - \rho I_H^J + \kappa I_H^T \\
\frac{dM_H^J}{dt} &= \omega_H \zeta I_H^J - \delta_{Discharge} \nu_H M_H^J - \delta_{Death} (1 - \nu_H) M_H^J \\
\frac{dR_H^J}{dt} &= \delta I_H^J + \delta_{Discharge} \nu_H M_H^J + \delta_{Death} (1 - \nu_H) M_H^J + \delta_{Death_U} (1 - \nu_H) (1 - \zeta) I_H^J \\
&\quad + \nu_H (1 - \zeta) \delta_{Discharge} I_H^J + \psi_J R_H^P - \kappa \tau R_H^J - \rho R_H^J + \kappa R_H^T \\
\frac{dS_O^J}{dt} &= -\beta_{OL}^J S_O^J (I_L^J + I_E^J + I_H^J + \sigma (E_L^J + E_E^J + E_H^J)) - \beta_{OO}^J S_O^J (I_O^J + \sigma E_O^J) + \mu_J S_O^C \\
&\quad - \mu_C S_O^J \\
\frac{dE_O^J}{dt} &= \beta_{OL}^J S_O^J (I_L^J + I_E^J + I_H^J + \sigma (E_L^J + E_E^J + E_H^J)) + \beta_{OO}^J S_O^J (I_O^J + \sigma E_O^J) \\
&\quad + \mu_J E_O^C - \mu_C E_O^J - \gamma E_O^J \\
\frac{dI_O^J}{dt} &= \mu_J I_O^C - \mu_C I_O^J + \gamma E_O^J - \delta I_O^J - \omega I_O^J \\
\frac{dR_O^J}{dt} &= \mu_J R_O^C - \mu_C R_O^J + \delta I_O^J
\end{aligned}$$

SI Appendix 2. The exponential survival model fit to Hu et al., 2020 estimated a mean asymptomatic shedding period of 11.79 days (95% CI: 7.86, 18.61), which is indeed a higher estimate than that found in the original manuscript, which did not account for censoring. As 5.1 of those days are already accounted for in the original estimate for γ^{-1} , this yielded an estimate for $\hat{\gamma}^{-1}$ of 6.7 days. Compared to a Kaplan-Meier fit of the available data, the exponential model fit well, and adequately models underlying survival function (Fig 8).

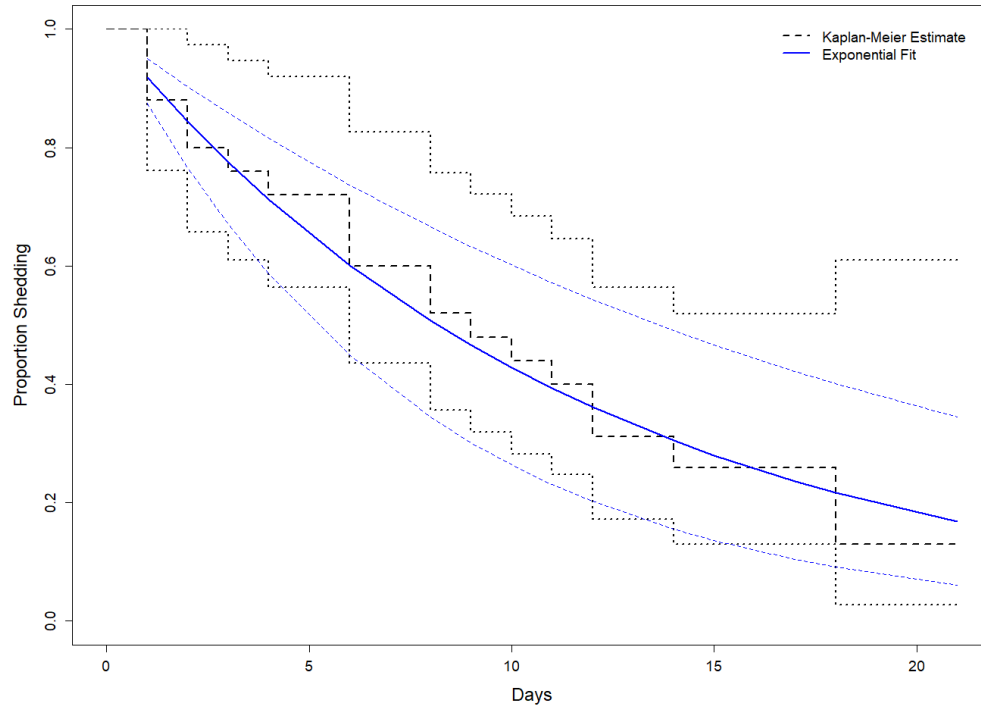


Fig 8. Proportion of patients with viral shedding among a cohort of asymptomatic COVID-19 patients in China. Original data from Hu et al., 2020. Dashed black line depicts a non-parameteric Kaplan-Meier fit, while the solid blue line depicts the fit of an exponential survival function.

Exhibit 2

Declaration of Dr. Robert L. Cohen, M.D.

**Declaration of Robert L. Cohen, M.D.,
Regarding the Spread of COVID-19 in and from the Dallas County Jail**

Professional Background

1. I am an internist. I received my M.D. degree from Rush Medical College at Rush University. I have worked as a physician, administrator, and expert in the care of prisoners and persons with HIV infection for more than thirty years. I was Director of the Montefiore Rikers Island Health Services from 1981 to 1986. In 1986, I was Vice President for Medical Operations of the New York City Health and Hospitals Corporation. In 1989, I was appointed Director of the AIDS Center of St. Vincent's Hospital. I represented the American Public Health Association (APHA) on the Board of the National Commission for Correctional Health Care for 17 years. I have served as a federal court monitor overseeing efforts to improve medical care for prisoners in Florida, Ohio, New York State, and Michigan. I have been appointed to oversee the care of all prisoners living with AIDS in Connecticut, and I also serve on the nine-member New York City Board of Corrections.

