

March 20, 2020

Governor Lee:

Per the escalating and destructive situation with the COVID-19 pandemic, we humbly ask you to act swiftly on behalf of the citizens of Tennessee.

It is our estimation that we have little time to “flatten the curve” on the current situation. China and South Korea have made great progress by imposing restrictive measures. We ask that Tennessee do the same.

The replication rate ( $R_0$ ) of COVID-19 is the primary area upon which we can impact this deadly virus. Compared to the annual influenza, COVID-19 is anywhere from 60 to 100% more “efficient” at replicating itself. For instance, on average 10 patients with the influenza will infect 13 individuals. With COVID-19, ( $R_0$  of 2.0 to 2.5), those same 10 will infect 20 to 25 individuals if we do nothing.

We are many months away from having a vaccine or approved FDA treatment and there is a high likelihood of inadequate hospital and ventilator capacity. According to very conservative estimates 20% of our state’s population will become infected. Based on hospital bed availability in Tennessee, we would surge above hospital and ICU bed capacity by 132% and 298%, respectively. Other estimates predict 40-60% infectivity. This would prove disastrous.

The mortality rate of COVID-19 is at minimum 10x, and possibly up to 34x deadlier than seasonal influenza. The incubation time of COVID-19 is up to 14 days, versus only 1 to 4 days with influenza, therefore apparently well individuals already infected will infect numerous people without knowing it.

China and South Korea have made great strides by prohibiting travel and closure of non-essential industry and business. We must act with the same level of boldness.

We request that effective midnight Sunday, March 22<sup>nd</sup> that Tennessee declare a shelter in place for 14 days with only essential personnel being deployed during this emergency. We also request a self-quarantine of 14 days for all individuals returning from international and domestic travel.

Thank you for your thoughtful consideration to this urgent matter.

Signed,

Aaron Milstone, MD, FCCP, Pulmonology & Critical Care  
Tufik Assad, MD, Pulmonology & Critical Care  
Devin Sherman, MD, FCCP Pulmonology & Critical Care  
Laura Hunt, MD, FCCP Pulmonology & Critical Care  
David Aronoff, MD, Division Chair Vanderbilt Infectious Disease  
Richard Lane Past Governor of the Tennessee Chapter of the American College of Physicians  
K Michael Smith President Elect of the Tennessee Medical Association  
Elise Denny, MD Governor of the Tennessee Medical Association  
Tracey Doering, MD, President of the American College of Physicians  
Adele Maurer Lewis, MD, Medical Examiner for the State of Tennessee  
And 600 Concerned Physicians from the State of Tennessee