

SmartNotes

Keeping supply chains open for all testing equipment during coronavirus

Healthcare systems working at full capacity need the unwavering support of their supply chains to enable the right first-time clinician decisions that provide quality patient care.

It is no secret the coronavirus brought with it a monumental demand for SARS-CoV-2 testing that outstripped supply. But healthcare teams the world over also found that routine testing supplies were adversely affected.

Speaking during a virtual roundtable event hosted by Thermo Fisher Scientific™ at the virtual ECCVID conference in September, Romney Humphries, Medical Director of the Microbiology Laboratory at Vanderbilt University Medical Center, Nashville, USA, said: "Here in the United States, one of our primary challenges is simply accessing routine testing supplies. Twice this week, for example, my clinical microbiology lab has been unable to acquire blood agar plates, which are a staple for any microbiology testing."

For many, the situation has not improved, despite the easing of the first flushes of pandemic pressure.

In November, 54.4% of US laboratories had a shortage of non-COVID-19 testing supplies for the detection of routine bacteria, 65.8% a shortage of supplies for the molecular detection of sexually transmitted infections (STIs), and 27.3% a shortage of supplies for mycobacteria testing.¹

These supplies are vital as services come back online. Just 16% of clinical labs in the US said they are operating with a major decline in volume of non-SARS-CoV-2 testing, compared to 81% in April.²

At the same time, demand for SARS-CoV-2 testing continues to grow. In a survey by the Association for Molecular Pathology (AMP) in August, 90% of respondents said that supply chain interruptions had delayed or interrupted testing. Just over half (54%) said that testing demand was higher than capacity – compared to 32% in April.³

These are trends that are only set to continue as many countries introduce mass antigen and antibody testing programmes, and as hospitals move into the winter influenza season and start to reinstate paused services.



Clinical Manifesto

Laboratories are doing everything they can to manage these shortages. Some have reverted to past protocols while others have engaged a range of testing systems so they can 'mix and match' depending on the supplies available.

But it shouldn't have to be that way. At Thermo Fisher Scientific, we believe it is our job to maintain the supply chains, so that microbiologists can concentrate on what they do best – timely, accurate diagnosis. **Our Clinical Manifesto promise is to empower laboratories to work smarter, so they can improve outcomes and make the world healthier, cleaner, and safer.**

This ethos has driven our response to the SARS-CoV-2-related shortages. The microbiology division (MBD) has worked closely with its laboratory partners in the US and the UK to expand capacity and ramp up production based on customer need.

In early May, we committed to providing the US Government with 170 million tubes of highly specialized viral transport medium VTM for SARS-CoV-2 sample collection. Six weeks later, we opened a \$40 million facility in Kansas dedicated to VTM production and ramped up production from 50,000 to 8 million units a week.

It was a similar story in the UK, where we commissioned additional footprint and automation to enable the manufacture and distribution of 8 million saline tubes per week.

All this has been achieved while maintaining supplies of routine testing equipment.

Partners in diagnostics

By guiding accurate, timely, decision making, clinical laboratories are an integral part of the healthcare ecosystem. Now more than ever, they need unfettered access to the tools of their trade – and we believe it is our job to make sure they have them.

We all have a role to play in the pandemic response, and in vital areas of microbiology, we are the catalyst to your expertise.

Logistical challenges

Travel restrictions, lockdowns, and staff shortages have taken their toll on global supply chains across sectors. But the healthcare and microbiology fields have had more to contend with than most.

The high demand for SARS-CoV-2 testing saw many companies redeploy capacity and resources to SARS-CoV-2 diagnostics at the expense of routine supplies, compounding existing interruptions.

Whatever the reasons for shortages, a lack of access to routine testing supplies can have a huge impact on clinical decision making and human health, particularly during a pandemic.

Without adequate supplies, for example, laboratories are forced to ration procedures such as antibiotic susceptibility testing (AST), reducing the ability to make patient-centred treatment decisions, and contributing to antimicrobial resistance. Shortages also threaten to reverse progress in tackling non-SARS-CoV-2 infectious disease, such as STIs, by limiting the ability of healthcare professionals to make early interventions.

