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DECLARATION OF SUSI VASSALLO, M.D.

I, Susi Vassallo M.D., make the following declaration based on my personal knowledge and declare under the penalty of perjury pursuant to 28 U.S.C. § 1746 that the following is true and correct to the best of my knowledge.

Background

- 1. I am a board-certified emergency medicine physician and medical toxicologist. I practice as an attending physician in the emergency department of Bellevue Hospital, a large urban emergency department in New York City, and have practiced at various sites in Texas for many years. I am a Clinical Professor of Emergency Medicine at the New York University School of Medicine. I am certified as a correctional health professional by the National Commission on Correctional Health Care (NCCHC) and have evaluated correctional health care systems in six states. I have also been retained by the Department of Homeland Security to review medical care delivery at its detention facilities, and the Fifth Circuit and other courts have relied on my reports. A copy of my curriculum vitae is attached hereto.
- 2. COVID-19 or coronavirus disease 2019 is an unpredictably lethal virus. It causes severe pneumonia, respiratory and heart failure, systemic clotting, and death. The virus enters cells through the angiotensin-converting enzyme 2 (ACE2) receptor. These receptors are on the lungs, heart, kidneys, the fat, and other sites in the body. The immune system's response is critical to containing the virus. However, over-response causes a multisystem inflammatory response that is life-threatening to COVID-19 patients.
- 3. Since the onset of the COVID-19 pandemic, I have treated about 300 COVID-19 patients in my practice at Bellevue Hospital and NYU Langone Medical Center. These patients have ranged in age from young people in their 20s to the elderly. I have also treated many COVID-19 patients who have serious Risk Factors, such as age, diabetes, respiratory issues, and hypertension, amongst others. I am very knowledgeable about not only the treatment of COVID-19 generally but also the necessary treatment and monitoring of COVID-19 patients who are medically vulnerable. In addition to my significant experience treating COVID-19 patients, I also have closely followed best practices, research, and clinical guidance regarding the treatment and monitoring of COVID-19 patients. A federal court has also

recently qualified me as an expert in the care and treatment of COVID-19 patients as well as correctional medicine.¹

Nature of COVID-19

- 4. COVID-19 is highly transmissible. Droplets in the air can transmit the virus within at least 6 feet. Unfortunately, it is now understood that the virus is spread through aerosols. This corona virus is aerosolized by fecal matter through the flushing of toilets. Just talking can result in the presence of the virus in indoor air for many hours. These features of COVID-19 make it incredibly transmissible in the population at large. However, given the congregate nature of detention facilities, the dangerousness of the virus is compounded multi-fold for people in detention.
- 5. Persons are contagious up to 3 days before symptoms onset, and a substantial number of infections result from transmission by asymptomatic people. Nearly all patients (~97%) who will develop symptoms will do so within 11.5 days. The symptoms may include fever, but fever is not required, and present day thermometer technology is frequently inaccurate and may not reflect the true body temperature.
- 6. The symptoms of COVID-19 present variably from fever, cough, chest pain, headache, rash, loss of smell, diarrhea, vomiting, and muscle aches. Although cough and fever are frequent symptoms, there are enormous numbers of patients with other symptoms and no cough or fever whatsoever. In one study of critically ill patients, only 88% presented with cough and only 50% had a fever.² Fatigue, sore throats, body aches, ear aches, or congestion frequently prove to be COVID. Abdominal pain with or without fever or cough is frequently a sign of COVID. Back pain is a symptom of COVID, with or without fever or cough. At Bellevue, many of our trauma patients, and patients presenting with various other problems are found to unexpectedly have COVID. Diarrhea is often a symptom of COVID.³ Rash may be COVID and can be mistaken for other illnesses. Thus, screening for cough and/or fever is alone inadequate to exclude the possibility of infection

¹ See Gumns v. Edwards et al, 3:20-cv-231-SDD, ECF. 57 at 22 (M.D. La. May 15, 2020).

² Covid-19 in Critically III Patients in the Seattle Region — Case Series, The New England Journal of Medicine (March 30, 2020), https://www.nejm.org/doi/full/10.1056/NEJMoa2004500

³ Because the ACE2 receptors are on the intestines and the lungs, diarrhea is a common presentation.

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- from COVID. Moreover, many patients are asymptomatic and are infectious to others.
- 7. COVID-19 is also a highly unpredictable disease, which is one reason it is so dangerous. Patients' conditions may deteriorate quickly—even after signs of improvement. Thus, it is dangerous for detention facilities to assume that people who present with mild symptoms will remain that way.
- 8. Amongst the greatest dangers of COVID-19 is how the virus causes microblood clots throughout the body. These clog up the organs. In the lungs, autopsy studies clearly show the thickening of the interface between the alveoli (microscopic air sacs) and the capillaries. There is no oxygen exchange. So, instead of a soft and pliable lung that the ventilator pushes oxygen into, the lung becomes rigid, and no amount of pressure exerted into the lung will make the oxygen pass across the membrane. This is why patients die on ventilators because the lungs are as hard as basketballs and cannot be inflated and deflated. Made rigid by micro clots, the interface between the air sac trying to drop oxygen molecules into the capillaries is no longer working. Sometimes there are big clots that occur in the big arteries of the lungs, known as a pulmonary embolus. Sometimes there are clots in the brain and strokes in very young people with COVID-19, and no other risk factors are reported in the literature.
- 9. At present, there are no markers identified, nor signs or symptoms, that can definitively predict clinical deterioration. Although some patients with mild signs and symptoms will do well, others will deteriorate precipitously, notwithstanding the mildness of symptoms. In at least one study, half of the patients admitted to the intensive care unit for COVID died on the first day. However, COVID patients may also present insidiously, and it is impossible to predict the course of the illness, who will do well, and who will not. Severe pneumonia is one of the serious consequences of COVID-19, and the lungs become filled with fluid. I have had patients tell me, "I can't do this anymore," as they realize they can no longer keep up the work of breathing, and they require life-saving interventions. It is my experience treating patients in the emergency departments of NYU Langone Health and Bellevue Hospital Center that patients are not always aware of the degree of hypoxia (lack of oxygen) present in their bodies. Unlike the more common experience of holding one's breath for as long as possible and then gasping for breath, these patients teeter on the edge of death with no gasping for breath or feeling their need for oxygen. This has been shocking to us working in Emergency Departments. Immediately upon arrival at the