Coronavirus of 2019 Poses a Significant Threat in the Dallas County Jail

2. Coronavirus disease of 2019 (COVID-19) is a pandemic. COVID-19 is caused by a novel coronavirus (SARS-CoV-2) for which there is no established curative medical treatment and no vaccine. UpToDate¹ reports an overall case mortality rate from the disease of 2.3 percent, though the rate ranges in different geographies, from 0.9 percent in South Korea to 7.2 percent in Italy.

¹ See "Coronavirus disease 2019 (COVID-19)", UpToDate, <https://cutt.ly/GtJYSkj>. UpToDate is an online medical reference resource widely used in hospitals and health organizations and by private physicians. The 2.3 percent figure is from an update on April 4, 2020.

3. The numbers of COVID-19 cases in Dallas County and Texas are rising rapidly, resulting in a public health crisis. Texas was declared a disaster area due to COVID-19 by Governor Greg Abbott on March 13, 2020. Cases in Dallas County increased from one as of March 10, 2020 to 921 as of April 2, 2020.² Cases in Texas rose from five on March 6, 2020 to 6,110 on April 3, 2020.³ As of the date I am executing this declaration, there are 8,264 confirmed COVID-19 cases in Texas, and 1,155 in Dallas County.⁴

4. The current conditions in the Dallas County Jail create a high risk of contributing to an outbreak of COVID-19. Jails and prisons are long known to rapidly spread air-borne respiratory infection like COVID-19 because they house large number of persons held in cramped conditions with inadequate air flow. Tuberculosis, for example, is a bacterium that is significantly less transmissible than COVID-19 yet has been responsible for numerous outbreaks of illness in prisons and jails over the years. For this reason, the Centers for Disease Control and Prevention (CDC) recommend universal screening for tuberculosis in all jails and prisons. The intensity of tuberculosis screening in prisons and jails depends on the inmate population, their length of stay, and the prevalence of tuberculosis in the population that live in and work in the jail.⁵

5. Everyone is at risk for COVID-19 infection, and the danger of transmission presented by COVID-19 in jails and prisons thus requires more intense screening and testing than tuberculosis. Everyone who lives and works in a jail is at the highest risk.

² See Dallas County Health and Human Services *2019 Novel Coronavirus (COVID-19) Summary*, Fig. 2, (Apr. 3, 2020), <https://cutt.ly/ptJUtCt>.

³ See Texas Department of State Health Services, “Texas Case Counts COVID-19” (accessed April 7, 2020), <https://cutt.ly/YtJUaXJ>.

⁴ *Id.*

⁵ Centers for Disease Control, *Prevention and Treatment of Tuberculosis in Correctional and Detention Facilities*, (July 2006), <https://cutt.ly/HtJUIqu>.

6. Jails promote the spread of respiratory illnesses because large groups of strangers are forced suddenly into crowded congregate housing arrangements. Normal civilian recommendations that are made with the expectation that individuals can safely shelter in place are not relevant to a jail where congregate living is forced on all who enter. This situation is complicated by the fact that custody and other personnel who care for detainees live in the community and can carry the virus into a jail with them and, just as concerning, out into the community at large.

7. At a time when (a) the President's task force on COVID-19 recommends limiting gatherings to no more than 10 persons, (b) the President has declared a national emergency, (c) the Centers for Disease Control and Prevention (CDC) recommend wearing a face mask in public settings where social distancing is difficult to maintain, and (d) there is a stay-at-home order in Texas through at least April 30, 2020, Dallas County is forcing over 5,000 people to live in congregate living conditions at the Dallas County Jail with a continuing influx of new bookings every day. Because of the structure of the jail and manner in which daily activities occur in a jail, incarcerated persons intermingle, and it is not possible to limit gatherings to less than 10 individuals or engage in social distancing required by public health guidance. The conditions in the Dallas County Jail are contrary to the President's recommendation, to the Texas Governor's order requiring people to "minimize in-person contact with people who are not in the same household",⁶ to the stay at home order by Dallas County,⁷ to City of Dallas regulations implementing the Texas and Dallas County orders,⁸ and to current public health recommendations.

⁶ Office of the Tex. Gov., Press Release: *Governor Abbott Issues Executive Order Implementing Essential Services and Activities Protocols* (March 31, 2020), <https://cutt.ly/stJUKfc>.

⁷ See Amended "Safer at Home" Order, (Apr. 6, 2020), <https://cutt.ly/otJIl2m>.

⁸ See Shelter in Place: Stay Home Stay Safe, City of Dallas, <https://cutt.ly/TtJIvcg>.

These circumstances will result in the spread of disease both within the Dallas County Jail and to the broader community.

8. Indeed, there are already confirmed cases of COVID-19 in the Dallas County Jail: On March 25, 2020, Dallas County Sheriff Marian Brown announced during a news conference at the Frank Crowley Courthouse that a Dallas County Jail inmate, a man in his 40s, who tested positive for the novel coronavirus had been in custody for at least three months, since December 2019.⁹ Sheriff Brown said on April 1, 2020 that it was unclear how he contracted the virus while in custody.¹⁰

9. Medical care for COVID-19 focuses on prevention, which emphasizes physical distancing, handwashing, respiratory hygiene, and the wearing of masks. Currently, severe cases of the disease can be treated only with supportive care including respiratory isolation, oxygen, and mechanical ventilation.

10. COVID-19 is transmitted by infected people when they sneeze or cough. Droplets of respiratory secretions infected with the virus can survive as an aerosol for up to three hours.¹¹ Droplets can be directly transmitted by inhalation to other individuals in close proximity. Droplets can land on surfaces and be picked up by the hands of another person who can then become infected by contacting a mucous membrane (eyes, mouth, or nose) with their hand. Infected droplets can remain viable on surfaces for variable lengths of time, ranging from up to three hours on copper, 24 hours on cardboard, and two to three days on plastic and stainless steel.¹²

⁹ Editorial, *COVID-19 spreads with close contact, so what do we do about those in jail?*, The Dallas Morning News (Apr. 5, 2020), <https://cutt.ly/8tJOi67>.

¹⁰ *Id.*

¹¹ National Institute of Health, *New Coronavirus Stable for Hours on Surfaces* (March 17, 2020), <https://cutt.ly/BtJOaia>.

