



Supply Chain Lessons Learned and Q&A

Joe Saad, MD, FCAP - College of American Pathologists

Matthew Pettengill, PhD, D(ABMM) - American Society for Microbiology

October 28, 2021

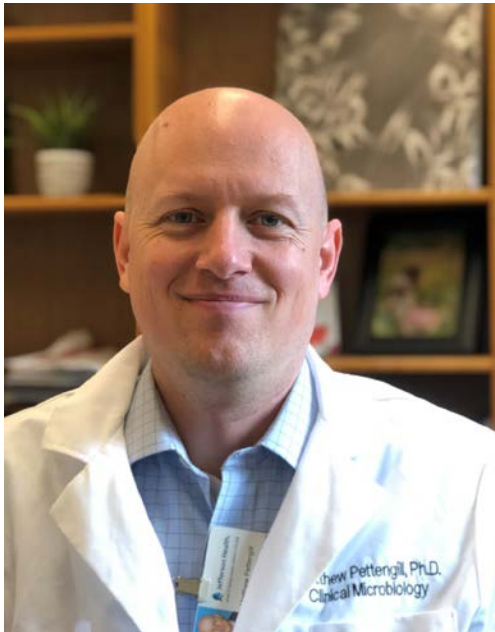


U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

Agenda

- Introduction
 - Today's Presenters
 - New/Featured OneLab Resources
 - Mentimeter Activity
- Supply Chain Lessons Learned – Part 1
- Mentimeter Activity
- Supply Chain Lessons Learned – Part 2
- Q&A
- Upcoming Events

Presenters



Matthew Pettengill, PhD
Diplomate, American Board of Medical Microbiology
Director of Clinical Microbiology, Thomas Jefferson University Hospital
Chair, American Society for Microbiology Professional Development Subcommittee



Joe Saad, MD, FCAP
Vice Chair, College of American Pathologists (CAP) Council on Professional and Government Affairs
Member, Board of Governors
Chief of Pathology, Methodist Health System
President-Elect of Medical Staff, Methodist Health System
Adjunct Associate Professor of Pathology, University of Texas Southwestern Medical Center

The background features a stylized globe with various colored dots (black, blue, orange, grey) and lines connecting them, suggesting a network or data flow. The globe is centered and occupies most of the frame. The text 'NEW RESOURCES' is overlaid on the globe in a bold, dark blue font.

NEW RESOURCES

Introduction to Laboratory Risk Management

New CDC Laboratory Training



LAB TRAINING



PPE EDITION

**Now
Available!**



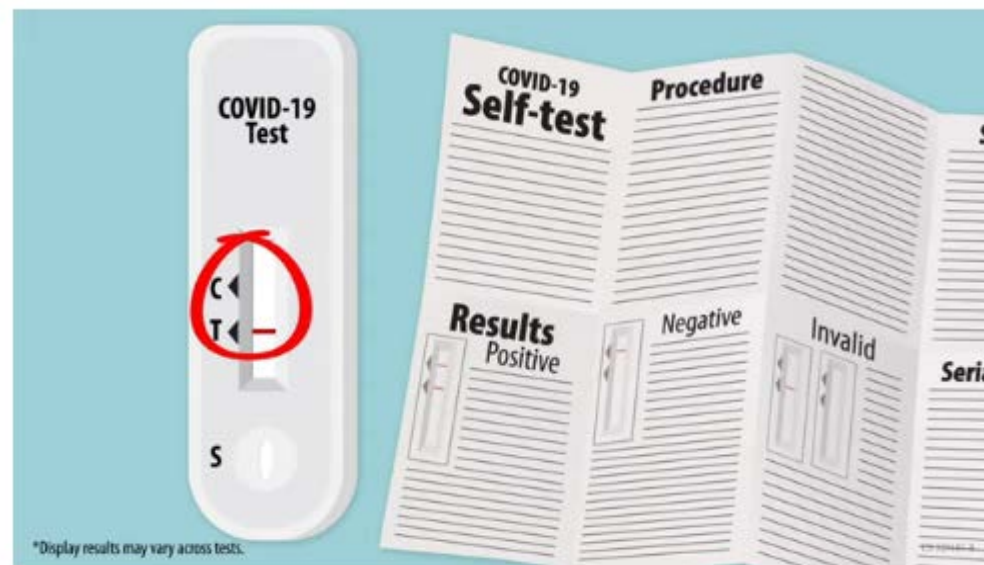
cdc.gov/labtraining

New CDC Self-Testing Videos



[How to Use a Self-Test](#)

- Basics of COVID-19 self-tests
- Purchasing a test
- Specimen collection
- Performing the test
- Proper disposal



[How to Interpret Self-Test Results](#)

- What to do about a
 - Positive test result
 - Negative test result
 - Invalid result or test error
- False positive/negative results

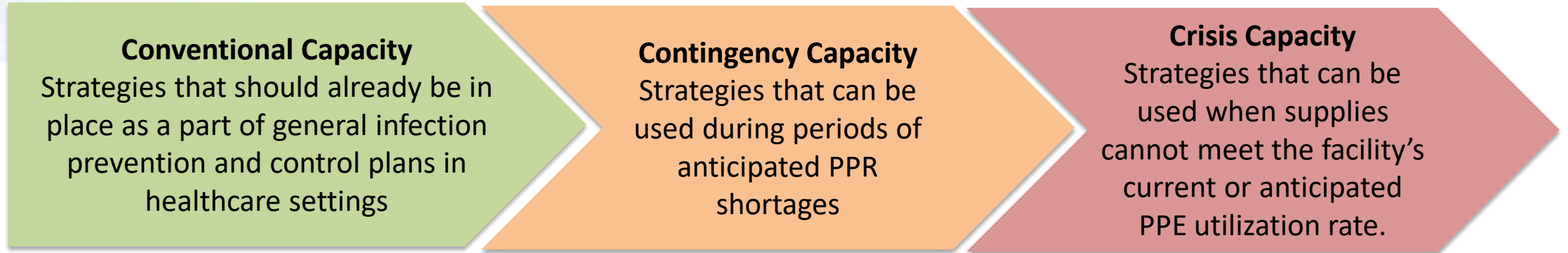
The slide features a central white band with the title 'SUPPLY CHAIN RELATED RESOURCES' in bold blue text. The background is a dark blue gradient with faint, light-colored diagrams of supply chains, including nodes, arrows, and circular paths. A decorative bar with purple, green, and blue segments is at the bottom left.