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- hospital, life-saving measures may be required. In some cases, the patients code (suffer cardiac arrest) suddenly. In other experiences, some patients have adequate oxygen saturations for days and then suddenly deteriorate.
- 10. Due to the rapidity of people's deterioration, close monitoring of COVID-19 patients is crucial—especially for people in detention settings. Monitoring should be continuous with visualization of the patient at all times by health care personnel. In detention facilities, security personnel cannot be in charge of monitoring because they lack the skills and training to identify deterioration. Unlike influenza, COVID patients worsen suddenly and with little warning. Flu patients do not do this.⁴
- 11. Although the seriousness and trajectory of the illness cannot definitively be predicted for COVID-19, there are multiple laboratory tests that can help medical staff to identify how COVID-19 is impacting patients. These include d-dimer, low lymphocyte counts, prolonged coagulation parameters, liver and kidney function, and tests of inflammation, such as the c-reactive protein, and ferritin. Inflammatory markers are abnormal, reflecting the inflammatory immune response in COVID-19 patients. A high level of one of these, known as Interleukin 6 (Il-6) is a target for treatment and is a clinical predictor of mortality in COVID-19 patients. Plain x-rays are not as sensitive as computerized tomographic (CT) scans and sometimes the plain chest x-ray looks normal and the CT scan is abnormal. In order to care for someone who has COVID-19, a high level of clinical judgment is crucial and requires using laboratory results, the appearance of the patient, particularly the work of breathing, the time since the onset of illness, and the knowledge that someone who looks alright now may be acutely ill later that day. This means that medical staff must not only have appropriate training and qualifications to help exercise a high level of clinical judgment but also that there are proper standards and guidance from ICE regarding treatment and care of COVID-19.
- 12. Although advanced age and underlying illnesses or chronic medical conditions increase the risk of serious effects of COVID, it is important to note that relatively young and healthy patients may also require intensive care and die. While fatalities have been highest for older patients, increasing evidence in the US has shown the dire risk that COVID-19 poses to younger patients. Young patients ages 20-54 years old can have serious complications from COVID-19 including hospital admission, admission to

⁴ However, patients who test positive for the flu can have COVID-19, too, and COVID patients can likewise have influenza. One certainly does not protect from the other and they coexist.

an intensive care unit, invasive ventilation, or death. As of late March 2020, 38% of those individuals hospitalized in the US were between 20-54 years old. Of those admitted to the ICU, 12% were aged 20-44 years, and 36% were age 45-64 years. These statistics highlight the significant risk younger people are at for serious complications due to coronavirus. In the hospital where I work, there have been times with nearly 500 COVID-19 patients, about half of whom are on ventilators. Many of these patients are under the age of 65. The evidence and my personal experience show that all types of people—healthy and unhealthy, young and old—can suffer serious complications and death from COVID-19. Proper risk assessment is, therefore, critical for all COVID-19 patients, and it is dangerous to assume that young or healthy individuals do not require close monitoring. That being said, as explained further below, correctional facilities must provide heightened monitoring and treatment of COVID-19 patients who are medically vulnerable because they are at a much higher risk of serious complications and death from the disease.

Need for increased precautions for medically vulnerable people

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- 13. Although COVID-19 can infect and be deadly to anyone, the virus poses a particularly serious and lethal threat to older people, people with certain underlying medical conditions, and pregnant people. These underlying medical conditions include cardiovascular disease, high blood pressure, chronic respiratory issues, diabetes, cancer, liver disease, kidney disease, autoimmune disease, HIV/AIDS, history of transplantation, and severe psychiatric illnesses. Increased precautions and monitoring are crucial to protect these vulnerable people from infection and, if infected, from serious complications and death. Below, I provide a few illustrative examples of why COVID-19 is so dangerous to people with certain of these conditions.
- 14. For example, people with heart disease or cardiovascular disease are especially vulnerable to COVID-19. COVID-19 decreases oxygen levels. As the oxygen level drops, the heart has to beat harder and more frequently to deliver adequate oxygen to the body. The heart is a pump controlled by an electrical system. The ability to beat faster is limited by age-related changes in the pump and the electrical system. In COVID, medications that treat underlying cardiovascular conditions frequently impair the ability of the heart to beat harder and faster to meet the demands of maintaining sufficient blood pressure and oxygen delivery. Hypertension, congestive heart failure, previous death of heart cells (heart attack or myocardial infarction), and arrhythmias, such as atrial fibrillation, are examples of conditions that are treated with medications that impair the ability of the heart to beat

adequately to meet the demands of the sick COVID-19 patient. Diuretics used in the treatment of heart diseases deplete the amount of fluid in the blood vessels. Calcium channel blockers, beta-blockers, and angiotensin receptor inhibitors and blockers impede the heart function while treating the underlying disease. In patients with uncontrolled hypertension, the heart muscles are thickened, and this affects the heart's electrical conduction system and the contractility of the pump. Additionally, the increased thickness of the muscle will outgrow its oxygen supply leading to congestive heart failure and heart attacks. The virus puts enormous demands on the heart that often cannot be met in persons with underlying cardiovascular disease. For this reason, people with heart disease are especially vulnerable to COVID-19, and it is crucial that measures be taken to abate the risk of infection, including increased medical monitoring.

- 15. People with kidney problems are also at a particularly high risk of serious complications. To be clear, cardiovascular disease is tied directly to kidney disease. It is common for the word cardiovascular to suggest only heart disease. However, the "vascular" part of the word is the most important, as it includes the heart, lungs, and kidneys. While the media focused heavily on shortages of ventilators to supply oxygen to COVID-19 patients, there was a similar urgency among health officials about the shortage of kidney support machines, such as dialysis machines. The kidneys stop working due to a lack of oxygen. For people with long-standing kidney problems, the kidneys may already be impaired by long-standing high blood pressure causing the impairment of the ability to filter. As mentioned earlier, the kidney has ample ACE 2 receptors, the entry receptor for the virus. Again, as with heart disease, it is absolutely crucial that people with kidney problems be monitored carefully and that all available precautions be taken to prevent their infection.
- 16. Diabetes also makes people very vulnerable to COVID-19. Diabetes is a chronic disease that causes blood vessels to narrow and impairs the sufficient supply of blood, the critical transport mechanism for oxygen. Diabetes specifically affects the kidneys. Hypertension and diabetes are the two most frequent causes of kidney failure leading to the need for dialysis. A recent study alarmingly found that 1 out of 10 people with diabetes hospitalized due to COVID-19 dies. Increased medical surveillance of diabetics is therefore crucial during the pandemic.

⁵ Robert Preidt, 1 in 10 Hospitalized COVID-10 Patients with Diabetes Dies: Study, US News (May 29, 2020), https://www.usnews.com/news/health-

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- 17. Similarly, people with respiratory problems or people who suffer from underlying lung diseases are at serious risk. These conditions impair the ability of oxygen to cross from the air sacs to blood vessels. Blood clotting caused by the coronavirus further exacerbates this problem. Increased medical surveillance of people with such lung problems is therefore crucial during the pandemic.
- 18. People with mental illness and even dementia are also at a high risk of suffering from complications and death from COVID-19. People with mental illness or dementia may be unable to problem solve, and the ability to reason or ask for help may be impaired. This is especially true during times of illness. A person suffering from COVID-19 must be able to express himself, identify and clearly articulate symptoms, have the mental energy and interpersonal skills to ask for help and to be understood. As I have practiced emergency medicine for over 30 years in the Bellevue Hospital Emergency Department of New York City, I have encountered numerous patients who express distress, pain, or symptoms in odd or non-traditional ways. Confusion can be subtle and requires experience to recognize. In my experience, COVID patients may be uncooperative with therapeutic maneuvers due to low oxygen, metabolic derangements, fear, pain, and fever. Increased surveillance and symptom checks of people with mental illness are therefore crucial. In addition, people with mental illness who are placed in medical isolation require increased monitoring by mental health staff to ensure their mental health condition does not deteriorate.
- 19. I have reviewed ICE's Pandemic Response Requirements (PRR) issued on April 10, 2020 as well as the revisions to the PRR issued on June 22, 2020. In my expert opinion, the PRR and its revisions are deficient in numerous respects—in particular for its lack of guidance on care for medically vulnerable people.
- 20. For example, the PRR fails to prescribe specific standards or precautionary measures to protect medically vulnerable people from COVID-19 or for treating them if they ultimately become infected. As explained above, people with Risk Factors face the very real possibility of serious complications and even death if they contract COVID-19. Therefore, facilities must ensure they