¹² *Id.*

11. There is now evidence that COVID-19 can be transmitted by asymptomatic individuals, and it is estimated that approximately six percent of infections are transmitted by asymptomatic persons.¹³ This is critical in a jail because persons coming into the jail or already in jail and newly infected may be asymptomatic, are confined in close quarters, and are passing the infection without being aware.

12. Infected individuals become symptomatic with COVID-19 in a range of 2.5 to 11.5 days with 97.5 percent of infected individuals becoming symptomatic within 11.5 days. Typically, an infected individual becomes symptomatic around day five of their infection. The total incubation period for COVID-19 is thought to extend up to 14 days. Thus, persons coming into jails can be asymptomatic at intake only to become symptomatic later during incarceration. For that reason, a comprehensive correctional intake screening test for COVID-19, including COVID-19 testing is essential.

Despite Positive Steps Taken to Address COVID-19 in the Dallas County Jail, Considerably More Must be Done to Protect Incarcerated Persons and the Community

13. At the Dallas County Jail, an incoming detainee receives a screening test for COVID-19 only if intake personnel refer the detainee to health care professionals at the jail and they determine the detainee meets “Dallas County Health and Human Services criteria.”¹⁴ Others are not routinely tested.

14. There are three types of groups cohorted in the Dallas County Jail with respect to the COVID-19 pandemic under CDC guidelines.¹⁵

¹³ Wycliffe Wei, et al., *Presymptomatic Transmission of SARS-CoV-2 Singapore, January 23-March 16, 2020*, Morbidity and Mortality Weekly Report, Vol. 69, (April 1, 2020), <https://cutt.ly/utJPq7f>.

¹⁴ Dallas County Sheriff's Office, “COVID-19 Initiatives,” (March 27, 2020), <https://cutt.ly/NtJO7zY>.

¹⁵ Centers for Disease Control, *Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities* (March 23, 2020), <https://cutt.ly/atJPt5B>.

15. The first group are “persons quarantined” and includes those who may have been exposed or those who have unknown status, such as new inmates coming into the jail. Persons newly booked into the Dallas County Jail should be housed separately from any other group for a sufficient period of time after booking to reduce further transmission. Further, to reduce transmission, Dallas County officials should take every measure to admit and book as few new people into the jail as possible, as other cities have done in response to the COVID-19 crisis.

16. The second group are persons suspicious for COVID-19, which includes those who are symptomatic but whose tests have not been done or are pending, or who are otherwise highly likely to have the virus; this group is called “persons-under-investigation” (PUI).

17. The third group are persons known to be COVID-19 positive. These groups should be screened daily or multiple times daily for symptoms and fever. The known COVID-19 positive cases need to also be regularly checked for their oxygen levels to ensure they are not deteriorating. Persons known to be positive for COVID-19 should be housed separately from the rest of the jail. While testing positive for COVID-19 is not an independent reason to release someone from custody as a matter of public health, if someone positive for COVID-19 is medically vulnerable, sick, or incarcerated on a technical probation violation, a pretrial bond, or on a sentence with less than one year remaining, their positive status should not be a bar to releasing them so long as an adequate self-quarantine option for them exists.

18. As of April 4, 2020, according to *The Dallas Morning News*, 5,300 inmates remained in the Dallas County jail, down from 5,900.¹⁶ At least 20 of them had tested positive for the novel coronavirus, as had at least six detention officers and one or two deputies, up from five

¹⁶ *Id.* That number compares with 4,661 detainees at the Cook County jail in Chicago as of April 3. *See Sheriff’s Daily Report*, <https://cutt.ly/4tJAv9r>.

the week before.¹⁷ These numbers represent a more than 5x increase from the week before.¹⁸ The number has almost certainly grown over the intervening days.

19. Detainees are still being admitted into Dallas County Jail. According to its website, the Dallas Sheriff's Office did not begin "checking the temperatures of employees assigned to the jail" or asking detainees during the intake process "a set of preliminary questions recommended by Dallas County's healthcare partners" until March 27, 2020.¹⁹ Known or suspected cases of COVID-19 require isolation from others, but the housing units at the Dallas County Jail are not set up for mass quarantine or isolation. The Dallas County Sheriff's Office reports that "[i]nmates that need quarantining are being housed in separate cells."²⁰ According to the Dallas County website, there are fewer than 220 single cells in the North and West Towers of the principal Dallas County Jail facilities (at the Lew Sterrett Justice Center, a few blocks west of downtown Dallas) and an unknown number in the South Tower.²¹

20. Because inmates continue to be incarcerated in the Dallas County Jail, invariably, this will result in a significant portion of the Dallas County Jail dedicated to quarantine. Because the recommended number of days for quarantine is 14 days,²² if any individual in a cohort becomes COVID-19 positive, the entire group should be quarantined for another 14 days. As the number of persons in quarantine grows, managing them clinically becomes unsustainable. As of April 6,

¹⁷ Editorial, *supra* note 9 ("At the time of this writing, 20 inmates had tested positive for the virus, along with six detention officers and one deputy."); Ashley Paredez, *Confirmed COVID-19 cases at Dallas County Jail now up to 28*, Fox 4 (April 4, 2020), <https://cutt.ly/0tJSenr> ("The number of coronavirus cases at the Dallas County jail has increased from five cases last week, to now a total of 28," and "six [of those testing positive] are detention officers and two are clerks"); *COVID-19 Live Updates*, KERA News (quoting Director of Dallas County Health and Human Services on April 5, 2020 as saying "the jail has 24 cases, which includes 22 inmates and two detention officers," presenting approximately 25% of all new cases in Dallas County that day), <https://cutt.ly/itJSsiy>.

¹⁸ Paredez, *supra* note 17.

¹⁹ Sheriff's office COVID-19 Initiatives, *supra* note 14.

²⁰ *Id.*

²¹ Dallas County Sheriff, Detention Centers, <https://cutt.ly/AtJSO2A>.

²² See *Interim Guidance*, *supra* note 15.

