

# Five Weeks Later:

When the Critical Care  
Physician Becomes the  
Critical Care Patient

By Michael Leonard, MD



**I**n March 2020, I was an extremely healthy, fit anesthesiologist in my latter 60s working in quality and high-reliability safety. I made one last trip to the East Coast to socialize with clients before halting travel due to the impending COVID pandemic. I was quite careful to avoid people, socially distance, and stay in empty hotels normally used by international flight crews.

On March 15, I transited Dulles and O'Hare airports on the way home to Colorado. I did not realize the federal government had threatened to close off travel from Europe, and tens of thousands of people had stampeded into a select number of American airports. A quick Google search displayed pictures of literally thousands of people standing shoulder to shoulder for several hours waiting to pass through customs and immigration. Those were the people I sat among on two flights home.

A few days later, I developed fever and a cough, which lasted several days. As I live at altitude in the hills outside of Denver, I used a pulse oximeter to monitor my oxygen saturation (sat), which ranged from 95–97%.

On day 10, I went to the hospital seeking a COVID test but was turned down, because they were not going to admit me. My chest X-ray was normal. Two days later, everything changed. My oxygen sat, which was now 90% at rest, went to 70% as I tried to walk up my driveway, and remained critically low for the next hour as we drove to the University of Colorado Hospital.

When I walked into the emergency department, my greatest fear was I would be told to “go wait over there.” The first person to ask me what was wrong—ironically another anesthesiologist—heard, “I can't breathe. I really can't breathe. I'm an anesthesiologist, and I need to be intubated.” Words I thought I would never say and clearly a first for the other physician. As they laid me down, I texted my wife, “I'm coming home.” I woke up five weeks later.

I was ventilated for 35 days with acute respiratory distress syndrome (ARDS) and multiorgan failure, including my kidneys. My immune system was on fire and at war with COVID; unfortunately, my body was the battlefield.

Blood saturation ( $SpO_2$ ) levels measure how much oxygen your red blood cells are carrying. A normal range for a healthy adult is 95–100%.



Dr. Leonard was the first patient in Colorado to receive convalescent plasma—blood plasma from someone who has recently recovered from an illness—for COVID-19.



I probably survived because my family and the blood bank personnel at Children's Hospital Colorado were able to obtain convalescent plasma; I was the first patient in Colorado to receive it. Their tireless advocacy was amazing in making something happen when anyone could have refused.

At that time, all plasma had to be transported to Dallas for Food and Drug Administration (FDA) testing and clearance. Normally, there is a flight between Denver and Dallas about every 20 minutes, but not last spring. Flights were cancelled or delayed, and getting the plasma back and forth was quite a feat.

As a result, the plasma arrived in Denver at 2 a.m. Someone from the blood bank physically picked it up planeside, and the techs were waiting to process it so I could receive it as soon as possible. Though the outcome data on convalescent plasma is equivocal, I slowly started to get better a few days later. Prior to the plasma, as my family says, “There was no good news, only that you had survived another day.”

I spent 40 days in the intensive care unit (ICU) and another nine days in inpatient rehab. I was initially so weak that I could not stand. Even 2.5-pound weights were heavy. I have been through 11 months of physical therapy, pulmonary rehab, and physical conditioning. I weaned off supplemental oxygen and can work out in the gym at about 75% of my pre-illness exercise tolerance. Lungs are amazing, and mine continue to improve slowly and steadily. My oxygen diffusion capacity (the ability to move oxygen from your lungs into your bloodstream) is normal, as are my pulmonary function tests. My significant lung scarring continues to diminish. I am blessed and amazingly free of COVID complications, aside from my lungs.

At one point, I was given a 5% chance of survival. How did I make it? First, the care I received at the University of Colorado was world class. As a pretty serious student of safety culture and high-reliability teams, I saw skilled clinicians work extremely hard for me to have a chance to heal. The ICU team allowed my daughter, a surgical resident in Utah, to join rounds virtually every day. I also had amazing family and spiritual support, with people in my company holding daily prayer sessions and thousands of people around the world pulling for me, including Buddhist monks in Kathmandu.

When my daughter put out a plea for convalescent plasma on Facebook, there were over 10,000 responses. People I have never met offered to fly to Denver and donate. There is a lot of good and kindness in the world. What struck me most was that skilled people came in every day to take care of me—someone with an incurable illness that put them at risk—and they never hesitated. It was and is incredibly moving, the ethos of caregivers in medicine.

I have spent my career as a cardiac anesthesiologist and became a critical care patient. It is a humbling and profound experience. Never underestimate the power of people who love you. Never forget to tell them every day how much you care for them. Never take breathing for granted, as life changes dramatically when your lungs aren't healthy. Never forget to tell the people who care for us how they have made a difference on a deep level.

I am grateful every day, both to be alive and to acknowledge the good in the world. I continue to work in the areas of quality and safety, and I am deeply concerned for our caregivers after a year of unspeakable COVID-related horror. This trauma will not heal quickly or easily. We need to take care of our colleagues: They have been seriously wounded by all they have experienced and have seen.

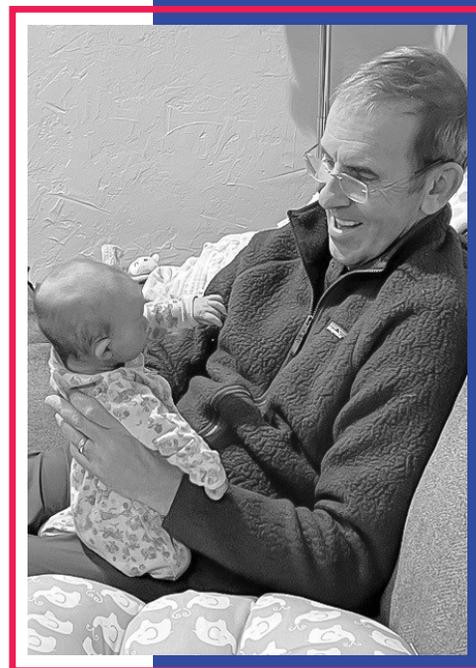
Though a life-threatening illness is nothing we would ever choose, the silver lining has been profound gratitude and deep appreciation for all the kindness I have experienced. Be well, and thank you for what you do every day.

Take care,

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*Dr. Michael Leonard, a founder of Safe & Reliable Healthcare, is a cardiac anesthesiologist by training who spent 20 years with Kaiser Permanente, both as a practicing clinician and leader, and 10 years as the National Physician Leader for Patient Safety. In 1999, he helped Kaiser forge a collaborative relationship with Dr. Robert Helmreich's Human Factors Research Project to work on the application of human factors teamwork and communication training into healthcare. Dr. Leonard has been an adjunct professor of Medicine at Duke University School of Medicine.*

*Dr. Leonard has a deep interest in culture, leadership, teamwork, and high reliability in diverse areas of clinical practice. He has taught extensively in high-risk areas such as surgery, obstetrics, critical care, and others to enhance safety. He is a faculty member of the Institute for Healthcare Improvement (IHI) and has helped train over 2000 patient safety officers. Dr. Leonard recently collaborated on The Essential Guide for Patient Safety Officers, published by IHI and The Joint Commission.*



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