Ultimately, laboratory supply shortages hamper the pandemic response on multiple levels. They reduce healthcare systems' ability to track and trace the virus, divert time and resources from the task in hand, and drive-up costs in a time of economic uncertainty.



Clinical microbiology services

Antimicrobial Susceptibility Testing

Satisfy your antimicrobial susceptibility testing requirements with high-performance automated and manual test products to help ensure patients are on the most appropriate treatment plan. Our AST products are designed with the user in mind and with what matters most: accurate, reliable, and consistent results.

Blood Culture

Achieve fast results with fewer limitations with a reliable, versatile, and cost-effective blood culture system: the solution for improving patient care and aiding early diagnosis of sepsis.

Microbial Isolation and Screening

Maintain the highest quality standards with Thermo Scientific culture media. Our rigorous quality standards have made us a trusted source of culture media for laboratories around the world.

Clinical Microbial Identification

Guide proper patient management with biochemical and immunological identification solutions to suit your needs.

Microbiology Specimen Collection and Transport

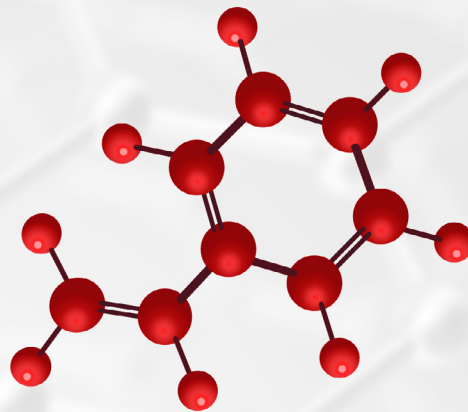
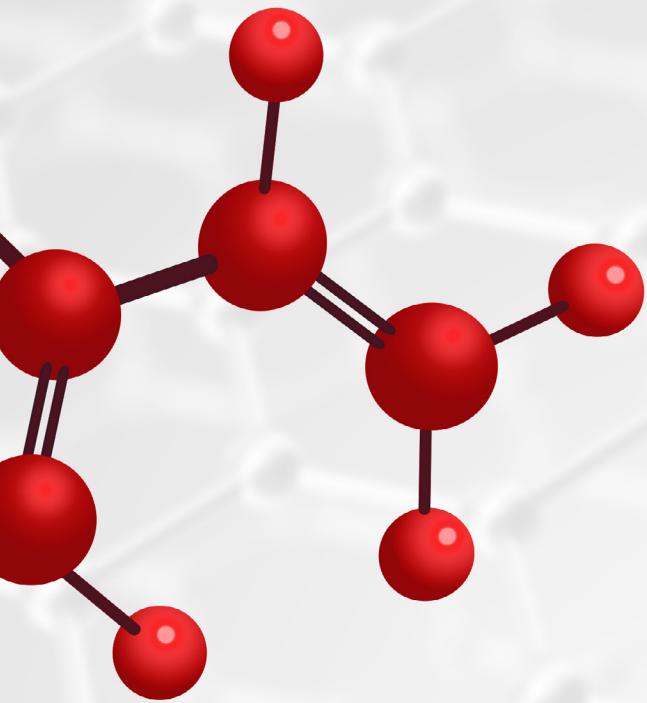
Collecting and transporting specimens can be troublesome, especially when trying to preserve target organisms. Ensure your laboratory receives healthy and viable organisms by choosing the right transport system.

Microbiology Quality Control

Put your trust in quality control organisms, backed by over 30 years of expertise for reproducible results and consistent microbiology testing.

Microbiology Laboratory Supplies

Streamline procurement and complement your test program with supplies to support the entire clinical workflow.



¹ Supply Shortages Impacting COVID-19 and Non-COVID Testing. American Society for Microbiology. (2020).
<https://asm.org/Articles/2020/September/Clinical-Microbiology-Supply-Shortage-Collecti-1>

² COVID-19 Impact on Clinical Trials Tracker. Kalorama Information. (2020)
<https://kaloramainformation.com/covid-19-impact-on-clinical-labs-tracker/>

³ SARS-CoV-2 Testing Survey Results. Association for Molecular Pathology. (2020)
<https://www.amp.org/advocacy/sars-cov-2-survey/>

Find out more at thermofisher.com/microbiology

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