2020, more than half of the incarcerated persons in New York City's jails, over 2500, are in asymptomatic "quarantine status."²³

21. Keeping people with confirmed COVID-19 cases in the same, quarantined cohort is a correct intervention. However, this can only be done as staff and physical capacity limits allow. For persons who are sick, vulnerable to serious illness, or whose reason for incarceration is less serious—for instance, a technical probation violation, a pretrial bond, or a criminal sentence with less than one year left—release should remain the default public health intervention, notwithstanding an individual's positive COVID-19 status. In cases where a person positive with COVID-19 should be released, jail and other officials should confirm that the individual can be released to self-quarantine at home or in a temporary socially distant housing option such as a vacant hotel room.²⁴

22. Negative room pressure is an isolation technique used to prevent cross-contamination from room to room of airborne contagious diseases, such as COVID-19. While, if operating properly, they can be effective, there are only a limited number of negative pressure isolation rooms at the Jail, and the known numbers of COVID-19 patients and persons suspicious for infection likely already exceeds the number of isolation beds. Based on available information regarding the characteristics of the Dallas County Jail's three towers, there are an inadequate number of negative pressure rooms, and thus the conditions there create a high risk of transmission to both staff and other inmates. Increasingly it is difficult to separate suspected and infected persons from the uninfected, and therefore infections will rise. The continuing rise in positive COVID-19 cases at the Dallas County Jail demonstrate that this is already occurring.

²³ These persons are not being tested for COVID-19 in New York, though it is my opinion that they should be.

²⁴ See, e.g., Updates: COVID-19 in Washington State, KUOW (Apr. 3, 2020) <https://cutt.ly/ftJDdzd> (discussing, *inter alia*, the use of vacant hotels to provide temporary housing for those who need to practice social distancing but do not have a stable option on their own).

23. Incarcerated persons in quarantine or in isolation for suspicion or known infection must be monitored. Persons in quarantine should be monitored daily for symptoms and temperature. Individuals in isolation require multiple daily temperatures and monitoring of blood oxygen levels to ensure stability. The required monitoring has had an effect – severely stressing or overwhelming-- on staffing in facilities with significant infections. The COVID-19 pandemic has had a similar effect on staffing in most hospital settings.

24. Newer tests with a turn-around time of one day (“rapid COVID-19 test”) are still being rationed. These tests need to be made available to screen inmates quarantined in order to reduce transmission to newly incarcerated inmates in their arrest quarantine cohort. All incoming inmates into the jail should be screened for COVID-19.

25. Most persons being discharged from the jail have uncertain COVID-19 status. If a person of unknown COVID-19 status is discharged from quarantine or from PUI isolation they can infect persons they come into contact with in the community. For this reason, persons being discharged from the jail who have uncertain status need to be tested with a rapid COVID-19 test prior to discharge and given appropriate instructions on protecting themselves and others. However, testing should not be used to delay release.

26. An individual’s immune system is the primary defense against this infection. As a result, people over 50 years of age and persons with impaired immunity, including chronic diseases, have a higher probability of death if they are infected. It is important to note that the older a person is, the higher likelihood of death; this is thought to be due to impaired immunity with aging. Persons of any age with a number of health conditions including lung disease, heart disease, chronic liver or kidney disease (including hepatitis and dialysis patients), diabetes, epilepsy, hypertension, compromised immune systems (such as from cancer, HIV, or autoimmune disease),

blood disorders (including sickle cell disease), inherited metabolic disorders, stroke, developmental delay, severe obesity, and asthma, also have an elevated risk.²⁵ Early reports estimate that the mortality rate for those with cardiovascular disease was 13.2%, 9.2% for diabetes, 8.4% for hypertension, 8.0% for chronic respiratory disease, and 7.6% for cancer.²⁶ Persons with severe mental illness in jails and prisons are also, in my opinion, at increased risk of acquiring and transmitting infection because of likely inability or impaired ability to communicate.

27. The current CDC recommendations for social distancing and frequent handwashing measures, which are the only measures available to protect against infection, are extremely unlikely to be adequately enforced in the current correctional environment at the Dallas County Jail. The mandatory cleaning and sanitizing of all surfaces multiple times each day, in bathrooms, toilets, showers, tables, and all surfaces will be extremely difficult to assure. Adequate cleaning supplies and necessary personal protective equipment for all persons must be provided.

28. A large number of employees work in jails and prisons. These individuals have frequent contact with incarcerated persons, which often requires them to break the recommended CDC guidelines for social distancing. Frequent handwashing is not easily available for inmates or staff. Their risk is considerable. At least seven employees at the Dallas County Jail tested positive for COVID-19 as of April 3, 2020, and the number of infected employees will undoubtedly be larger when this Declaration is filed. These employees return to the community and can and will transmit the infection to others in their family and community. In this sense, jails act as incubators

²⁵ World Health Organization, *Coronavirus disease (COVID-19) advice for the public: Myth busters*, <https://cutt.ly/dtEiCyc> (“Older people, and people with pre-existing medical conditions (such as asthma, diabetes, heart disease) appear to be more vulnerable to becoming severely ill with the virus.”); see Centers for Disease Control, *Groups at Higher Risk of Severe Illness*, <https://cutt.ly/AtJDxSv>.

²⁶ World Health Organization, *Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19)*, at 12 (Feb. 28, 2020) <https://cutt.ly/xtEokCt> (finding fatality rates for patients with COVID-19 and co-morbid conditions to be: “13.2% for those with cardiovascular disease, 9.2% for diabetes, 8.4% for hypertension, 8.0% for chronic respiratory disease, and 7.6% for cancer”).

of respiratory infectious disease. COVID-19 is experiencing a rapid and dramatic spread within the Dallas County Jail and this ongoing outbreak is inevitably resulting in spread to the community. All staff entering the jail should be screened daily for temperature and symptoms, and should be sent home if they cannot pass the screen.

29. Currently, there is limited screening and very little protective housing for all inmates in the Dallas County Jail.

Opinions and Recommendations

30. Given current conditions in the jail, it is my opinion that steps should immediately be taken to release any inmate who is over the age of 50 or otherwise medically vulnerable as described in Paragraph 23 above to protect them from a serious risk of death. No less intrusive intervention will adequately address the public health risk posed by COVID-19 in the Dallas County Jail environment.