SUPPLY CHAIN RELATED RESOURCES

Clinical Laboratory COVID-19 Response (CLCR) Calls

- [Short Term Supply Readiness Approaches and Surge Response Capabilities](#) – 8/23/21
 - [Transcript](#) | [Slides](#)
- [How the Federal Government is Addressing Laboratory Supply Issues](#) - 5/17/21
 - [Transcript](#) | [Slides](#)
- [Managing Laboratory Supply Shortage Issues](#) - 12/14/20
 - [Transcript](#) | [Slides](#)

Summary for Healthcare Facilities: Strategies for Optimizing the Supply of PPE during Shortages

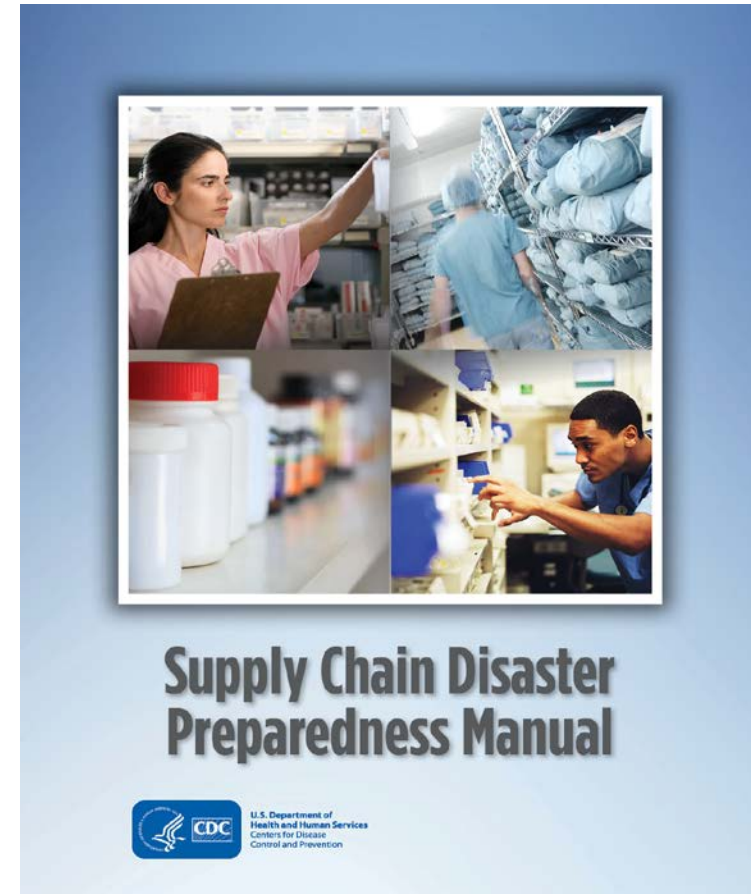


- Summarizes [CDC Strategies to Optimize Personal Protective Equipment \(PPE\)](#)
- [Optimizing Supply of PPE and Other Equipment during Shortages](#)

Supply Chain Disaster Preparedness Manual

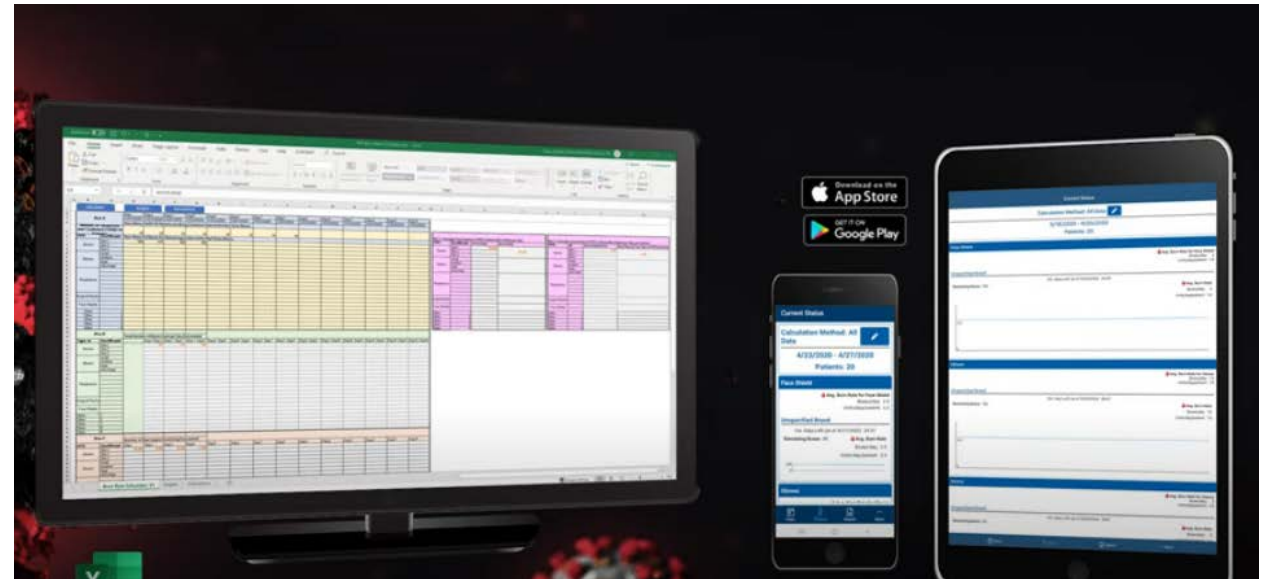
- Hazardous scenarios likely to impact facility or systems
- Develop supply chain-related plans
- Develop an all-hazards cache of supplies

[Supply Chain Disaster Preparedness Manual](#)



Personal Protective Equipment (PPE) Burn Rate Calculator

- Spreadsheet-based model that will help healthcare facilities plan and optimize the use of PPE for response to COVID-19
- Non-healthcare facilities may also find this tool useful

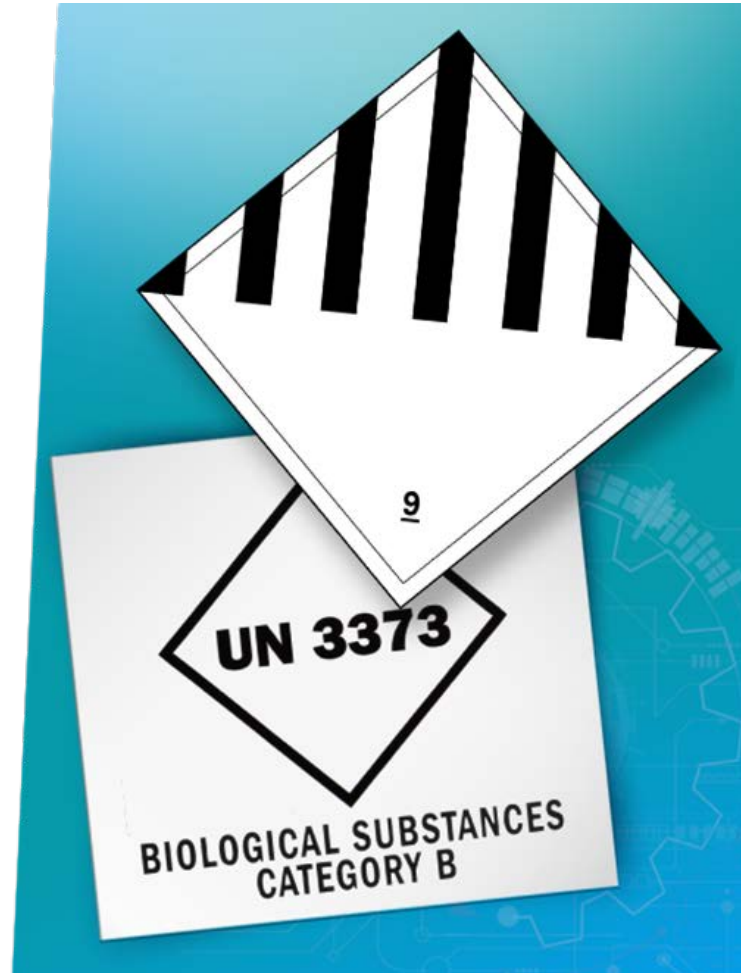


[Personal Protective Equipment Burn Rate Calculator](#)

The background features a stylized globe with various network lines, arrows, and nodes in shades of blue, grey, and orange. The globe is centered and slightly faded, with network paths extending across the frame. The overall aesthetic is clean and modern, typical of a corporate or scientific presentation.