 $[\]frac{news/articles/2020-05-28/1-in-10-hospitalized-covid-19-patients-with-diabetes-\\ \underline{dies-study}.$

have proper protocols in place to protect this vulnerable population. It is dangerous for ICE to presume that precautionary measures utilized for the population at large are sufficient to abate the risk of harm to medically vulnerable people. The revised PRR provide no specific precautionary measures to help protect medically vulnerable people while in custody. For example, there are no requirements that medical staff conduct increased medical surveillance (e.g., symptom checks) of people who are medically vulnerable. Likewise, the revised PRR does not provide special measures to abate the risk of infection to medically vulnerable people, such as enhanced PPE measures, increased social distancing, etc.

- 21. As for preventing COVID-19 transmission to medically vulnerable people, there are a number of precautionary measures that ICE could prescribe that are not reflected in the revised PRR, including but not limited to:
 - a. Release of all medically vulnerable persons;

- b. Accelerated healthcare evaluations by a doctor or physicians assistant upon intake, and upon identifying medical vulnerabilities to COVID, a more comprehensive health assessment should be conducted;
- c. Healthcare evaluation of currently detained people who have Risk Factors and evaluation of underlying medications and how they impact fighting the virus, as many medications impede the body's ability to fight the virus;
- d. Increased infection control measures for medically vulnerable people;
- e. Increased social distancing measures for medically vulnerable people, e.g., within housing areas, during programs and activities (recreation, meals, law library), and medical visits;
- f. Increased monitoring of medically vulnerable people, including contact tracing, temperature checks, and symptom questions (temperatures alone are not sufficient given that fever is only one symptom and is not always present);
- g. Increased medical surveillance, including testing of vital signs, and assessment of underlying conditions that make the patient vulnerable;
- h. Mandates on the use of PPE for both detainees and staff, and frequent increased changing of PPE, as well as specification that PPE includes use of masks;
- i. Increased cleaning of areas where medically vulnerable detainees are present using appropriate chemical agents, and not putting detainees at risk of inhalation or contact with such agents;
- j. Increased access to soap/sanitizer;
- k. Prohibitions on work assignments of medically vulnerable detainees, especially for any cleaning work assignments;

- 1. Increased surveillance and contact tracing of staff overseeing medically vulnerable detainees;
- m. Universal and ongoing testing of medically vulnerable detainees;
- n. Increased education for medically vulnerable detainees;
- o. Increased training for staff overseeing medically vulnerable detainees;
- p. Increased mental health treatment and monitoring for those with mental health conditions;
- q. Creating additional negative pressure rooms.⁶

- 22. The PRR likewise fails to provide necessary guidance related to the treatment of COVID-19 generally, and especially what additional treatment measures are necessary to abate the risk of harm to medically vulnerable people. Indeed, while the PRR requires facilities to have a "Mitigation Plan" for COVID-19, ICE does not mandate that mitigation plan to address proper treatment of COVID-19, proper medical staffing ratios, amongst other critical aspects of care.⁷
- 23.In fact, the revised PRR's focus is almost exclusively focused on prevention strategies (albeit deficiently) and altogether fails to provide crucial guidance regarding the treatment and care of people with COVID, particularly for medically vulnerable people. This lack of guidance means that facility staff are left in the dark about what guidance to follow. This is very dangerous given the novel nature of COVID-19. In my experience evaluating medical care in ICE facilities, many facilities lack qualified medical staff and many medical staff are acting outside their scope of practice. The lack of guidance exacerbates these pre-existing problems, thereby heightening the risk that medically vulnerable people will not be provided adequate treatment for COVID-19.
- 24. For example, the "Management" section of the PRR is woefully deficient and lacks necessary clinical guidance on the treatment of COVID-19. Instead, the Management section primarily discusses isolation and housing measures once there are infections. However, the PRR does not discuss other crucial components of the management and care of COVID-19, including: how the treatment should be provided; how frequently COVID-19 patients should be monitored and by whom; what vitals should be checked; what resources clinicians can access for the most updated clinical guidance; and

⁶ This is not difficult. At one hospital where I work in New York, engineers easily converted rooms to negative-pressure rooms.

⁷ See ICE Pandemic Response Requirements (June 22, 2020), at 6-7 https://www.ice.gov/doclib/coronavirus/eroCOVID19responseReqsCleanFacilities.pdf.

- when hospitalization is necessary, amongst other dangerous omissions. These deficiencies in ICE's guidance pose dangerous to everyone in ICE custody—not just medically vulnerable people. ICE's recent revisions to the PRR do not remediate these dangerous deficiencies.
- 25. For medically vulnerable detained people who are COVID-positive, the facility must provide adequate and careful monitoring by qualified medical staff. This includes careful monitoring of oxygen levels. As discussed above, COVID-19 decreases oxygen delivery, which is especially dangerous to people with certain chronic conditions. With COVID-19, the onset of shortness of breath develops a median of 5-8 days after other symptoms. Unfortunately, many patients are unaware that they are teetering on the edge of death from low oxygen. Indeed, I have had patients present to the emergency department who, when asked to walk 10 feet, have turned back towards me and been visibly blue without a significant feeling of air hunger. This is referred to as "silent hypoxia." Though the feeling of breathlessness (dyspnea) may ultimately occur, accompanying low oxygen levels and the accompanying failure of the heart and brain occur rapidly and precipitously.
- 26. This information is crucial for facility staff to know. Staff may believe that patients are doing well because of under-reporting of symptoms or lack of appearance of breathlessness. This could lead to staff monitoring becoming laxer just as dangers present themselves. The patient's unawareness of the degree of hypoxia present and the rapidity of this progression over hours is common. Thus, detention facilities cannot rely merely on people's self-reporting of symptoms, including breathlessness. Rather, careful monitoring of patients—including their oxygen levels—is crucial. This is especially true for medically vulnerable people. Again, ICE's revisions to the PRR do not fix this dangerous omission.
- 27. The PRR likewise fails to provide crucial information related to oxygen administration. Oxygen administration is fundamental to the treatment of hypoxia. However, the means of administration of oxygen requires a complicated series of judgments, and therefore there is a strong need for qualified medical staff. For example, to assess whether a COVID-19 patient has oxygen levels that require hospitalization, medical staff must not only know the person's oxygen saturation levels but also needs to understand the patient's medical history, which could impact the level at which hospitalization is necessary. For example, people with less hemoglobin (anemia) may require hospitalization earlier than others. The same is true for people with pre-existing lung damage, e.g., from a history of smoking.

