

Dear State Correctional Facility Directors,

As pharmacists, public health experts, and front-line ICU doctors serving patients at the bedside, we write to inform you that many of the medicines your states are currently holding for use in lethal injection executions are in short supply and desperately needed to treat patients suffering from COVID-19. We respectfully request that you release these medicines to healthcare facilities in your states so they may be used to treat COVID-19 patients.

As you will be aware, healthcare workers across the United States are facing unprecedented shortages of vital resources needed to battle COVID-19. Scarce resources include not only ventilators and masks, but also key medicines such as sedatives and paralytics needed for intubation and mechanical ventilation. Many of the medicines needed during this critical time are the same drugs used in lethal injection executions. These medicines were never made or developed to cause death – to the contrary, many were formulated to connect patients to life-saving ventilators and lessen the discomfort of intubation.

Sedatives and paralytics are already in dangerously short supply across our nation and will become scarcer as this virus continues to sweep through our hospitals.^{i,ii} Four drugs in many of your states' execution protocols, midazolam, vecuronium bromide, rocuronium bromide, and fentanyl, are currently listed on shortage by the American Society of Health-System Pharmacists (ASHP),ⁱⁱⁱ with midazolam and fentanyl also listed on shortage with the Food & Drug Administration (FDA).^{iv} At the bedside, we are already rationing the use of both midazolam and fentanyl, drugs that are central to the needed sedation for mechanically ventilated COVID-19 patients. Other drugs used in executions – such as rocuronium bromide, cisatracurium besylate, and etomidate – are also needed in ICUs for intubation and mechanical ventilation.

Our research suggests that the drugs currently stockpiled by your states could be used to treat hundreds of COVID-19 patients.

Many states have refused to disclose the number of vials of potentially life-saving medicines that they are stockpiling in their execution chambers. Based on publicly available information from a handful of states, stockpiled execution drug supplies could be used to treat over a hundred COVID-19 patients.^v When one factors in the drugs held by states that refuse to release details of their supplies, it is likely many times that number of patients could benefit from their release.^{vi} All told, these supplies could be used to save the lives of potentially hundreds of patients suffering from COVID-19 and potentially thousands of patients in other ICU settings.^{vii,viii}

In this pandemic, it is increasingly clear that hundreds of thousands of people in the United States might die. Yet personal experience and medical knowledge demonstrate that patients in the ICU sickened by COVID-19 are still able to survive this infection with proper medical care. Your stockpile could save the lives of hundreds of people; though this may be a small fraction of the total anticipated deaths, it is a central ethical directive that medicine values every life. Those who might be saved could include a colleague, a loved one, or even you.

For years, pharmaceutical companies^{ix} and health experts^x have warned that states' pursuit of execution drugs create public health risks and “could result in the denial of medicines from patients who need them most.”^{xi} In this time of crisis, these risks have never been more acute, and our health system has never more desperately needed the medicines you currently hold for use in executions. Every last vial of medicine could mean the difference between life and death.

We urgently ask you to send any execution drug supplies in your storerooms to hospitals where they are needed to treat critically ill COVID-19 patients. At this crucial moment for our country, we must prioritize the needs and lives of patients above ending the lives of prisoners.

Sincerely,

Joel B. Zivot, MD, FRCP(C), MA

Associate Professor of Anesthesiology and Surgery
Emory University
Atlanta, Georgia, USA

Joshua M. Sharfstein, M.D.

Professor of the Practice
Johns Hopkins Bloomberg School of Public Health

Prashant Yadav, Ph.D.

Lecturer, Harvard Medical School & Fellow, Center for Global Development

Kenneth W. Goodman, PhD, FACMI, FACE

University of Miami Institute for Bioethics and Health Policy

David B. Waisel, MD

Associate Professor of Anaesthesia
Harvard Medical School

Donald F. Downing

Clinical Professor of Pharmacy at the University of Washington
Representing myself as a licensed pharmacist in Washington State

Philip D. Hansten

Professor Emeritus
University of Washington

Robert B. Greifinger, MD

Consultant on Public Health in Corrections

Leonidas George Koniaris, MD

Professor of Surgery, Indiana University School of Medicine

This letter represents the views of the signatories in their individual capacities; their institutional affiliations are listed here for identification purposes only.