COMING SOON RESOURCES

Training of Trainers on Packing and Shipping Category B Infectious Substances and Dry Ice



To learn more email
labtrainingneeds@cdc.gov

Laboratory Communications Toolkit

Communication strategies help simplify the process of translating complex information into meaningful messages for your audience.



Sensitivity and Specificity Job Aid

Understanding sensitivity and specificity helps determine test selection and whether retesting might be necessary.



The background features a stylized globe with various network-like elements. A prominent dark blue arc curves across the top, with several lines extending upwards and outwards, ending in small circles and arrows. A similar arc is visible at the bottom. The globe itself is rendered in light blue and white tones, with some faint grid lines and data points. The overall aesthetic is clean, modern, and technical.

MENTIMETER ACTIVITY



Go to www.menti.com and use the code **4877 4703**

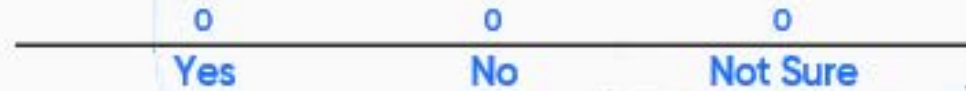
My organization faced major supply chain issues throughout the COVID-19 Pandemic



Go to www.menti.com and use the code **4877 4703**

Mentimeter

My organization is still facing supply chain issues



Go to www.menti.com and use the code **4877 4703**



I worry about future supply chain issues



The background features a stylized globe with various colored dots (black, orange, grey) and lines connecting them, suggesting a network or supply chain. The globe is centered and slightly tilted. The overall color palette is muted, with greys, blues, and earthy tones.

SUPPLY CHAIN LESSONS LEARNED

*MATTHEW PETTENGILL, PHD, D(ABMM)
AMERICAN SOCIETY FOR MICROBIOLOGY*



Jefferson
Thomas Jefferson University

Department of Pathology, Anatomy, and Cell Biology
Clinical Microbiology Laboratory



Our COVID Experience: Clinical Microbiology at Thomas Jefferson University Hospital

Matthew A. Pettengill PhD, D(ABMM)



Outline

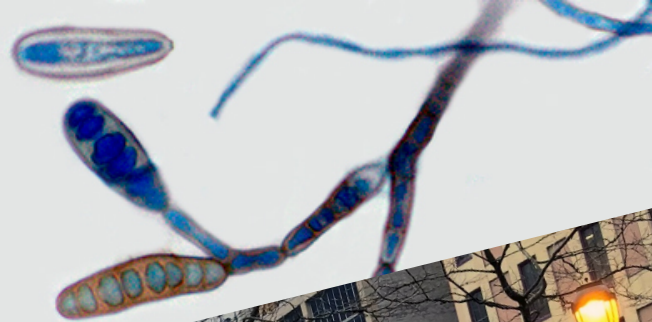
- Our COVID lab experience, TJUH/ Philadelphia
- Supply Chain – Shortages of reagents
- Shortages of Personnel
- Advocacy matters



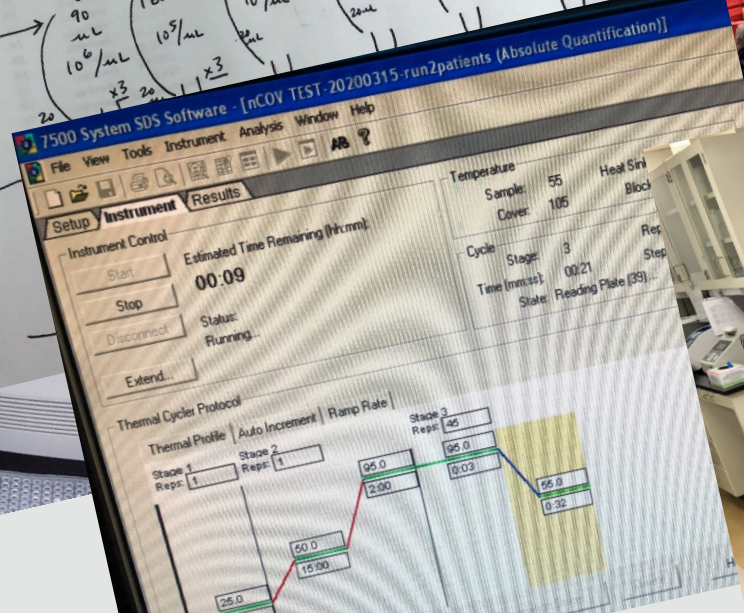
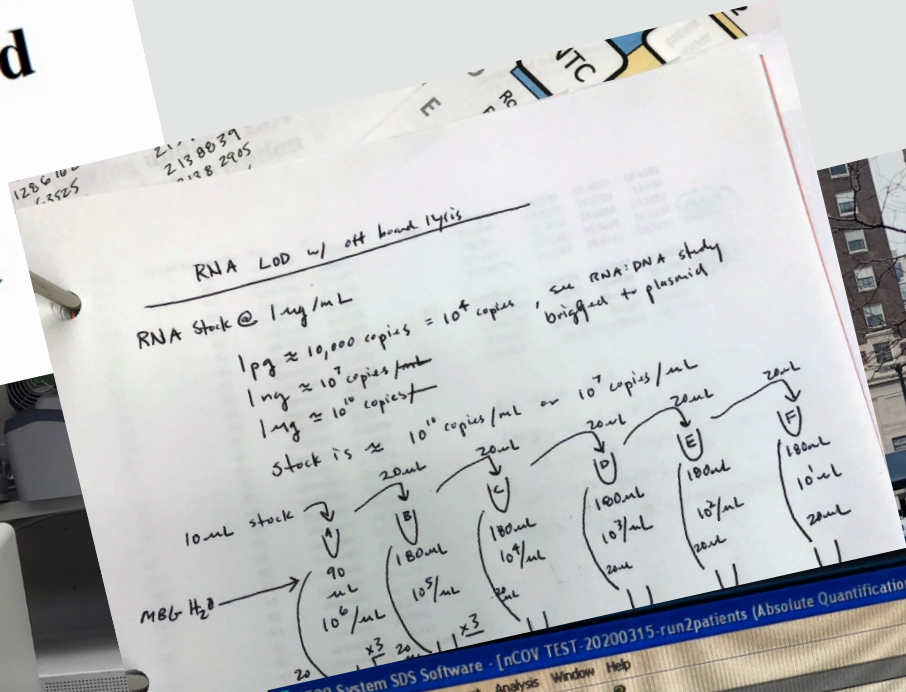
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Clinical Microbiology Laboratory



Emergency Use Authorization of Medical Products and Related Authorities Guidance for Industry and Other Stakeholders





Validation of a modified version of the CDC SARS-2CoV / COVID-19 PCR diagnostic assay:

To serve our patients and physicians at Thomas Jefferson University Hospital during the current COVID-19 pandemic, we sought to validate in house a modified version of the CDC SARS-2-CoV PCR assay. This was a collaboration between the clinical microbiology laboratory and the molecular pathology laboratory at TJUH. The following modifications were necessary due to inability to acquire the specified equipment or control material in a timely manner: PCR reactions and analysis were performed on an Applied Biosystems 7500 (software version 1.3.1), which necessitated also a slight modification to the specified annealing/extension time (from CDC protocol 30 seconds, to a modified 32 seconds), Human Specimen Control for daily external quality control was made in-house from pooled remnant nasopharyngeal swab viral transport media (4 pools made from 15-18 specimens each) and confirmed negative for N1 and N2 primer reactivity (positive for RNaseP), and whole genomic RNA from SARS-2-CoV was acquired as a kind gift from Dr. Scott Weaver with a material transfer agreement with the University of Texas Medical Branch (UTMB). We are extracting RNA using a BioMerieux Easy Mag, which was not included in the original CDC instructions for use but was included in the update to this document dated 15 March 2020. We are using CDC-validated lots of primers/probes acquired from Integrated DNA Technologies (IDT), with the exception that we are omitting use of the N3 target (we will use N1, N2, and RNaseP).