- 28. COVID-19 patients should have their oxygen and vital signs checked regularly. The pulse, respiratory rate, and oxygen saturation must be performed by qualified health care providers every 4 hours throughout the day and night. The results must be recorded in the medical chart. Here again, the revisions to the PRR wholly fail to provide crucial guidance to facilities.
- 29. The PRR also neglects to provide necessary guidance and standards concerning when hospitalization should occur. Defendants altogether refused to address this issue in its revisions to the PRR. This is especially dangerous because many healthcare staff may not understand when hospitalization is necessary and hospitalization is frequently needed even when a patient does not appear to be in distress. Accordingly, health care personnel need guidance on when hospitalization should occur. At a minimum, COVID-19 patients should be sent to the hospital immediately when:
 - a. the oxygen saturation is $\leq 95\%$ on room air;
 - b. the pulse is ≥ 100 beats / minute;
 - c. The systolic blood pressure is ≤ 100 ;
 - d. There is dyspnea at rest. (shortness of breath or trouble speaking whole sentences due to breathing difficulties);
 - e. Chest pain;
 There is confusion or other signs of altered mental status;
 - f. The patient is pregnant;

- g. Patients need additional blood testing or radiographic studies to exclude a COVID-19 diagnosis because at least 15% of COVID PCR tests will be negative when the patient has COVID-19. In some circumstances the patient will have to go to the hospital for COVID-19 testing if the test at the detention facility does not provide timely results.
- 30. It is important to note that many people may require hospitalization at earlier times, even when these parameters are not present, depending on underlying illness and medical history. A high level of clinical judgment is therefore crucial in assessing people's conditions and determining whether hospitalization is warranted. One example is people with a history of lung damage or anemia may require hospitalization earlier than when their oxygen levels are low. Medical staff should be provided this sort of guidance, especially because COVID-19 is a novel virus, and many medical staff will be unprepared to respond as necessary, given their lack of experience with this illness, and lack of training regarding management and

treatment of COVID-19 patients. This is why proper and comprehensive guidance is so crucial and why the revised PRR is so deficient.

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- 31. Upon discharge from the hospital, it is crucial that COVID patients be provided necessary follow-up care. This includes an encounter with a doctor or physicians assistant. If facilities lack sufficient staffing, telehealth may be a good means of providing follow-up care while reducing the risk of transmission from transfers to medical appointments. Here again, the revised PRR is silent.
- 32. Moreover, it is critical to note that many ICE facilities are in remote locations far from hospitals with adequate resources and personnel to treat COVID-19. This makes hospitalization protocols all the more important, because it may take a significant amount of time to transfer people from ICE detention to an appropriate hospital. The amount of time taken to transfer can be crucial, given how rapidly people's conditions can deteriorate. Several minutes can make a difference between life or death. Facility staff therefore must know, not only when hospitalization is appropriate, but also whether local hospitals are full and have enough equipment (e.g., ventilators) to treat people. This issue is not adequately addressed in the revised PRR. Local facilities should be mandated to ensure there are sufficient numbers of ventilators, dialysis machines, and hospital beds in close proximity to the facility in the event that hospitalization is necessary.
- 33. The PRR also fails to provide necessary guidance related to quarantining and medical isolation. The PRR fails to make clear that conditions of medical isolation and quarantine should not be the equivalent of punitive solitary confinement. Solitary confinement is generally applied for punitive reasons, and people are overseen by security staff. Properly administered, quarantines and medical isolation are quite different. People in both unitsbut especially medical isolation—require frequent checks by medical and mental health staff. People also require opportunities for recreation and material conditions that do not cause them to deteriorate mentally, including access to TV, phones, and reading material. Further, given how rapidly COVID-19 patients can deteriorate, people in medical isolation must be visible to medical staff. Ideally, these should be negative pressure rooms where the air is changed frequently throughout the day. If an airborne infection isolation room is not available, the patient should be placed in a single room with a closed door with the patient visible to health care professionals. Anyone entering the room should wear personal protective equipment and adopt universal precautions. Personal protective equipment includes a gown, N95 respirator, googles or face shield and gloves. Once

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- again, the revised PRR do not provide adequate guidance to ensure that facilities do not utilize solitary confinement as an improper and dangerous means of infection control.
- 34. The PRR also fails to provide necessary guidance concerning testing. PCR testing should be universally available, and results should be available within 24 hours to help mitigate risk. Detained people should be told their results. For new intakes, tests could occur on arrival in conjunction with tuberculosis screenings. Although ICE should provide ongoing and universal testing for all people in detention, expanded testing is especially necessary for medically vulnerable people. The revised PRR fails to mandate testing to medically vulnerable people. In addition, the PRR fails to provide necessary guidance concerning the high rate of false negatives. A significant percentage of PCR tests are falsely negative; if a person tests negative but has COVID-19 symptoms, they should be presumed positive and isolated from others. Blood tests further elucidate the presence, absence, and severity of COVID. These tests include lymphoctye counts, coagulation factors and d dimer, measures of cardiac injury such as the troponin, and inflammatory markers such as ferritin, c-reactive protein and erythrocyte sedimentation. These tests may only be available at a hospital. Pending these tests, people with COVID symptoms should be provided necessary PPE and be separated from asymptomatic people who test negative, and from COVID positive patients. Consistent with other failings in ICE's response, the PRR revisions do not remediate these deficiencies.
- 35. The PRR and its revisions also fail to provide adequate guidance regarding the use of PPE. Frequently, the PRR simply states that PPE must be worn during particular circumstances, but the PRR does not specify what this entails. Wherever PPE is necessary, the PRR should state with specificity that masks **must** be worn in addition to gloves, etc. Failing to specifically mandate the use of masks risks detention staff picking and choosing which kinds of PPE they will wear—particularly since masks are so uncomfortable.
- 36. In addition, and troublingly, the PRR and its revisions do not mandate that staff wear masks and other PPE at all times when in facilities. For example, one of the revisions to the PRR simply requires that staff use PPE when within 6 feet of detainees. But this fails to account for the fact that staff need PPE when they are close to other staff members and visitors who are not detainees, particularly because it is staff and visitors that are the primary sources of infection at detention facilities. In this way, the revised PRR again fails to take a necessary precautionary to protect medically vulnerable people.

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2	I declare under penalty of perjury and under the laws of the United States, pursuant to 28 U.S.C. § 1746 that the foregoing is true and correct to the best of my knowledge, memory, and belief.
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5	Executed on the 24 th day of June, in the year 2020, in the city of New York, New York. Susi Vassallo HD Dr. Susi Vassallo
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EXHIBIT A

SUSI U. VASSALLO, M.D., M.S.