31. I also believe anyone in jail for a technical parole violation or less than one year left on a sentence should be removed from the Dallas County Jail. Considerable downsizing is needed—less urgent action will not be sufficient.

32. In addition to release, it is my opinion that the following steps must be taken to protect those in the Dallas County Jail, and that they too are necessary in order to address the threat posed by COVID-19. These additional necessary measures cannot replace the release required as described in Paragraphs 30 and 31.

33. It is my opinion that at this time, testing for COVID-19 must be expanded to all incoming inmates and all inmates about to be discharged. These tests need to be done as rapidly as possible due to problems with potential for transmission in the quarantined population and the need to discharge people quickly. Rapid COVID-19 testing also needs to be expanded for as many

people as possible because of the ongoing continuing rise in cases and continuing transmission within the jail. This recommendation is made to protect both the inmate population and the civilian population who will be exposed to employees who work within the jail.

34. It is my opinion that persons under investigation (PUI) for COVID-19 need to be housed in separate housing and not in cells on tiers with other inmates.

35. It is my opinion that—to the extent, for any reason, they are not immediately released—any incarcerated person over 50, or with severe mental illness, or a medical vulnerability as set forth in paragraph 23, along with all persons in quarantine or who have potentially been exposed to the virus should, immediately, have a daily symptom and temperature screening. Any positive symptom or temperature should require respiratory isolation and testing for COVID-19. All PUI and known COVID-19 positive detainees need to have monitoring every shift with at least vital signs including temperature and pulse oximeter testing.

36. It is my opinion that all persons anticipated being discharged who have uncertain status need to be tested with a rapid COVID-19 test prior to discharge.

37. All symptomatic persons requiring discharge planning services to assure safe transition back to their community must have access to these services, including temporary housing. The need for such services should not be treated as a bar to release.

38. It is my opinion, and the CDC recommendation, that all inmates and staff should wear a face mask. Employees interacting with potentially positive inmates (most inmates at this time) must wear CDC recommended personal protective equipment.

39. It is my opinion that all inmates in the Jail should receive full and free access to sanitation supplies (including soap, cleaning supplies, paper supplies and sanitizer with at least 60 percent alcohol) and adequate advice, orally and in writing, by appropriately trained personnel,

regarding the relevant symptoms to look for, the urgency of the social distancing, and appropriate use of PPE.

40. Jail administration should document that cleaning supplies are available to persons working and living in the jail, that all surfaces in all housing and living areas are cleaned. This information should be published.

41. It is my opinion that all persons housed in the Jail should receive information, both verbally and in writing, about the latest CDC and public health guidance about the COVID-19 disease, including best practices and updated protocols as they emerge.

42. It is my opinion that statistics reflecting the state of the pandemic in Dallas County Jail be published daily and provided to the community, including those who live and work in the jail. This data is essential to assure that current pandemic management plans are working, and to provide timely evidence if they are not, so that plans can be changed.

43. Elements of this daily published report must include:

- a. Number of patients with confirmed COVID-19
- b. Number of patients tested each day
- c. Number of positive and number of negative results received each day
- d. Number of Correction Staff with Confirmed COVID-19 positive (cumulative)
- e. Number of Jail Health Staff with Confirmed COVID-19 (cumulative)
- f. Total Population in Custody
- g. Total New Admissions
- h. Total Pretrial
- i. Total Sentenced
- j. Total held on Technical Parole Violation

- k. Total 50+
- l. Total in Infirmary Status (Mens and Womens infirmary)
- m. Total Pregnant Women in Custody
- n. Number in Quarantine Status
 - i. Admission
 - ii. Exposed, not tested
- o. Number of Persons Under Investigation (PUI)
- p. Number COVID-19 in cohorted housing
- q. Total Hospitalized
 - i. Daily Hospital Admissions
 - ii. Daily Hospital Discharges
 - iii. Daily Number of Patients on Ventilators
 - iv. Deaths (daily and cumulative)

44. It is my opinion that all persons housed in the Jail should receive clean, laundered sheets and clothing at least twice a week, and showers with soap once per day, and at least one hour of large muscle recreation

45. It is my opinion that sufficient physical distancing must be implemented throughout the Jail, including allowing for six feet of distance between inmates, in addition to the measures outlined above for those who are positive or PUI. People should be released from the jail until it can be run in a manner that ensures sufficient social distancing at all times, beginning with persons over 50 and the medically vulnerable, as I set forth above.

46. It is my opinion that inmates must continue to have access to timely and emergency medical and mental health care as this virus continues to spread.

47. It is my opinion that the Sheriff must be in close communication with the health staff and the Dallas County Department of Health and Human Services.

48. In reaching my opinion in this matter, I relied on my personal expertise, professional experience in correctional medicine, as well as the statements referenced above regarding operations at the Dallas County Jail.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 7th day of April, 2020 in New York, NY.


Robert L. Cohen, M.D.

Declaration of Eduardo Hinojosa

Declaration of Eduardo Hinojosa

My name is Eduardo Hinojosa and I was detained in the Dallas County Jail for four months until I was released on April 3, 2020. My Bookin# was 19060903.

1. When I was detained at the Dallas County Jail, I was a resident of South Tower (KT 1-C). I was one of 61 detainees housed in Tank 1-C of the first floor of the South Tower. There are nine Tanks on this floor. There are four people within each bunk area, and the bunk areas are separated by less than six feet. It is my understanding that at least two detainees in South Tower had the virus, and at least two officers tested positive as well. The detainees who were sick were removed from South Tower. At this point, we all started to panic and were very afraid.
2. I was never removed from South Tower and remained there until I was released. Even though we were exposed to the virus, most of us were never quarantined or tested. I never showed any symptoms of the virus, and the jail was only testing people who showed symptoms.
3. I have high blood pressure, and my prostate and kidney are compromised, so I am especially vulnerable to the virus, but this was not taken into consideration by the jail at all. When I was at the jail, I was only given medication for my blood pressure. When I asked about other ailments, I was advised to seek treatment when I was released.
4. Starting in February, we started to receive instructions that we should be maintaining six feet of distance from each other and washing our hands frequently. This instruction was not official, but rather provided by certain guards who were concerned for our safety and their own safety. Not everyone listened to this advice. Additionally, this was impossible advice to follow given the amount of people in each cell and the way the bunks were organized.
5. I was provided a mask for the first time on April 3, my last day at the jail, and then only because I worked in the kitchen. The only detainees given masks were those who worked in the kitchen, and that only started on April 3.
6. We had access to very small amounts of free soap. I thought that soap was not enough and of poor quality. To get body wash or additional soap, you need to buy from the commissary. There are six showers available daily for approximately 60 people.
7. It is only very recently that the jail staff have started wearing personal protective equipment. Staff would sometimes have masks and gloves, but it was not consistent. The correction officers would sometimes try to put physical barriers, like chairs, between themselves and inmates to keep six feet of distance between them. The staff seemed just as scared and panicked as the inmates did.