The whole genomic RNA from SARS-2-CoV from UTMB was quantified as to mass (total RNA, 10 uL received at 100 ng/uL), but not viral copies. We were informed by a representative from NIH who was coordinating viral RNA transfers for both UTMB and BEI that we should receive RNA from only one source so that this limited resource would be available to more labs (BEI's material was quantified for viral



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Journal of
Clinical Microbiology®

Understanding, Verifying, and Implementing Emergency Use Authorization Molecular Diagnostics for the Detection of SARS-CoV-2 RNA

Stephanie L. Mitchell,^a  Kirsten St. George,^b Daniel D. Rhoads,^c Susan M. Butler-Wu,^d Vaishali Dharmarha,^e Peggy McNult,^e Melissa B. Miller,^f on behalf of the American Society for Microbiology Clinical and Public Health Microbiology Committee

^aDepartment of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, USA

^bLaboratory of Viral Diseases, Wadsworth Center, New York State Department of Health, Albany, New York, USA

^cUniversity Hospitals Cleveland Medical Center, Cleveland, Ohio, USA

^dDepartment of Pathology, Keck School of Medicine of USC, Los Angeles, California, USA

^eAmerican Society for Microbiology, Washington, DC, USA

^fUniversity of North Carolina School of Medicine, Department of Pathology and Laboratory Medicine, Chapel Hill, North Carolina, USA



SARS-CoV-2 serologic test advertising on social media, June 2020

Knowing if you have COVID-19 antibodies can benefit not just you, but everyone.

An advertisement featuring two women. The woman on the left is younger with long brown hair, wearing a white surgical mask with a blue circular graphic containing the text "Should I get tested?". The woman on the right is older with short white hair and glasses, wearing a white surgical mask with a blue circular graphic containing the text "Should everyone get tested?". The background is a dark purple color.

You can get tested for COVID-19 antibodies without a doctor's referral. Find a testing location near you.

An advertisement featuring a woman with long dark hair wearing a white surgical mask with a blue circular graphic containing the text "Do I need a referral?". The background is a solid red color.

SARS-CoV-2 serologic testing was a hot topic in May/June 2020, but ultimately it has not been found to have much clinical utility.

Clinical Infectious Diseases

MAJOR ARTICLE



3-Dimensional Printed Alternative to the Standard Synthetic Flocked Nasopharyngeal Swabs Used for Coronavirus Disease 2019 Testing

Summer J. Decker,¹ Todd A. Goldstein,² Jonathan M. Ford,^{1,*} Michael N. Teng,¹ Robert S. Pugliese,³ Gregory J. Berry,² Matthew Pettengill,³ Suzane Silbert,⁴ Todd R. Hazelton,¹ Jason W. Wilson,¹ Kristy Shine,³ Zi-Xuan Wang,³ Morgan Hutchinson,³ Joseph Castagnaro,² Ona E. Bloom,² Dwayne A. Breining,² Barbara M. Goldsmith,³ John T. Sinnott,¹ Donna Gentile O'Donnell,³ James M. Crawford,² Charles J. Lockwood,¹ and Kami Kim¹

¹University of South Florida, Morsani College of Medicine, Tampa, Florida, USA, ²Northwell Health System, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, New Hyde Park New York, USA, ³Thomas Jefferson University, Philadelphia, Pennsylvania, USA, ⁴Tampa General Hospital, Tampa, Florida, USA

Table 5. Table of Agreement for All Methods

		3DP	3DP	3DP	Total
		+	-	Inconclusive	
FLNP	+	74	2	3	79
FLNP	-	4	203	1	208
FLNP	Inconclusive	0	2	2	4
Total		78	207	6	291

Bold indicates agreement. Abbreviations: 3DP, 3-dimensional printer; FLNP, flocked nasopharyngeal.

*95.88% Agreement, Kappa 0.901.

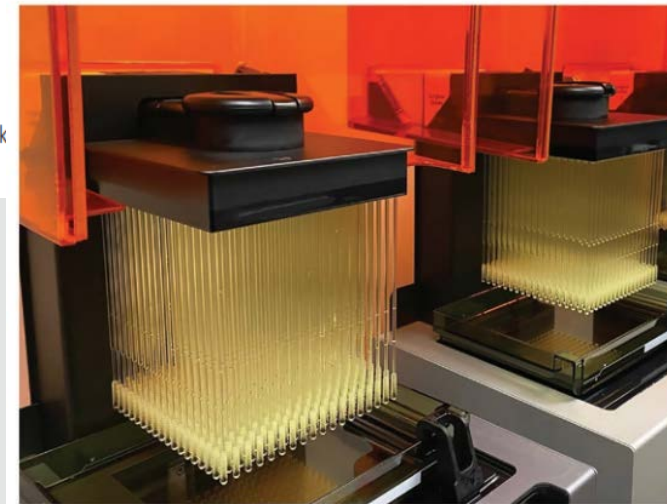


Figure 1. 3-dimensional model of 3-dimensional printer swabs and 2 batches of 324 swabs.



Sean Chadwick, an instructor in the biotechnology program, works on producing viral transport media for one of an estimated 10,000 testing kits. Also pictured: biotechnology student-volunteers and teaching assistants Ellen Robinson and Austin Pendergast.

In-house production of viral transport media, TJU Biotechnology Program under the leadership of Scott Gyga PhD, and Sean Chadwick: students generated ~ 30K VTM collection kits.



Extraction-Free Methods for the Detection of SARS-CoV-2 by Reverse Transcription-PCR: a Comparison with the Cepheid Xpert Xpress SARS-CoV-2 Assay across Two Medical Centers

Andrew Cameron,^a Nicole D. Pecora,^{a,b} Matthew A. Pettengill^c

^aUniversity of Rochester Medical Center, Clinical Microbiology, Department of Pathology and Laboratory Medicine, Rochester, NY

^bUniversity of Rochester Medical Center, Department of Microbiology and Immunology, Rochester, New York, USA

^cThomas Jefferson University Hospital, Department of Pathology, Anatomy, and Cell Biology, Philadelphia, Pennsylvania, USA

