The ventilator shortage is here. The medication shortage is next.



A medical professional wearing protective gear prepares drugs for a patient infected with the coronavirus at the General University Hospital in Prague on March 29. (Gabriel Kuchta/Getty Images)

Picture this: You're struggling to breathe. There's a plastic tube down your throat, and it feels like you're choking. Your body is in panic mode; your lungs are screaming that you aren't getting enough air, that you're dying right now, in agony. Alarm bells shriek as you fight against the ventilator and flail against the masked people trying to pin you down. Even though oxygen is flowing, you are suffocating because your fighting makes the ventilator ineffective. Then a nurse adjusts your medication and you dissolve back into relief.

Now imagine if the medication pump were empty and the hospital were out of

critical medications to refill it. This is the next nightmare we face in the covid-19 war.

Full coverage of the coronavirus pandemic

Widespread reports of ventilator shortages and the prospect of doctors forced to choose who will live and die have belatedly stirred the United States to action. Last week, the Trump administration <u>invoked the Defense Production</u> <u>Act</u> to facilitate the rapid manufacture of ventilators. But make no mistake: These ventilators will be useless without a steady supply of the critical care medications that allow emergency and critical care physicians to sedate and support our intubated patients.

It is terrifying to imagine being on a ventilator without sedation. But the medical issues here transcend patient anxiety and discomfort. These medications are life-saving, full stop. Oxygenating patients through severe acute respiratory distress syndrome, or ARDS, requires heavy sedation and often medical paralysis. Emergency intubation of patients without powerful sedatives and muscle relaxants is highly traumatic for patients and often unsuccessful. Intubating a covid-19 patient this way could also prove fatal to the doctor due to the aerosolization of massive doses of virus that would occur under these conditions.

A <u>recent survey</u> of U.S. health-care facilities found that 70 percent reported at least one shortage of drugs for coronavirus treatment — a figure that's bound to get worse. As an emergency physician, I am making an impassioned call to focus state and federal attention on this looming shortage of the medications required to treat patients in respiratory failure, particularly sedatives, neuromuscular blockers, analgesics and vasopressors. And as someone with more than 15 years of experience launching biotech companies, I know that our industry has the know-how to tap into existing drug manufacturing

capacity and rapidly make the medications we will need over the coming weeks. We just need the political will, resource coordination and information to do so.

<u>Sign up for our Coronavirus Updates newsletter to track the outbreak. All</u> <u>stories linked in the newsletter are free to access.</u>

Political action. Extend the Defense Production Act to facilitate drug manufacturing capability. Pass the <u>Medical Supply Chain Emergency Act</u> to direct the administration to turn the biopharmaceutical industry toward production of critical drugs and supplies.

Deregulation. Because many of these critical care medications are powerful narcotics and sedatives, their manufacture and distribution are appropriately and tightly regulated. But right now, regulatory barriers need to be eased to ensure production, distribution and access. Federal agencies are already taking steps in this direction. For example, in response to <u>calls</u> from the American Hospital Association and other groups, the Drug Enforcement Administration <u>moved</u> on Tuesday to increase annual production limits and relax inventory controls for manufacturers of controlled-substance medications.

Industry coordination and leadership. To my colleagues in the biopharmaceutical industry, I urge you to evaluate your manufacturing capacities and see where you can help. Let's not rely on government to do the right thing quickly enough for it to matter. All of the drugs we need are generic small molecules that are relatively simple to produce. Obviously, this won't solve issues of immediate need, but if enough companies take coordinated action now and regulatory agencies jump in to bless the process, our country should be able to shore up supply within a month.

The Opinions section is looking for stories of how the coronavirus has

affected people of all walks of life. Write to us.

Real-time information and distribution. The Federal Emergency Management Agency and state agencies must enable physicians to know where we stand in terms of what drugs we have, where they are, how much is left, how much is coming and when we should expect new shipments. We are flying blind. We need a transparent, centralized inventory and a distribution network to get the right medications to the hospitals most in need.

Over the past few decades, the United States has outsourced much of its domestic generic drug manufacturing capability overseas. This crisis should remind us that shoring up critical generic medication supplies is a national security issue. Let us use this emergency to bolster that capability now and build it for the future. We must act decisively to save lives.

<u>Sophie A. Greenberg: As a doctor, I am willing to do whatever it takes to defeat</u> <u>this virus. Why isn't Trump?</u>

Michael S. Saag: What an infectious disease specialist learned about the virus <u>— from getting it</u>

<u>The Post's View: We face a worldwide ventilator deficit. The federal</u> <u>government is flat-footed.</u>

Joanne Gruber: Wait! Before you take me off the ventilator ...

<u>Greg Sargent: Has Trump corrupted the coronavirus supply chain? Schiff</u> wants to know.

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