8. I did not file a grievance form because there is a long history of retaliation against those who file grievances at the jail and I feared the consequences. I was in a good position as a Trustee working in the kitchens. I did not want to jeopardize that placement.
9. I was released on April 3, 2020 because I had been awaiting placement in a treatment program. My sister and my girlfriend collected petitions and advocated for my release with the District Attorney due to the threat from this pandemic. It is only because of their actions that I was able to get released.

I declare under penalty of perjury that the forgoing is true and correct.

April 7, 2020
Dallas County

/s/ Eduardo Hinojosa
Eduardo Hinojosa

Declaration of David Jones

Declaration of David Jones

My name is David Jones and I was a detainee in the Dallas County Jail for ²⁸~~25~~ days until I was released on April 3rd. My bookin # was 20011307.

1. In the nearly four weeks that I was detained at Dallas County Jail, I was moved to a different housing unit four times. I was housed in the following facilities: Tank 13 on the fifth floor of the West Tower; E wing of the third floor of the South Tower; A wing of the third floor of the South Tower, and the ninth floor of the West Tower. I spent the longest amount of time on the ninth floor of West Tower, where I was held with detainees who had tested positive for COVID-19 until my release.
2. I was transported from the jail to the courthouse on March 19th and 23rd. Each time, I was shackled by a guard who was not wearing a mask or gloves. As I was escorted to and from the courthouse, I was forced to walk within six feet of about 80 people.
3. Each wing on third floor of the South Tower has the same layout and houses 64 men in one two-tiered room. Both wings A and E were almost filled to capacity with just a handful of empty beds.
4. The phones in South Tower were constantly in use so people could let their family know they were okay. We were not supplied with any cleaning materials to clean the phones between each use. Whenever we asked for such supplies, the jailers told us to use our shirts.
5. The beds were only an arm's length away from each other.
6. All 64 men in each wing had to share 8 toilets and 6-7 showers. I never saw anyone clean the toilets or showers.
7. Each recreational area was about 20 feet by 30 feet and shared by two 64 men wings. Whenever the jail staff conducted a wing-wide search for contraband, they moved all 64 men to the recreational area at one time.
8. All 64 men in each wing ate meals at the same time in the dayroom. We sat elbow to elbow, with five people at a table.
9. Personal protective equipment seemed optional for the jail staff. Some wore face masks, others wore white zip-up jump suits. Some wrapped themselves in clear blue trash bags held together with tape. Others wore nothing. The detainees were denied masks even when they were requested by people with known repertory problems.
10. While I was in E wing, there was a detainee who was coughing and vomiting for 3-4 days before he was removed from the wing. Afterwards, all the detainees in wing E were split into groups of 10-15 and moved to new housing units with other detainees. Our temperatures were not taken and we were not tested for COVID-19 before we were moved.
11. I was moved from E Wing to A Wing, where 4 more detainees showed symptoms of the COVID-19. All four of the 4 men put in several sick call saying they had been feeling ill, but no one provided them with any medical care. After 3 or 4 days of putting in sick calls, the jailers placed

DJ

the 4 detainees side by side and removed them from the wing. The jailers then made a detainee from A Wing to gather up one of the sick man's cells without any protective gear.

12. On March 25, I was moved to the ninth floor of the West Tower, where the detainees who tested positive for COVID-19 were held on lockdown for 24 hours a day. I demanded the jailers test me for COVID-19 because I was not showing any symptoms and did not want to be housed with people who were sick. I have seizures and was concerned about contracting the virus. I was never administered a test.
13. I was housed in an 8 man tank with 6 detainees in single cells connected to each other. I could often hear people coughing and sneezing and not covering their mouths. None of these detainees were getting any medical attention aside from the medications they received regularly. The regular medication was frequently administered in a paper cup under the door.
14. We were not permitted to send or receive mail, or to use the phone. I was also not permitted to speak with my attorney.
15. We were not permitted to use the showers for ten days. We were forced to wear the same jumpsuit for 13 or 14 days because we were not provided with clean clothes.
16. When I arrived in my cell, it was filthy and covered with used snot rags that were not mine. When I asked for cleaning supplies, I was told "Don't come to jail."
17. I was never provided with any soap while I was on the 9th floor of the West Tower. The only way to obtain soap was to purchase it through the commissary, which was closed.
18. The jailers fed us meals by squashing our food and sliding it under the crack at the bottom of the door. Because of this, our food always touched the bottom of the door, which was never cleaned. Our food portions were significantly reduced because they meals were served on paper trays, which were half the size of the rubber trays we received in the South wing. I lost 30 pounds while I was at the jail.
19. After a week on the 9th floor of the West Tower, a nurse started daily temperature checks. I always refused to have my temperature taken because the nurse did not change her gloves or mask in between interactions with sick people on the same unit.
20. I asked for grievance forms every time I came in contact with someone who works at the jail. Most just ignored me. One officer gave me the middle finger. I was never provided a form. Had I been given a form, I would have adhered to the grievance process and asked for immediate release.
21. On April 3rd, I was released because I am innocent and the charges against me were dropped due to lack of evidence. When I was being escorted out of the jail, I was forced me to stand right next to another man who was also being released at the same time. I asked the jailer, "what about social distancing, where is my six feet." He told me, "You can have that once you're gone."