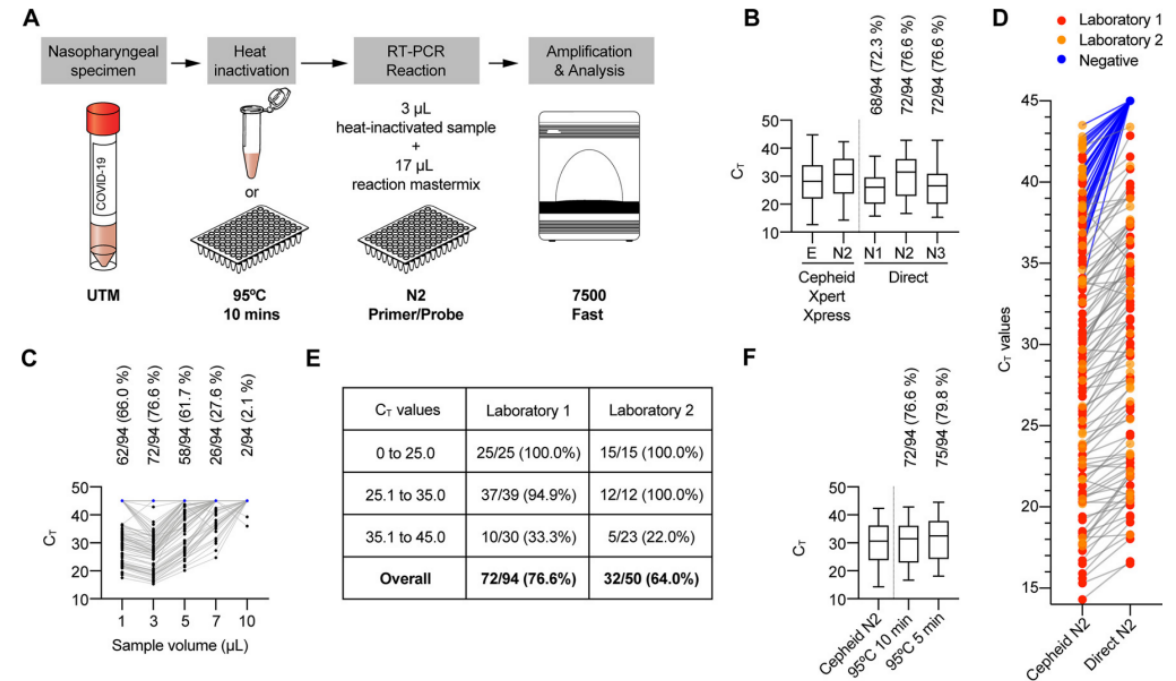


FIG 1 Extraction-free SARS-CoV-2 N2 screening. (A) Generalized direct PCR procedure. (B) The performance of the N2 primer/probe pair was most comparable to that seen with the Cepheid N2 target. (C) Optimization of sample volume in reaction mixture. (D) Direct N2 C_T values compared to initial Cepheid N2 C_T value (negative = C_T value of 45). (E) Performance of Direct N2 screening by C_T value and performing laboratory. (F) Shorter heat inactivation duration modestly increased performance.

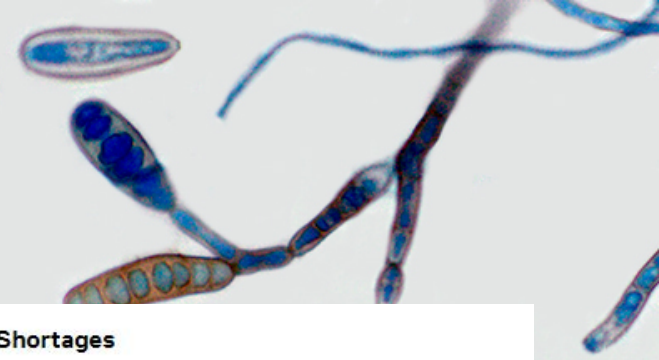


Supply Shortages Impacting COVID-19 and Non-COVID Testing

Jan. 19, 2021

SHARE THIS 

COVID-19 brought unprecedented challenges to clinical laboratories. While U.S. labs strove to provide quality and accurate test results in the face of 2020's adversity, the uncertainty and lack of supplies were a significant hurdle, hindering day-to-day laboratory operations and the ability to increase testing capacity.



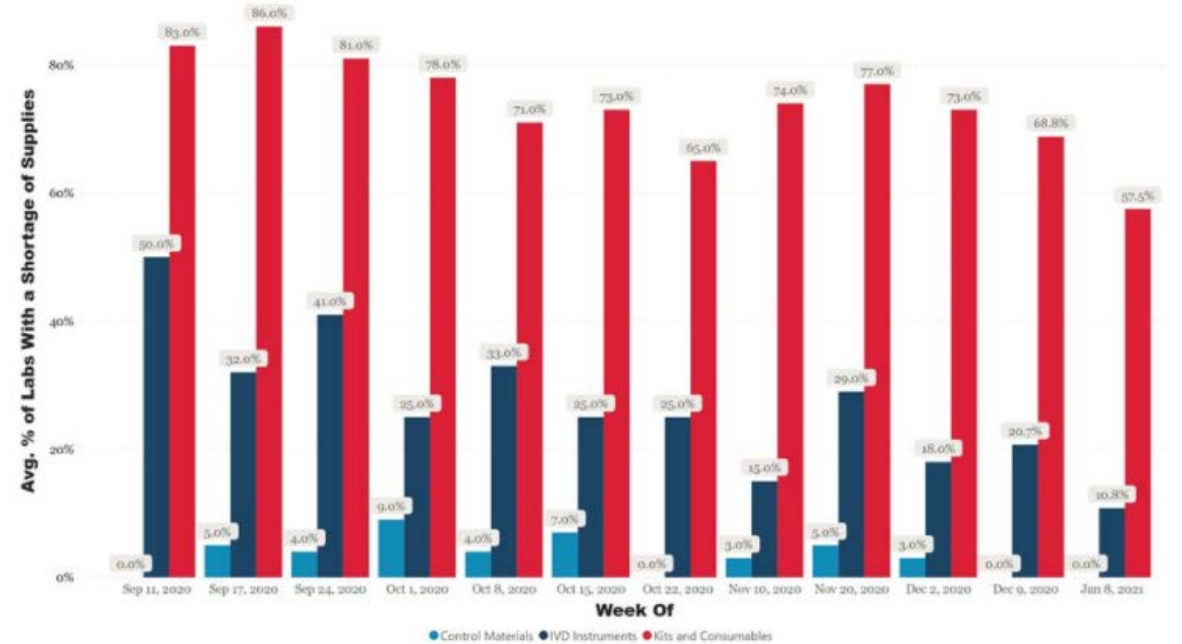
Supply Shortages Impacting COVID-19 and Non-COVID Testing

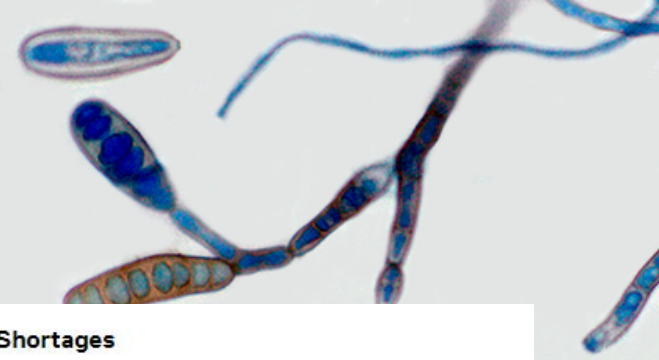
Jan. 19, 2021

[SHARE THIS](#)

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COVID-19 Commercial Molecular Assay Testing Supplies Shortages





COVID-19 Commercial Molecular Assay Testing Supplies Shortages



Supply Shortage of COVID-19 and

Jan. 19, 2021

[SHARE THIS](#)

COVID-19 brought unprecedented challenges to provide quality and accurate tests and lack of supplies were a significant barrier and the ability to increase testing capacity.