Curriculum Vitae

PERSONAL DATA

Born: Austin, Texas, January 27, 1959

Citizenship: USA

Address: 6018 Mount Bonnell Cove, Austin Texas 78731

Address: 200 East 36th street, Apt.11J, New York, New York 10016

C: 646-298-4510

Susi.vassallo@nyumc.org susivassallo@gmail.com

EDUCATION

1977 High School Diploma - McCallum High School Austin, TX

1980 Bachelor of Science Biology, Honors – University of Texas, Austin, Texas

1984 Doctor of Medicine - University of Texas, Houston, Texas

POST DOCTORAL TRAINING

Residency

1984-1987 - Emergency Medicine, Wayne State University, Detroit Receiving Hospital, Detroit Michigan

Fellowship

1987 - 1989 - Medical Toxicology Fellowship, New York University School of Medicine / Bellevue Hospital Center, New York City Regional Poison Control Center, 455 First Ave., New York New York

Masters of Science in Healthcare Management

University of Texas at Dallas School of Business and the University of Texas Southwestern Medical School December 2016

LICENSURES AND CERTIFICATION

Licensure

1984 Texas State Medical License, #G9001

1987 New York State Medical License, #170778

2001 California State Medical License, #C50674

Board Certifications

1984 Federal Licensure Examination

1988 Diplomate, American Board of Emergency Medicine

1989 Diplomate, American Board of Medicine Toxicology

1995 Diplomate, American Board of Emergency Medicine With Subspecialty Certification in Medical Toxicology

2004 Medical Toxicology Subspecialty Recertification

2008 Diplomate Recertification, American Board of Emergency Medicine

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2018 Diplomate Recertification, American Board of Emergency Medicine American Board of Medical Toxicology Diplomate recertification September 2018

Other Certifications

Basic Life Support
Advanced Cardiac Life Support
Pediatric Advanced Life Support
Certified Correctional Health Professional

ACADEMIC APPOINTMENTS

May 2015-present Clinical Professor of Emergency Medicine, New York University School of Medicine / Bellevue Hospital Center, NY, NY

2014 -2018 Volunteer Clinical Faculty Emergency Medicine University of Texas Dell Medical School at Austin September 2012 to 2014 -Clinical Associate Professor UT Southwestern Medical School Dallas, Texas September 2009 to 2015 - Associate Professor of Emergency Medicine, NYU School of Medicine / Bellevue Hospital Center, New York, New York

1993-2009 – Clinical Assistant Professor of Emergency Medicine, NYU School of Medicine / Bellevue Hospital Center, New York, New York

Consultant NY Regional Poison Control Center 1989 to present

1987-1993 - Instructor in Clinical Medicine (Emergency Medicine), NYU School of Medicine / Bellevue Hospital Center, New York, New York

APPOINTMENTS

2016-2018 Department of Homeland Security Civil Rights and Civil Liberties Medical Expert evaluating medical care in detention facilities

1989 to Present – Attending Physician Emergency Medicine Bellevue Hospital Center and Tisch Hospital, NYU School of Medicine, NY, NY

2003 to Present – Attending Physician Emergency Medicine Veterans Administration Hospital, NY, NY

AWARDS AND HONORS

1991 - Fellow, American College of Emergency Physicians

1997 - Fellow, American College of Medical Toxicology

2003 - Fellow, New York Academy of Medicine

2014 - Fellow, American Academy of Emergency Medicine

MEMBERSHIPS, OFFICES, AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES

Memberships

1989 - American Academy of Clinical Toxicology

1989 – American College of Medical Toxicology

1991 - American College of Emergency Medicine

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2003 - Society for Academic Emergency Medicine

2010 - Academy of Correctional Health Professionals

Offices

1999 – 2002 – Women's Sports Foundation Advisory Board and Research Council 2000-2004 New York State Office of Professional Medical Conduct Consultant

Committee Assignment

2007 - 2011 American Board of Emergency Medicine, Oral Board Examiner

EDITORIAL POSITION: REVIEWER

1987 – 1989, American Academy of Clinical Toxicology Updates

1994 – Annals of Emergency Medicine

1995 – Journal of Toxicology / Clinical Toxicology

1999 - Intensive Care Medicine

2011 - American Journal of Public Health

PRINCIPAL CLINICAL AND HOSPITAL SERVICE RESPONSIBILITIES

Clinical

2015 Dell School of Medicine Volunteer Faculty.

2012 to 2017 Faculty UT Southwestern Emergency Medicine Residency at Austin, TX

19897- present: Supervise patient care, provide administrative and clinical oversight in the Bellevue Emergency Department and teach medical students and residents from all specialties.

Hospital Service

1999 to present: Office of Public Affairs, Expert in Emergency Medicine, NYU School of Medicine 1989 to present: Office of Public Relations, Expert in Emergency Medicine, Bellevue Hospital Center

MAJOR ADMINISTRATIVE RESPONSIBILITIES

1995 - 1996 - Director, Medical Toxicology Fellowship Program, NYU School of Medicine, NYC Regional Poison Control Center, NY, NY

2012- present; - Physician Advisor for Case Management Bellevue Hospital Emergency Services

Faculty Council NYU School of Medicine 2012-2016

Faculty Council Secretary NYU School of Medicine July 2014-2016

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TEACHING EXPERIENCE

Local

- March 1988 Bellevue Hospital and New York City Regional Poison Control Center Emergency Medicine Seminar: Non-Opioid Analgesics.
- April 1988 Bellevue Hospital and New York City Regional Poison Control Center Emergency Medicine Seminar. Lecture: "Mushrooms."
- May 1988 New York Hospital / Cornell School of Medicine Flight Team. Lecture: "Helicopter Transport of the Poisoned Patient."
- May 1988 Bellevue Hospital and New York City Regional Poison Control Center Emergency Medicine Seminar.
 Lecture: "Solvent Toxicity: Has My Patient Been Exposed?"
- June 1988 New York University Medical Center / Bellevue Hospital, Emergency Medicine Board Review Course. Lecture: "Recent Advances in Hypothermia Management."
- March 1988 to November 1988 New York University Medical Center / Bellevue Hospital Twenty-Two-Week Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- August 1988 New York University Medical Center, Department of Internal Medicine Conference Series.
 Lecture: "Hyperthermia."
- March 1990 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy. An Intensive Review in Clinical Toxicology. Lectures on: "Calcium Channel Antagonists," "B-blockers," and "Digoxin."
- October 1988 New York University Medical Center, Postgraduate Medical School, and Bellevue Hospital, Emergency Services, Fifth Annual Five Day Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- June 1990 New York University Medical Center, Postgraduate Medical School, 10th Annual Emergency Medicine Seminar. Lectures: "Evaluation of Penetrating Trauma," "Orthopedic Assessment and Casting," "Airway Management," and "Trauma Case Studies."
- March 1991 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, An Intensive Review in Clinical Toxicology. Lectures on: "Chemical Toxins."
- March 1991 to November, 1991 New York University Medical Center / Bellevue Hospital Twenty-Two-Week Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- August 1991 Metropolitan Hospital / New York Medical College, Emergency Medicine, Grand Rounds. Lecture: "Hyperthermia."
- October 1991 New York University Medical Center, Postgraduate Medical School, and Bellevue Hospital, Emergency Services, Sixth Annual Five-Day Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- March 1992 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy. An Intensive Review in Clinical Toxicology. Lectures: "Biological Hazards" and "The Patient with an Arrhythmia."
- June 1992 New York University Medical Center, Postgraduate Medical School, 11th Annual Emergency Medicine Seminar. Lectures: "Resuscitation from Traumatic Arrest," "Heat-related Disorders," and "Orthopedic Assessment and Casting."
- March 1992 New York University Medical Center, Postgraduate Medical School. Course Director, One-day Seminar. Lecture: "Orthopedic Assessment for the Emergency Physician."
- March 1993 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, an Intensive Review in Clinical Toxicology. Lectures: "Drugs of Abuse" and "Toxic Alcohols."

