

United States Senate

WASHINGTON, DC 20510-1304

August 31, 2020

The Honorable Mark Esper
Secretary of Defense
The Pentagon
Washington, DC 20301

Dear Secretary Esper:

I was recently briefed by the University of Illinois on an innovative system of testing and tracing that will be used to monitor the health of students as they return to class this fall. I believe this system, known as SHIELD T3, may be of interest to the Department of Defense, and I also seek your attention to supply chain problems that could impact its rollout.

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 obtained an emergency use authorization from the Food and Drug Administration on August 19. It is uniquely suited for large-scale adoption as it can address time, cost, and supply chain bottlenecks. The University of Illinois Urbana-Champaign has performed more than 80,000 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.

UIUC plans to set up this program in 10 labs across the state. It also is planning to establish mobile labs, which can quickly be deployed to outbreak areas and substantially expand community access to testing.

However, scaling up the program is challenged by shortages in the supply chain. In particular, the University reports that it expected delivery of two i5 BioMek Span 8 robots from Beckman Coulter in June, but due to prioritization orders issued by the Administration under the Defense Production Act, delivery of this critical equipment has been delayed by months and is still unfulfilled. In addition, the University also reports challenges in obtaining pipet tips for use by its robots, sterile filtered pipet tips, and 4 ml sterile cryovials for saliva collection. I ask that the Joint Acquisition Task Force investigate the delays to see if they can be resolved, and what further steps can be taken to ease the manufacturing constraints.

The University also has expressed interest in partnering with Naval Station Great Lakes and the Rock Island Arsenal to expand the use of SHIELD T3 to these important military facilities. I have contacted Secretary McCarthy and Secretary Braithwaite to ask them to assess the technology and consider a demonstration program at those sites. There is also an effort to create mobile laboratories to be able to deploy this testing strategy as needed, which could be of use in military exercises or contingency operations. I also would be interested to know if there are other opportunities in the Department of Defense for this program that you could identify.

Thank you for your attention to these matters. I look forward to continuing to work with you to prioritize the health and safety of the service members, civilians, contractors, and families supporting our national defense.

Sincerely,

A handwritten signature in blue ink that reads "Dick Durbin". The signature is written in a cursive style with a large, stylized "D" and "d".

Richard J. Durbin
Vice Chairman
Subcommittee on Defense