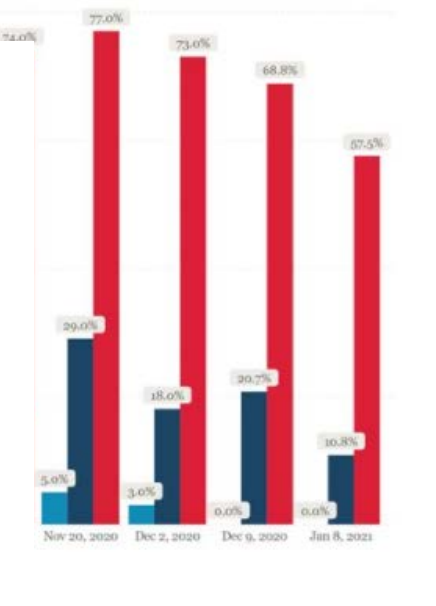
Non-COVID-19 Laboratory Testing Supplies Shortages

Avg. % of Labs With a Shortage of Supplies

Week Of	Bacteria	Fungi	Myco	Parasite	STI
Sep 11, 2020	94.0%	47.0%	14.0%	0.0%	88.9%
Sep 17, 2020	80.0%	58.0%	13.0%	9.0%	67.5%
Sep 24, 2020	67.0%	53.0%	21.0%	8.0%	77.8%
Oct 01, 2020	64.0%	33.0%	17.0%	0.0%	72.7%
Oct 08, 2020	67.0%	50.0%	19.0%	5.0%	69.6%
Oct 15, 2020	53.0%	39.0%	23.0%	8.0%	53.8%
Oct 22, 2020	47.0%	50.0%	15.0%	0.0%	57.1%
Nov 10, 2020	56.0%	12.0%	27.0%	14.0%	65.8%
Nov 20, 2020	39.0%	5.0%	35.0%	18.0%	70.0%
Dec 02, 2020	51.0%	29.0%	39.0%	16.0%	46.0%
Dec 09, 2020	58.0%	21.0%	26.0%	11.0%	59.0%
Jan 08, 2021	48.0%	19.0%	29.0%	9.0%	35.0%



LOW %  HIGH %





Our local shortages:

- Haemophilus test media (agar)
- Chromogenic MRSA agar plates
- Mueller Hinton plates
- LJ and LJ Gruft slants
- Thioglycollate broth
- UTM/VTM
- eSwabs
- Automated ID and AST broth tubes – delays and allocations due to glass shortage
- Rapid Strep A antigen tests
- Syndromic panel backorders – GI Panel, ME Panel, BCID Panel
- C. difficile PCR
- Pipette tips
- AFB/mycobacteriology Probes – MTB, M. avium complex
- Biochemical bacterial and yeast identification panels
- Fecal lactoferrin immunochromatographic tests
- Glass slides
- Spreading loops / plasticware
- **PEOPLE!!!**



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AJCP / ORIGINAL ARTICLE

The American Society for Clinical Pathology's 2018 Vacancy Survey of Medical Laboratories in the United States

Edna Garcia, MPH,¹ Iman Kundu, MPH,¹ Melissa Kelly, PhD,² and Ryan Soles, MS²

From the ¹American Society for Clinical Pathology (ASCP) Institute of Science, Technology, and Policy, Washington, DC; and ²ASCP Evaluation, Measurement, and Assessment Department, Chicago, IL.

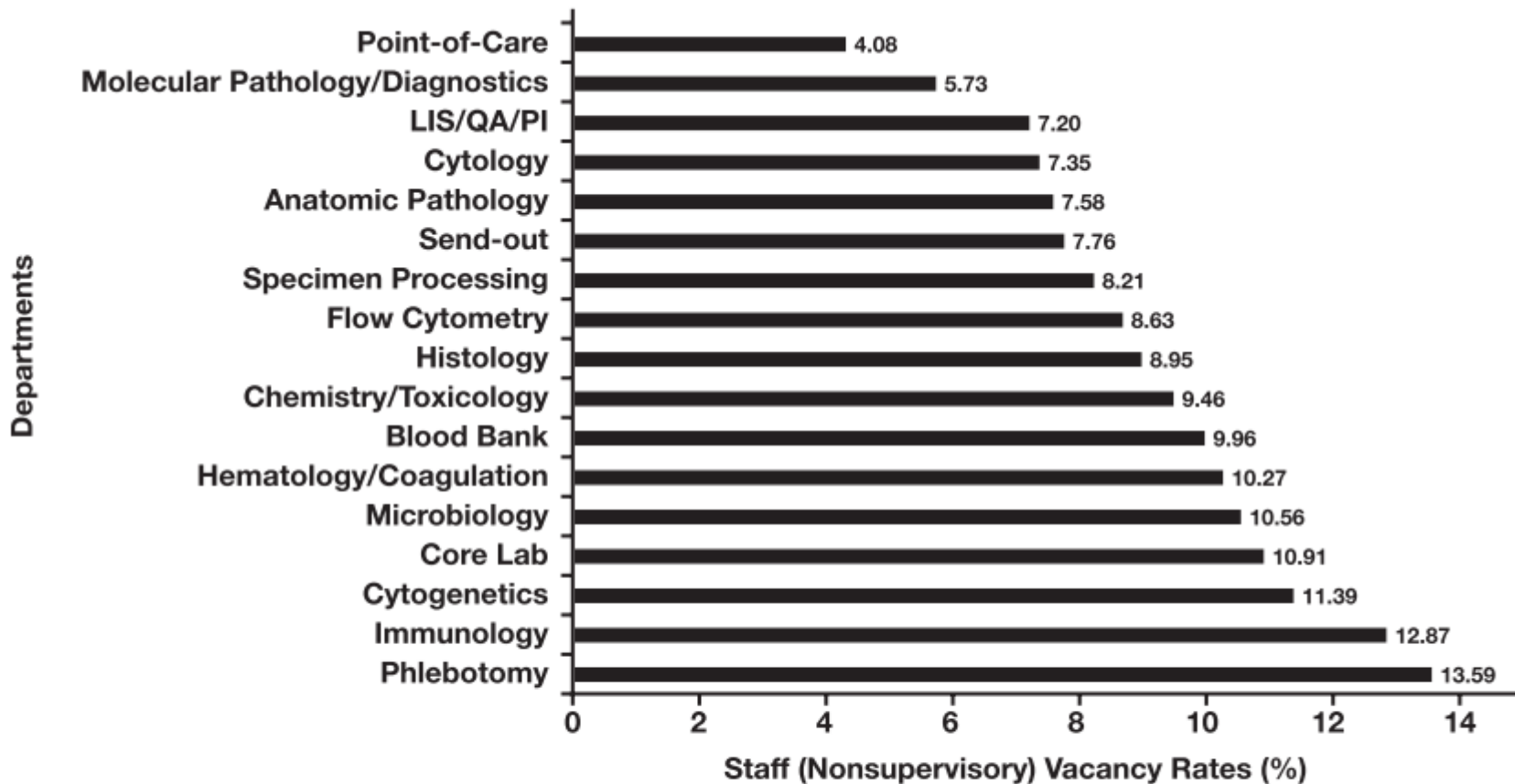


Figure 2 Staff (nonsupervisory) vacancy rates by laboratory department. LIS/QA/PI, laboratory information system/quality assurance/performance improvement.