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- 1992 to 1994 New York University Medical Center, Postgraduate Medical School Emergency Medicine Residency Program. Lecture Series: "Procedures in Emergency Medicine."
- March 1994 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, an Intensive Review in Clinical Toxicology. Lecture: "Hydrofluoric Acid."
- June 1994 New York University Medical Center, Postgraduate Medical School, 14th Annual Emergency Medicine Seminar. Lecturers: "Chest Pain and the Deformed Steering Wheel," "Pediatric Trauma," and "Hand Evaluation: An Intensive Minimodule."
- June 1994 New York University Medical Center, Bellevue Hospital, Department of Pediatrics and Emergency Services. Pediatric Emergency Medicine Lecture: "Environmental Emergencies."
- September 28 / October 2, 1994 Essential Topics in Emergency Medicine, presented by ACEP, Washington,
 D.C. Lectures: "Management of the Overdosed Patient," "Street Drugs," "Analgesic Drug Toxicity," and "Envenomations."
- March 1995 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, an Intensive Review in Clinical Toxicology. Lecture: "Special Concerns in Pediatrics."
- May 1995 New York University, Bellevue Hospital Center Department of Pediatrics. Pediatric Emergency Medicine Review. Lecture: "Summertime Environmental Dangers."
- 1995 New York University Medical Center Postgraduate Medical School. 15th Annual Emergency Medicine Seminar. Lectures: "Critical Decisions Regarding the Diagnosis and Management of Hypo- and Hyperthermia" and "Hand Evaluation."
- July 8, 1996 Grand Rounds: Brooklyn Hospital Center Internal Medicine and Emergency Medicine. "Heat Illness, Pathophysiology and Treatment."
- March 12 to 13, 1998 New York Regional Poison Control Center, Bellevue Hospital Center. An Intensive Review in Clinical Toxicology. "Natural Toxins."
- June 2 to 4, 1999 NYU School of Medicine / Bellevue Hospital Department of Emergency Medicine. Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach. How are Hypothermic Patients Best Rewarmed?
- March 9, 2000 Lutheran Medical Center Internal Medicine Grand Rounds, New York, NY. "Sports Toxicology."
- March 9, 2000 An Intensive Review Course in Clinical Toxicology, New York City Poison Control Center and Bellevue Hospital Center: "Sports Toxicology" and "Snakes and Spiders."
- April 13, 2000 Lutheran Medical Center Internal Medicine Grand Rounds, New York, NY. Lecture: "Snakes and Arthropods."
- June 2 to 4, 2000 NYU School of Medicine / Bellevue Hospital Department of Emergency Medicine. Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach, Lecture: "Fomepizole: When should it be used?"
- June 7, 2001 –Bellevue Hospital Department of Emergency Medicine 21st Annual Emergency Medicine Seminar. Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach. Lecture: "Medical Complications of Marathons."
- March 7 to 8, 2002 New York Poison Control Center and Bellevue Hospital Center: An Intensive Review Course in Clinical Toxicology. "Sports Toxicology."
- June 5, 2003 NYU Department of Emergency Medicine 23rd Annual Emergency Medicine Seminar. Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach. "The Pain of Prisoners: Health Care Behind Bars."
- March 3, 2005 American College of Emergency Physicians and the Section on Emergency Medicine. New York Academy of Medicine. Lecture: "Life in Emergency Medicine."

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- April 1, 2005 New York University School of Medicine. Orthopedic Injuries: Clinical Management and Controversies. "Pediatric Fracture Patterns in Child Abuse."
- March 9 to 10, 2006 New York City Poison Control Center and Bellevue Hospital Center. An Intensive Review Course in Clinical Toxicology. "Sports Toxicology Workshop."
- March 30, 2006 Office of the Chief Medical Examiner, New York City: "Trauma in the Living."
- April 7, 2006 NYU School of Medicine: The Orthopedic Manifestations of Child Abuse.
- August 3 to 7, 2006 NYU School of Medicine Emergency Medicine Review Course: "Environmental Emergencies."
- Advanced Science Seminar, NYU School of Medicine Medical Student Lecture Series August 2008: Sports Toxicology.
- March 8 to 9, 2007 Bellevue Hospital Center / NY Regional Poison Control Center: An Intensive Review Course in Clinical Toxicology. Lectures: "Hyperthermia Syndromes" and "Sports Toxicology Workshop."
- March 13-14 New York City Poison Control Center and Bellevue Hospital Center An intensive review Course in Clinical Toxicology. Hyperthermic Syndromes.

National Lectures

- 1994 ACEP Scientific Assembly, Orlando, Florida. Lectures: "Antidepressant Overdose," "Case Studies in Medical Toxicology," and "Heat Stroke and Heat-related Disorders
- November 1988 Johns Hopkins Medical Institutes, Department of Emergency Medicine, Baltimore, Maryland.
 Written Boards in Emergency Medicine, A Comprehensive Review. Lecture: "Environmental Emergencies."
- September 1991 San Francisco General Hospital / UCSF / Division of Emergency Medicine, Grand Rounds.
 Lecture: "Penetrating Trauma."
- June 1993 University of Texas at Houston, Department of Emergency Medicine, Houston, Texas, Grand Rounds. Lecture: "Acute Salicylate Toxicity."
- May 15 to 19 1994 Essential Topics in Emergency Medicine, Presented by ACEP, New Orleans, Louisiana.
 Lectures: "Management of the Overdosed Patient: The First Thirty Minutes," "Street Drugs," "Envenomations," and "Analgesic Drug Toxicity."
- March 20 to 24, 1995 Society for Academic Emergency Medicine, Annual Meeting, San Antonio, Texas. Case Presentation Competition Discussant, Northeast Region.
- September 1995 1995 ACEP Scientific Assembly, Washington, D.C. Lectures: "Difficult Issues in Pediatric Trauma: They're Not Just Little Adults," "Case Studies in Medical Toxicology," and "Snake and Arthropod Bites."
- April 1995 Brooke Army Medical Center Emergency Medicine Department, San Antonio, Texas. Grand Rounds. Lectures: "Iron Poisoning" and "Drugs of Abuse."
- April 15, 1997 University of Pennsylvania Medical Center Department of Emergency Medicine Grand Rounds: "Hypothermia."
- April 27 30, 1999 Women's Sports Foundation Annual Summit Meeting, Washington, D.C. "Sports Toxicology."
- April 3-5, 2000 American College of Emergency Physicians: Emergency Medicine Connection 2000, Marriott Marquis, NY, NY 1. Pure Poison 2000 2. Case Studies in Toxicology
- Jan 14, 2000 Uniformed Services Emergency Medicine Residency Program / Brooke Army Medical Center, Fort Sam Houston, Texas. Grand Rounds. Lecture: "Hypothermia," "Case Studies in Toxicology," and "New Drugs of Abuse."
- September 17, 2000 North American Congress of Clinical Toxicology 2000, American Academy of Clinical Toxicology. "Metformin."