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



April 5, 2020
Dallas, Texas


David Jones

***Declaration of Amy Fly on behalf of Jesus
Mandujano***

Declaration of Amy Fly on behalf of Jesus Mandujano

My name is Amy Fly and I am licensed to practice law in the State of Pennsylvania. On April 5, 2020, I spoke to a detainee in the Dallas County Jail named Jesus Mandujano (Bookin# 19057642) and he provided me with the following information:

1. Mr. Mandujano is 20 years old. He is incarcerated on a \$27,500 bond that he cannot afford to pay.
2. Mr. Mandujano has been detained on the 3rd floor of South Tower in C pod since January. The pod has 64 beds, and all but 6 are occupied. The bunks are right next to each other. Some of the men in his pod are clearly sick but have not been tested for COVID-19. One of the men who was coughing and sneezing was given a mask, but no replacement masks. The sick man wore the mask for three days until it became too dirty to wear anymore.
3. Mr. Mandujano started trying to clean the pod because the detainees responsible for cleaning do not do a good job. There are nats everywhere. The jail staff have not educated the detainees about the virus, so they do not take it seriously. Everyone keeps asking Mr. Mandujano why he keeps cleaning everything. Mr. Mandujano only recently started wiping down the phones before he used them because they are never cleaned and his girlfriend told him the virus could spread by using the phone.
4. The jail operations have not seemed to change much since the pandemic began. For example, they still only receive clean clothes once every six days. The only noticeable difference is that they are no longer allowed to have in person visitations.
5. Mr. Mandujano helps pass out meal trays to everyone in the pod. He is given gloves and a hair net, but not a face mask.

I declare under penalty of perjury that the forgoing is true and correct.

April 5, 2020
Dallas County

/s/ Amy Fly
Amy Fly

***Declaration of Alison Grinter on behalf of
Gloria Nelson***

Declaration of Alison Grinter on behalf of Gloria Nelson

My name is Alison Grinter. I am an attorney who is licensed to practice in the Eastern District of Texas. On April 7, 2020, I spoke to a detainee in the Dallas County Jail named Gloria Nelson (Bookin# 19045805) and she provided me with the following information:

1. Gloria Nelson is 31 years old, and is housed in the Dallas County Jail South Tower (also known as Kays Tower) as a federal inmate. She is being held for the federal court for a charge of money laundering for which she has already entered a plea and is awaiting sentencing. She has been in the Dallas County Jail since September 18, 2019.
2. About two weeks ago she became very sick. Her symptoms included sore throat, shortness of breath, and coughing.
3. One night she got up at about 3AM and told the guards that she was sick and in distress. guards brought a nurse to the pod, who checked her heartrate, said she was fine, and told her to put in a sick call request.
4. Ms. Nelson put in a sick call, and it took three days before someone saw her in response. When she saw finally received help, the provider looked in her mouth, checked her temperature, heartrate, pulse oxygenation, and blood pressure. That was the extent of the examination. The provider did not swab her nose or look at her throat with a light. She was given 10 mg of loratadine, Mucinex, and ibuprofen and sent back to the pod.
5. Ms. Nelson is still sick and has taken all of the Mucinex she was given, she has a few remaining loratadine.
6. Ms. Nelson is very worried about the COVID-19 pandemic, since she believes a woman in her pod was tested positive and quarantined about a week and a half ago.

I declare under penalty of perjury that the forgoing is true and correct.

April 7, 2020
Dallas County



Alison Grinter

***Declaration of Alison Grinter on behalf of
Olivia Washington***

Declaration of Alison Grinter on behalf of Olivia Washington

My name is Alison Grinter. I am an attorney who is licensed to practice in the Eastern District of Texas. On April 7, 2020, I spoke to a detainee in the Dallas County Jail named Olivia Washington (Bookin# 20006098) and she provided me with the following information:

1. Ms. Washington was booked into the Dallas County Jail on February 6, 2020. She is currently being held awaiting transport to the Substance Use Felony Punishment Facility (or SAFF) in the special needs unit.
2. Ms. Washington was friends with a fellow inmate, Amanda Martin, who was sick. Ms. Washington commented that Ms. Martin didn't look or sound too good. Ms. Martin said that the jail had not responded to her sick call kites. When they finally did respond, they just gave her Mucinex.
3. Then one day early last week in the middle of the night or early in the morning when everyone was asleep, they took Ms. Martin and sprayed down her bunk with a white substance that smelled bad.
4. People around the pod have been coughing. The jailers have told the inmates "put in a kite, it's the same process as usual." The process requires a sick inmate to pay ten dollars to make a sick call notice. The timing of a response depends on how busy the medical center is. It takes between a few days and a week to be seen by a doctor.
5. There are a lot of people who don't put in a sick call because they don't have the money. If you don't have the money on your books, it sends your account negative, and a lot of inmates don't want to waste their commissary money.
6. The pod has been getting clean laundry every six days. Usually it's every three days, but delays started in March.
7. Ms. Washington has seen the guards begin to wear masks, but the inmates are fed by inmate trustees that aren't given masks or gloves when they go from pod to pod passing out food. The inmates eat in the dayroom, shoulder to shoulder.
8. The inmates have asked for masks, but they have not been given anything. Commissary service has also stopped, so no additional hygiene items are available.