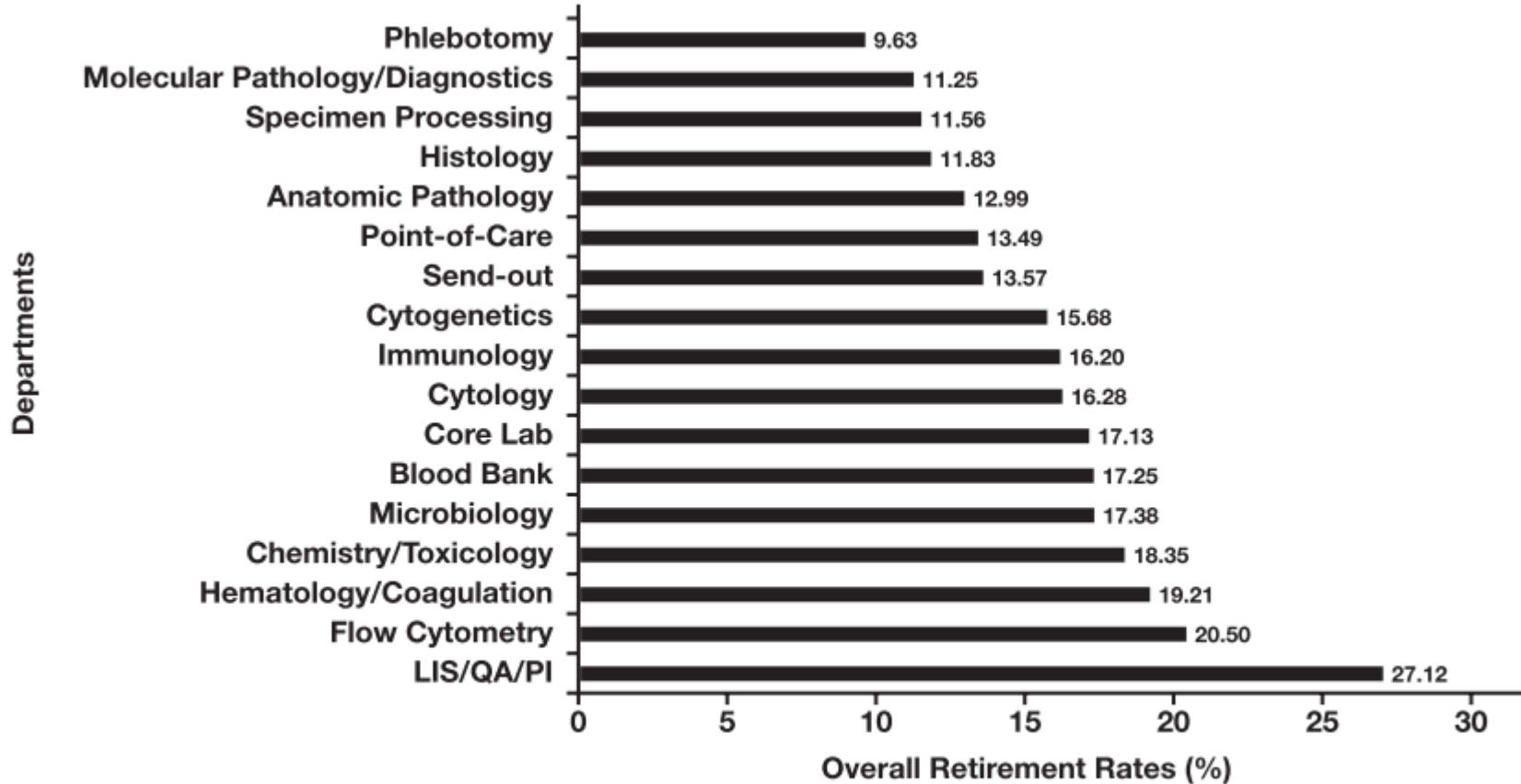


Figure 4 Overall retirement rates (anticipated in the next 5 years) by laboratory department. LIS/QA/PI, laboratory information system/quality assurance/performance improvement.



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117TH CONGRESS
1ST SESSION

H. R. 5602

To amend the Public Health Service Act to establish a Bio-Preparedness and Infectious Diseases Workforce Loan Repayment Program.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 15, 2021

Mrs. TRAHAN (for herself and Mr. MCKINLEY) introduced the following bill; which was referred to the Committee on Energy and Commerce



.....

SEC. 2. ESTABLISHMENT OF A BIO-PREPAREDNESS AND INFECTIOUS DISEASES WORKFORCE LOAN REPAYMENT PROGRAM.

Subpart 3 of part E of title VII of the Public Health Service Act (42 U.S.C. 295f et seq.) is amended by inserting after section 776 (42 U.S.C. 295f-1) the following:

“SEC. 776A BIO-PREPAREDNESS AND INFECTIOUS DISEASES WORKFORCE LOAN REPAYMENT PROGRAM.

.....



.....

“(I) certification as a physician assistant;

“(J) a doctor of public health;

“(K) a master of public health;

“(L) a master of science in epidemiology;

“(M) a bachelor of science in medical technology;

“(N) certification in medical technology or as a medical lab scientist;

.....



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AMERICAN
SOCIETY FOR
MICROBIOLOGY

October 21, 2021

The Honorable Lori Trahan
U.S. House of Representatives
Rayburn House Office Building
Washington, DC 20515

The Honorable David McKinley
U.S. House of Representatives
Rayburn House Office Building
Washington, DC 20515

Dear Representative Trahan and Representative McKinley:

On behalf of the American Society for Microbiology (ASM), we write to express our support for H.R. 5602, the Bolstering Infectious Outbreaks (BIO) Preparedness Workforce Act of 2021. Many of ASM's 30,000 members work in clinical microbiology laboratories in a range of urban and rural settings; including, but not limited to, academic and university-based medical centers, large healthcare systems, private community hospitals, independent laboratories, and public health laboratories. This bill is an important step forward in addressing the clinical microbiology laboratory professional shortages that our field has experienced for several years now, coupled with the lack of federally-funded programs to address financial barriers to entering the field.





Jefferson
Thomas Jefferson University

**Department of Pathology, Anatomy, and Cell Biology
Clinical Microbiology Laboratory**



In addition to personnel challenges, laboratories continue to be stretched thin with supply shortages and increased demand from all angles (COVID-19 diagnostic and surveillance testing and routine clinical testing)). Personnel and supply constraints are negatively affecting testing for infectious agents like strep, RSV, hepatitis C, TB, screening for antimicrobial resistance, and soon- possibly flu. Many labs cannot pivot easily due to lack of resources and diversity of testing platforms, and this is especially true in underserved areas. We are pleased that the legislation's provisions aim to assist clinical laboratory professionals working in medically underserved areas

and aim to boost the number of professionals working in biopreparedness from populations already underrepresented in healthcare.

We thank you for your leadership in sponsoring this legislation and recognizing the need to support a strong pipeline of clinical microbiologists, clinical laboratory scientists and other health care professionals. Supporting professionals working in biopreparedness will ensure a strong workforce to address the next pandemic or other health emergency our nation may face. If you have any questions, please contact Mary Lee Watts, ASM Director of Federal Affairs at mwatts@asmusa.org or 571-228-8345.

Sincerely,

A handwritten signature in black ink that reads "Melissa B. Miller".

Melissa B. Miller, PhD
Chair, ASM Clinical and Public Health
Microbiology Committee

A handwritten signature in black ink that reads "Stacey Schultz-Cherry".

