September 3, 2020

The Honorable Alex M. Azar II  
Secretary  
U.S. Department of Health and Human Services  
200 Independence Ave SW  
Washington, DC 20201

Dear Secretary Azar:

As many public health experts have stated, the need for rapid coronavirus (COVID-19) testing is critical to stopping the virus, saving lives, safely reopening the economy, and sending students back to school. Unfortunately, in our ongoing efforts to contain and stop the COVID-19 pandemic, our nation’s testing capacity has remained a challenge. As members of the Illinois delegation, we write today to bring to your attention a promising new testing regimen developed by the University of Illinois Urbana Champaign (UIUC), which we believe holds great promise in addressing the testing shortages that still plague our nation. We ask that the Department of Health and Human Services (HHS) look closely at what UIUC has developed and consider ways to scale up this testing regimen at the national level in order to help combat the COVID-19 pandemic.

UIUC’s initiative, SHIELD, is a comprehensive effort to expand the reach of widespread saliva-based COVID-19 testing with rapid results, data management, and action. The program was created to shield the campus community from the COVID-19 virus as students returned to their classes, and the University of Illinois System has launched Shield T3 to make the technology available nationally. We believe this effort is worthy of further investigation by HHS, the National Institutes of Health, and the Centers for Disease Control and Prevention (CDC) for a broader population health response to the pandemic, with particular benefits for underserved communities.

SHIELD T3 features a saliva-based test that is easy-to-administer, scalable, sensitive, and specific to SARS-CoV-2, the virus that causes COVID-19. The test produces rapid results, without relying on additional reagents that have encumbered testing capacity, at costs significantly below current alternatives such as nasal swabs. Results are available within two to six hours, rather than three days or more. This promising diagnostic has been operating under an emergency use authorization (EUA) from the Food and Drug Administration (FDA) as of August 19. It is uniquely suited for large-scale adoption as it can address time, cost, and supply chain bottlenecks. UIUC has performed more than 160,000 of these tests since its walk-up testing began in July and expects to ramp up to 20,000 tests per day for the fall semester.

The University of Illinois System plans to set up this program in 10 labs across the state—including at its campuses in Urbana-Champaign, Chicago, Springfield, Peoria, and Rockford, as well as Northern Illinois University and Southern Illinois University. It also is planning to establish mobile labs, which can quickly be deployed to outbreak areas and substantially expand community access to testing.
As CDC Director Redfield stated on May 11, when awarding $11 billion provided by Congress through the Paycheck Protection Program and Health Care Enhancement Act (PPHCEA), “Readily accessible testing is a critical component of a four-pronged public health strategy – including rigorous contact tracing, isolation of confirmed cases, and quarantine.” The quick turnaround time for test results is a key in curbing the virus, allowing isolation early enough to limit spread of the infection as well as narrowing down past exposure to allow more-effective contact tracing. It also identifies and isolates people with asymptomatic cases who would otherwise spread the virus unknowingly.

After having been briefed on this promising program by the University of Illinois, we wish to raise it to your attention so that your subject matter experts can make an independent, objective, and science-based assessment on whether SHIELD T3 could be of use to the nation through existing and additional HHS funding and regulatory assistance. For example, there remains $14 billion in unobligated PPHCEA funding that could be used to disseminate this model. Schools, businesses, health care facilities, and military bases could all stand to benefit from a reliable, rapid, low-cost, saliva-based COVID-19 testing strategy.

We also ask that the FDA and other agencies continue to evaluate and assist in addressing detrimental supply chain limitations that can hinder the deployment of rapid testing. UIUC has expressed concern about various challenges throughout the supply chain—including cryovials to collect saliva, sterile filtered pipet tips, assembly and delivery of Beckman Coulter robotics, and the specific Beckman Coulter pipet tips. Testing is imperative to reopen the economy, restart schools, and address COVID-19 hot spots. The University of Illinois System’s SHIELD T3 program holds the hope of being a significant leap forward in COVID-19 testing technology and, given the proper support and adoption, it has the potential to play a pivotal role in combatting this public health emergency.

Thank you for your attention to this matter, we look forward to working with you to help address and expand our nation’s testing capacity through novel, innovative strategies such as the University of Illinois System’s SHIELD T3 program.

Sincerely,

Richard J. Durbin
United States Senator

Tammy Duckworth
United States Senator

Sean Casten
United States Representative

Rodney Davis
United States Representative