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

April 7, 2020
Dallas County


Alison Grinter

***Declaration of Amy Fly on behalf of
Todd Whitfield***

Declaration of Amy Fly on behalf of Todd Whitfield

My name is Amy Fly I am an attorney who is licensed to practice in the state of Pennsylvania. I spoke to a detainee in the Dallas County Jail named (Bookin# 20011184) on April 5, 2020. Mr. Whitfield provided me with the following information:

1. Mr. Whitfield is 28 years old. He is incarcerated on a \$40,000 bond that he cannot afford to pay.
2. He has tested positive for COVID-19.
3. The staff told detainees that those who tested positive for the virus would be housed in the infirmary, which is located in the basement of the North Tower. Mr. Whitfield is currently detained on the 9th floor of the West Tower, where both people who have tested positive for COVID-19 and those who have not are housed together. He spent 7 or 8 days here before he was tested.
4. Mr. Whitfield was housed near a man with Hepatitis who was clearly very sick and running a very high fever. The man was eventually removed from the floor, but Mr. Whitfield does not know where he was taken.
5. When one man in Mr. Whitfield's pod was transported to the infirmary, the jailers put a sign on the door of his cell that said it was closed for cleaning. As of the date of this declaration, it has been 6 days and the cell has not been cleaned.
6. Every day Mr. Whitfield tells the staff that his body is in pain and his temperature is checked. He has had fevers ranging from 101 -106 degrees Fahrenheit. But he has not has not been transferred to the infirmary or received any medical treatment besides Tylenol.
7. Mr. Whitfield and the other detainees who tested positive are locked in their cell 24 hours a day. They are not even allowed to send mail. There is one jailer who goes out of her way to let them use the phones to tell their loved ones they are still alive. Generally they are not allowed to use the phones. When the phones are used, they are not wiped down.
8. The jailers do not use the slot in the door to deliver meals. Instead, they shove food under the door.
9. The jailers only supplied Mr. Whitfield with one mask that he must reuse every day.
10. Mr. Whitfield spent a week in West Tower before he was given any soap.

11. Mr. Whitfield, who has the virus, shared a pod with two men who were not tested for 9-10 days. The two men were then moved to a pod of other people who had not been tested. Many people refuse to take the tests because they do not want to be locked in their cells for 24 hours a day.
12. Everyone in his pod made an attempt to file grievances at the same time. It took 7 days for staff to bring them grievance forms. The detainees filled out the forms, but the staff will not collect them from the outboxes.

I declare under penalty of perjury that the forgoing is true and correct.

April 5, 2020
Dallas County

s/ Amy Fly
Amy Fly

***Declaration of Alison Grinter on behalf
of Kiara Yarborough***

Declaration of Alison Grinter on behalf of Kiara Yarborough

My name is Alison Grinter. I am an attorney who is licensed to practice in the Eastern District of Texas. On April 7-8, 2020, I spoke to a detainee in the Dallas County Jail named Kiara Yarborough (Bookin# 19060031) and she provided me with the following information:

1. Ms. Yarborough is an inmate in the Dallas County Jail, in the South (Kays) Tower 4th floor pod D. She has been in the jail since December 19, 2019 and is currently being held awaiting transport to the Intermediate Sanction Facility (ISF), a special treatment program run by the Texas prison system.
2. Ms. Yarborough is susceptible to pyelonephritis, a kidney infection, and has struggled with it for much of her life. She also suffers from sciatica, nerve pain in her lower back. Before she was incarcerated, she took medications for high blood pressure, but she is not receiving those medications in the jail.
3. Her pod has a maximum capacity of 64 detainees. Currently 53 beds are filled.
4. A woman in her pod, Amanda Martin, put in sick calls for a week before a nurse saw her. Afterwards, she was removed from the pod and put into quarantine in the middle of the night while other detainees were asleep. Jail staff then sprayed her bunk with something Ms. Yarborough had never seen used in the jail before. It left a strange residue. Another detainee Suzette Williams was moved into Amanda Martin's old bunk.
5. No one else from the pod was quarantined – not even those who sleep right next to her. Of the three detainees who slept closest to her, one moved pods (Jessica Campbell) and the other two were released from the jail about three days later.
6. Ms. Yarborough was nervous because her bunk is positioned about three yards away from Ms. Martin's old bunk. Her bunk is right by the showers and the phones, so it is impossible to keep any distance from the other women in the pod.
7. Clean laundry arrives only every 6 days, and the women are given a limited amount of soap. Commissary doesn't come around very often and the last few times it did, there was no soap.
8. Some of the guards wear masks, but one never does. The guard prays with the women, which is heartening to Ms. Yarborough because, as she says, "The only one protecting us now is God."
9. On April 8, 2020 a guard told Ms. Yarborough that the staff had been instructed to deny all requests for grievance forms.

I declare under penalty of perjury that the forgoing is true and correct.

April 8, 2020



Dallas County

Alison Grinter

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

Oscar Sanchez, Marcus White, Tesmond McDonald, Marcelo Perez, Roger Morrison, Keith Baker, Paul Wright, Terry McNickels, and Jose Munoz; *on their own and on behalf of a class of similarly situated persons*;

Petitioners/Plaintiffs,

v.

DALLAS COUNTY SHERIFF MARIAN BROWN, *in her official capacity*; DALLAS COUNTY, TEXAS;

Respondents/Defendants

Civil Action No. 3:20-cv-00832

Appendix in Support of Motion for Temporary Restraining Order, Preliminary Injunction, and Writ of Habeas Corpus

IMMEDIATE RELIEF SOUGHT

Pursuant to Local Rule 56.6, Plaintiffs submit the following appendix in support of their Motion for Temporary Restraining Order, Preliminary Injunction, and Writ of Habeas Corpus:

No.	Description	Appendix Page Numbers
1.	Declaration of Dr. Eric Lofgren, Ph.D., dated April 6, 2020	APP 001 – APP 043
2.	Declaration of Robert L. Cohen, M.D., dated April 7, 2020	APP 044 – APP 059
3.	Declaration of Eduardo Hinojosa, dated April 7, 2020	APP 060 – APP 062
4.	Declaration of David Jones, dated April 5, 2020	APP 063 – APP 066
5.	Declaration of Jesus Mandiujano, dated April 5, 2020	APP 067 – APP 068
6.	Declaration of Gloria Nelson, dated April 7, 2020	APP 069 – APP 070
7.	Declaration of Olivia Washington, dated April 7, 2020	APP 071 – APP 072
8.	Declaration of Todd Whitfield, dated April 5, 2020	APP 073 – APP 075
9.	Declaration of Kiara Yarborough, dated April 8, 2020	APP 076 – APP 078

Dated: April 9, 2020.

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**pro hac vice application forthcoming*

***N.D. Texas admission application forthcoming*

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing was served via the Court's CM/ECF system on all counsel registered with that system, and via email, on April 9, 2020.

/s/ Barry Barnett
Barry Barnett