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- December 6th, 2000 Southwestern Medical School Department of Emergency Medicine, Dallas, TX. Grand Rounds. Lecture: "Hypothermia."
- February 7 to 11, 2004 Rocky Mountain Winter Conference on Emergency Medicine. Grand Rounds. Lecture: Winners and Losers: The Toxicology of Performance Enhancement. Colorado Chapter, ACEP. Copper Mountain, Colorado.
- February 25, 2004 Southwestern Medical School Department of Emergency Medicine and Dallas Poison Control Center. Winners and Losers: The Toxicology of Performance Enhancement.
- July 8, 2004 Wayne State University School of Medicine / Department of Emergency Medicine Keynote Speaker, Detroit, Michigan. "Thermoregulatory Disorders in the Emergency Department."
- March 15-17, 2007 American College of Medical Toxicology 5th Annual Spring Course, Miami, FL. Lecture:
 "Out of Bounds: The Science and Toxicology of Testing Athletes."
- April 13–16, 2008 American College of Occupational and Environmental Medicine. American Occupational Health Conference, New York, NY. Invited Speaker: "The Toxicology of Testing in Sports."
- March 7 8th, 2008 Invited Panelist Fordham Law School, New York City. The Lethal Injection Debate: Law and Science. Physician Participation in Lethal Injection. Co-panelists: Gregory Curfman, M.D., Executive Editor, New England Journal of Medicine, Stephen Morrissey, PhD Managing Editor, New England Journal of Medicine and Jonathan Groner, M.D. Ohio State University. Lecture: "The Pharmacology of Lethal Injection."
- March 3, 2009 Fordham Law School Criminal Law Workshop, "Medical Care of Inmates," Invited scholar by Professor Deborah Denno and Arthur A. McGivney, Professor of Law.
- October 25th, 2011: Fordham Law School: Neuroscience and the Law. Ethanol Intoxication, Withdrawal and Tolerance and the Legal Limit
- November 1, 2011 American Public Health Association: Moderator: The FDA and Public Health: Improving Scientific Integrity, Safety, and Quality of Medical Products
- November 2-5, 2011 Children's Hospital of Philadelphia: Pediatric Emergency Medicine in Historic Philadelphia: Pediatric Toxicology
- November 27, 2012 Fordham Law School: Law and Neuroscience Speakers Series 2012. "From the Bellevue Hospital Emergency Department; The Science of Intoxication, Tolerance and Withdrawal".
- February 28-March 2, 2015 Austin, Texas: Annual Scientific Assembly American Academy of Emergency Medicine: "From The Emergency Department to Death Row".
- March 19-20, 2015.Boston, MA: 8th Academic and Health Policy Conference on Correctional Health Care: "Defeating Death from Heat in Prison: A Cool Collaboration."

International Lectures

- October 2-25 1997 14th Annual Scientific Conference, L'Association des Medecins d'Urgence du Quebec, Quebec City, Quebec. Lecturer. "Street Drug Intoxications," "Cocaine Toxicity," and "Clinical Cases in Toxicology."
- May 22 to 25, 2002 European Association of Poisons Centres and Clinical Toxicologists XXII International Congress, Lisbon, Portugal. "Toxicologic Effects on Thermoregulation."
- November 18 to 20, 2004 NYU Department of Emergency Medicine and the Department of Emergency Medicine, Tirgu Mures, Romania. Pediatric Emergency Medicine Course: "Pediatric Toxicology and Pediatric Thermoregulation."
- February 10 to 11, 2007 Rajavithi Hospital, Bangkok, Thailand. Advanced Training in Emergency Medicine. "The Management of Trauma."
- June 21, 2011: San Miguel de Allende, Mexico: The Symposium on Resusciation. Sociedad Mexicana de Medicine de Emergencia; / International Federation of Emergency Medicine: "Lipid Emulsion Infusion in Acute Overdose"

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TEACHING AWARDS RECEIVED

2002-2003- Clinical Attending Physician of the Year, NYU - Bellevue Emergency Medicine Residency Program 2005-2006 - Clinician of the Year, NYU -Bellevue Emergency Medicine Residency Program

MAJOR RESEARCH INTERESTS

Thermoregulation: Hyperthermia and Hypothermia
Drugs and Effects on Temperature

Prisoner Health: Access to appropriate health care in prison
Conditions of confinement and temperature
Drug effects on temperature regulation in prisoners

BIBLIOGRAPHY

Original Reports

- 1. Vassallo, SU and Delaney, KA: "Pharmacologic effects on thermoregulation: Mechanisms of drug-related heatstroke," *Clin Toxicol* 1989; 27; 4 199-224.
- 2. Delaney, KA, Howland, MA, Vassallo, SU and Goldfrank LR: "Assessment of acid-base disturbances in hypothermia and their physiologic consequences," *Ann Emerg Med* 1989;18;72-77.
- 3. Brown J, Hoffman RS, Aaron CK, Vassallo S: Theophylline toxicity. Ann Emerg Med 1989;18:425-426.
- 4. Vassallo, SU, Khan, A, Howland, MA: "Use of the Rumack-Matthew nomogram in cases of extended-release acetaminophen toxicity." *Ann Intern Med* 1996;125:940.
- 5. Vassallo S, Delaney K, Hoffman R, Slater W, Goldfrank L: "A prospective evaluation of the electrocardiographic manifestations of hypothermia." *Acad Emerg Med* 1999;6:1121-1126.
- 6. Vassallo, S, Hartstein, M, Howard, D and Stetz, J.: "Traumatic retrobulbar hemorrhage: emergency decompression by lateral canthotomy and cantholysis," *J Emerg Med* 2002;22: 251-256.
- 7. Delaney, KA, Vassallo, SU, Larkin, GL, Goldfrank, LR: "Rewarming rates in urban patients with hypothermia: prediction of underlying infection," *Acad Emerg Med* 2006;13:913-921.
- 8. Vassallo, SU: "Thiopental in lethal injection," Fordham Urban Law Journal, Vol. 35 p. 957-964, June 2008.
- 9. Chen BC, Vassallo SU, Nelson LS, Hoffman: Stress Cardiomyopathy induced by Acute Cocaine Toxicity Curr Clin Pharmacol 2012;6:1-11.
- 10. Buprenorphine: Can it be Deadly in a Dose? Emergency Medicine. 2012 February;44(2):20-22
- 11. Laskowski Landry Vassallo Hoffman: Ice water submersion for rapid cooling in severe drug-induced hyperthermia. Clinical Toxicology 53; 181-185, 2015.
- 12. Fernandez D, Fara M, Biary R, Hoffman RS, Vassallo S Balcer l, Torres D:: Clinical Reasoning: A 27 year old man with unsteady gait. Neurology. 2017 Sep 5:89(10).