ⁱ <https://www.nytimes.com/2020/04/02/health/coronavirus-drug-shortages.html>

ⁱⁱ <https://abcnews.go.com/Health/potential-coronavirus-shortages-focus-ventilator-operators-critical-drugs/story?id=69907976>

ⁱⁱⁱ <https://www.ashp.org/Drug-Shortages/Current-Shortages/Drug-Shortage-Detail.aspx?id=167>

^{iv} [https://www.accessdata.fda.gov/scripts/drugshortages/dsp_ActiveIngredientDetails.cfm?AI=Fentanyl%20Citrate%20\(Sublimaze\)%20Injection&st=c](https://www.accessdata.fda.gov/scripts/drugshortages/dsp_ActiveIngredientDetails.cfm?AI=Fentanyl%20Citrate%20(Sublimaze)%20Injection&st=c)

^v According to public records, the Florida Department of Corrections has 20,000 mg of rocuronium bromide (200 x 5mL rocuronium bromide and 100 x 10mL vials of rocuronium bromide) which could be used to intubate approximately 100 COVID-19 patients. The Nevada Department of Corrections has 32,500 mcg of fentanyl (150 x 2mL vials at 50 mcg/ml and 70 x 5 mL at 50 mcg/ml) which could be used to treat approximately 10 COVID-19 patients over the course of four days. The Tennessee Department of Correction has 1,100 mg of vecuronium bromide (110 x 10 mL vials at 10 mg/vial); given a dose of 40mg/patient, the amount of vecuronium bromide that Tennessee has could be used to help 27 COVID-19 patients. In total, these numbers add up to 137 patients who could be treated.

^{vi} See, for example, Alabama, which uses midazolam, rocuronium bromide, and potassium chloride in executions and has taken the position that records related to its execution drugs are confidential, and Oklahoma, which has recently announced that it has found a supply of midazolam, vecuronium bromide, and potassium chloride and would resume lethal injection executions, but has not disclosed the quantity of drugs on hand. See, e.g., <https://deathpenaltyinfo.org/executions/lethal-injection/state-by-state-lethal-injection-protocols>; <http://www.oag.ok.gov/state-officials-announce-plans-to-resume-execution-by-lethal-injection>.

^{vii} According to public records, the Florida Department of Corrections has 20,000 mg of rocuronium bromide (200 x 5mL rocuronium bromide and 100 x 10mL vials of rocuronium bromide) which could be used to intubate approximately 100 COVID-19 patients. The Nevada Department of Corrections has 32,500 mcg of fentanyl (150 x 2mL vials at 50 mcg/ml and 70 x 5 mL at 50 mcg/ml) which could be used to treat approximately 10 COVID-19 patients over the course of four days. The Tennessee Department of Correction has 1,100 mg of vecuronium bromide (110 x 10 mL vials at 10 mg/vial); given a dose of 40mg/patient, the amount of vecuronium bromide that Tennessee has could be used to help 27 COVID-19 patients. In total, these numbers add up to 137 patients.

^{viii} These numbers may be even higher if the number of additional patients who are able to be treated at a faster rate as a result of the use of early intubation with these medicines is factored in.

^{ix} Amicus brief filed by Fresenius Kabi USA, LLC and West-Ward Pharmaceuticals Corp. in Case No. CV-17-317, State of Arkansas *et al v.* McKesson Medical-Surgical Inc., <https://tinyurl.com/vthmskb>.

^x In 2018, a group of medicines experts including a former FDA Commissioner and Deputy Commissioner filed an amicus brief to the US Supreme Court warning that death rows' efforts to obtain lethal injection drugs could end up causing a "public health crisis."

https://www.supremecourt.gov/DocketPDF/17/17-8151/55113/20180723140325323_17-8151%20tsac%20PharmacyMedicineHealthPolicyExperts.pdf. A study published that same year in the Journal of the American Pharmacists

Association highlights that secrecy laws create a regulatory vacuum that risks a “product safety emergency” causing “patient injury and death.”
When government agencies turn to unregulated drug sources: Implications for the drug supply chain and public health are grave. Yadav, Prashant et al. Journal of the American Pharmacists Association, Volume 58, Issue 5, 477 – 480. [https://www.japha.org/article/S1544-3191\(18\)30336-4/abstract](https://www.japha.org/article/S1544-3191(18)30336-4/abstract)

^{xl}Amicus brief filed by Fresenius Kabi USA, LLC and West-Ward Pharmaceuticals Corp. in Case No. CV-17-317, State of Arkansas *et al v.* McKesson Medical-Surgical Inc., <https://tinyurl.com/vthmskb>.