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Reviews, Books, and Book Chapters

- 1. Delaney, KA, Vassallo SU, Goldfrank LR. "Hypothermia and Hyperthermia," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies, Fourth Edition*, Appleton-Lange-Crofts, Norwalk, CT 1990.
- 2. Vassallo SU, "Cocaine" in Tintinalli, Krome and Ruiz, (eds.) "*Emergency Medicine: A Comprehensive Study Guide, Third Edition*, McGraw-Hill, 1992.
- 3. Delaney, KA, Vassallo, SU, Goldfrank LR, "Thermoregulatory Principles," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies, Fifth Edition*, Appleton-Lange, Crofts, 1994.
- 4. Bruno, R and Vassallo, S., "Sedative Hypnotics," *Emergency Toxicology*, 2nd edition, Editor Vicellio, P. Lippincott-Raven, 1998.
- 5. Vassallo, S and Delaney, K, "Thermoregulatory Principles," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Toxicologic Emergencies*, 6th edition, Appleton-Lange, Crofts, 1998.
- 6. Vassallo, S., "Essential Oil Toxicity," *Clinical Toxicology*, Ford, M., Delaney KD, Ling LJ, Erikson, T.(eds.) Saunders, WB, 2001.
- 7. Vassallo, S: "Sports Toxicology" and "Thermoregulatory Principles,"," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies, 7th edition*, Appleton-Lange, Crofts, 2002.
- 8. Vassallo, S and Delaney, KA, "Thermoregulatory Principles,"," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies*, 8th Edition McGraw-Hill, 2006.
- 9. Vassallo, S, "Athletic Performance Enhancers,"," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies*, 8th edition, LR, McGraw-Hill, 2006.
- 10. Vassallo, S: Chapter 7: Environmental Emergencies. In Naderi, S., Park R (eds.) *Intensive Review for the Emergency Medicine Written Boards*. McGraw-Hill, 2009
- 11. Vassallo,S: Thermoregulatory Principles. In Goldfrank LR et al Goldfrank's Toxicologic Emergencies, 8th Edition McGraw-Hill 2019
- 12. Vassallo, S, "Athletic Performance Enhancers," ," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies*, 8th edition, LR, McGraw-Hill 2019

Educationally Relevant Publications

- 1. Vassallo, S., "Treatment of Methanol Intoxication." Hospital Pharmacy Hotline, Vol. 1 No 10, 1988.
- 2. Vassallo S., "Hypothermia," Audio Digest, Volume 7, Number 5, March 1, 1990.
- 3. Vassallo, S., "Clinical Challenges in Emergency Medicine: Nausea, Vomiting, Vertigo and Drug Overdose," Continuing Education Material Sponsored by Albert Einstein College of Medicine and Montefiore Medical Center. December 2001.

Abstracts

1988 AAPCC/AACT/ABMT/CAPCC Annual Meeting, Baltimore, Maryland.

SUSI VASSALLO, M.D., FACEP, FACMT

REFERENCES, Page 10

• Service dichromate poisoning: Survival after hemodialysis. Vassallo, SU and Howland, MA.

1998 American Association of Poison Control Centers Meeting.

• Passion and Poison in the World's Great Opera. Platform presentation September 1998, Orlando FL.

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Media

The Marshall Project: https://www.themarshallproject.org/2017/10/11/cooking-them-to-death-the-lethal-toll-of-hot-prisons. Cooking them to Death October 11, 2017

Houston Chronicle Federal judge orders Texas prison system to provide a/c for heat-sensitive inmates at Pack Unit by Gabrielle Banks July 19,2017 https://www.chron.com/news/houston-texas/article/Federal-judge-orders-temporary-air-conditioning-11299434.php

https://feminem.org/honors/dr-susi-vassallo/ February 2018

NBC Channel 4 http://www.nbcnewyork.com/on-air/as-seen-on/Dr_-Susi-Vassallo-on-Heat-Related-Illnesses_New-York-317664951.html July 21, 2015

Texas Monthly: The Heated Battle for Cooled Texas Prisons, Annie Melton, June 2, 2014

The Brian Lehrer Show WNYC July 22, 2014 http://www.wnyc.org/story/its-getting-hot-here-what-heat-does-you/

 $NPR\ http://www.npr.org/2014/07/24/334049647/do-heat-sensitive-inmates-have-a-right-to-air-conditioning$

NPR: January 24, 2013 Bellevue Hospital's Slow Comeback After Superstorm Sandy . www.wnyc.org/npr.../bellevue-hospitals-slow-comeback-after-superst.

WNYC News Monday May 9, 2011: Proposed ER at St. Vincent's Part of Larger Health Care Debate http://www.wnyc.org/articles/wnyc-news/2011/may/09/emergency-room-focal-point-larger-health-care-debate/

MSNBC September 22, 2011 Scores got sick, one died trying to kill bedbugs. Mike Stobbe

New York Times: 19 Have Died from Heat this Summer, City Says. Andy Newman September 1, 2011 Leonard Lopate Show: 93.9 FM,WNYC August 6, 2010. Please explain: Heat Stroke http://beta.wnyc.org/shows/lopate/2010/aug/06/please-explain-heat-stroke/http://www.wnyc.org/people/susi-vassallo/

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REFERENCES, Page 11

Joan Hamburg show July 6, 2010 WOR 710 radio NY Hour 2: Medications and heat. http://www.wor710.com/WOR---The-Joan-Hamburg-Show/39827

National Public Radio; Interview on the risks of hypothermia and the landing on the Hudson River by Captain Chesley Sullenberger. Jan 16, 2009

NY Daily News: Icy river next horror after US Airways Flight 1549 crash by Nancy Dillon. Jan. 16, 2009

Crain's Health Pulse: US Airways Jet Lands in Hudson River by Crainsnewyork.com January 15, 2009

Today Show: Toxicology consultant on the Heath Ledger's death due to drug toxicity

Sirius /XM Satellite Radio: Radio Doctor: Pediatric Emergencies / Pediatric Poisoning

New York Times: 8 Aboard Rescued in Another East River Chopper Crash. By Santora and Jess Wisloski. June 18, 2005

Trauma: Life and Death in the ER. Lifetime Television

MSNBC: September 13, 2001. Coverage of 9/11 from Ground Zero, NYC

New York 1 television interviews: Toxicology and Emergency Medicine

New York Times: Patients whose final wishes go unsaid put doctors in a bind. N.R. Kleinfield July 19, 2003

New York Times: Who's Got Job Stress? November 14, 1999

Books / Magazine Articles: Consultant / Contributor

Men's Health: How to get out of the Hospital Alive. by Ted Spiker.

AARP magazine: Emergency medicine. by Ted Spiker

The Doctors Book of Home Remedies for Women: Heat Exhaustion. By Prevention Magazine Editors

Ice: The nature, the history, and the uses of an astonishing substance. By Mariana Gosnell

Burned Alive: A Shocking True Story of Betrayal, Kidnapping and Murder by Kieran Crowley

Emergency! True Stories from the Nation's ERs