Stacey L. Schultz-Cherry, PhD
Chair, ASM Public and Scientific
Affairs Committee



TJUH Clinical Microbiology Staff

Jenna Meloni	Effimia Chatzimanoli	Michele McKenna
Sara Goss	Eileen Andris	Niketa Patel
Mark Sterner Jr	Heather Kelly	Olivia Truong
Karishma Naik	Hevikaben Patel	Payal Patel
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Anjana John	Janki Patel	Preston Ball
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Ashley Clark	Joanne Hardesty	Vijaykumar Patel
Bernice McLaughlin	Kanyeba Ilunga	Yasmeen Jordan
Bonnie Roseman	Kevin Moore Jr	Ivana Jones
Christine Slovik	Kwesi Morrison	Katarina Johnson
Conrad Onuoha	Maria Kim	Simranjit Mehat
David Wilds	Michael Steiner	Elia Harmatz

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Run Jin	Ashley Anthony
Kairong Li	Christopher Stein
Carly Darnell	Faisal Tabari
Valerie Williams	Lisa Joseph
Shannon Mahoney	Hannah Jenkinson
Robert Vander Meulen	Gabrielle Pae

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Dr. Barbara Goldsmith	George Marrone
Dr. Zi-Xuan Wang	Kim Brown
Dr. Doug Stickle	Ramane Jones
Dr. Scott Gyax	Sharon Falasco
Laughlin Rice	

The background features a stylized globe with various icons and network-like lines. The globe is centered and has a light blue and white color scheme. There are several circular nodes connected by lines, some with arrows pointing outwards. The overall aesthetic is clean and modern, typical of a professional presentation.

MENTIMETER ACTIVITY



Go to www.menti.com and use the code **4877 4703**

What were your most challenging supply chain issues through 2020?



Press **ENTER** to pause scroll



Go to www.menti.com and use the code **4877 4703**

What were/are your most challenging supply chain issues from January 2021 through now?

 Mentimeter

Press **ENTER** to pause scroll



The background features a stylized globe with various icons and network-like lines connecting different points. The globe is rendered in a light, semi-transparent style, allowing the text to be clearly visible. The overall color palette is dominated by blues and greys, with some accents of orange and yellow.

SUPPLY CHAIN LESSONS LEARNED

JOE SAAD, MD, FCAP
COLLEGE OF AMERICAN PATHOLOGISTS



COLLEGE of AMERICAN
PATHOLOGISTS

Supply Chain Lessons Learned

A CAP Presentation for the OneLab
Network

A. Joe Saad, MD, FCAP
Vice Chair, CAP Council on Government
and Professional Affairs

October 28, 2021

About the CAP's Surveys

- **The CAP surveyed laboratories it accredits to evaluate the impact of the pandemic on pathologists and laboratories.**
- **These studies were fielded over the course of a year:**
 - April 2020
 - June 2020
 - February 2021
- **The data that follow are taken from these surveys and focus on the issue of laboratory shortages.**
- **These data have informed the CAP's advocacy and engagement with Congress and the Administration.**

More than half of respondents are in practices that offer PCR tests

February 2021: Which of the following COVID-19 testing does your laboratory currently perform on-site?
(select all that apply)

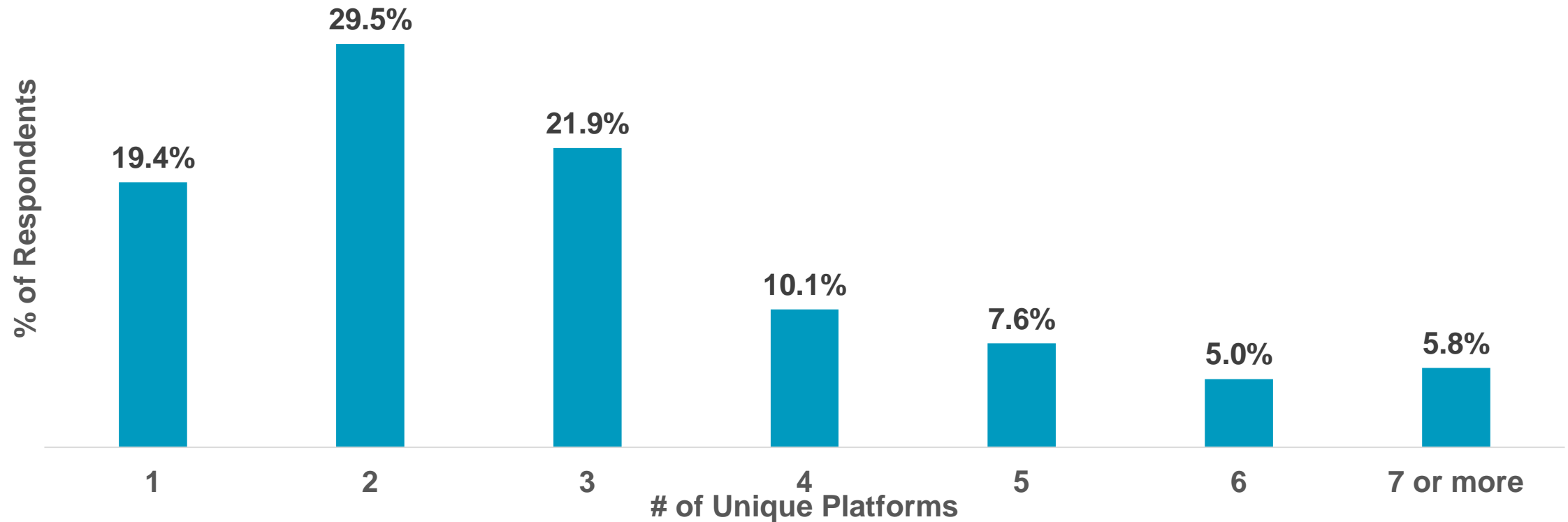
	All Respondents		CLIA Laboratory Directors only	
	%	n	%	n
Molecular (PCR) high throughput testing	52%	307	50%	74
Molecular (PCR) non-high throughput testing	53%	316	62%	91
Antigen testing	37%	221	39%	57
Antibody testing	49%	292	57%	83
None, COVID-19 testing is not performed on-site	11%	66	13%	19
Unsure	7%	41	1%	2
Total	595		147	

Academic, Community Hospitals, and Larger Practices are All Likely to Offer PCR Testing

	Setting			Practice Size (# of FTEs)				
	Academic medical center (n=219)	Non-academic hospital (n=235)	Independent Laboratory (n=56)	<6 (n=150)	6-10 (n=91)	11-20 (n=80)	21-50 (n=79)	>50 (n=22)
Molecular (PCR) high throughput testing	71.7%	39.6%	41.1%	25.3%	66.3%	73.4%	90.9%	54.9%
Molecular (PCR) non-high throughput testing	51.6%	64.7%	19.6%	56.0%	50.0%	57.0%	59.1%	52.7%
Antigen testing	34.7%	46.8%	23.2%	43.3%	32.5%	45.6%	22.7%	35.2%
Antibody testing	52.5%	51.9%	37.5%	48.7%	56.3%	65.8%	40.9%	48.4%
None	1.4%	3.4%	46.4%	19.3%	6.3%	2.5%	0.0%	12.1%
Unsure	10.5%	5.5%	3.6%	3.3%	10.0%	6.3%	4.5%	5.5%

Nearly 80% of laboratories providing COVID-19 testing have more than one testing platform; nearly half have 3 or more platforms

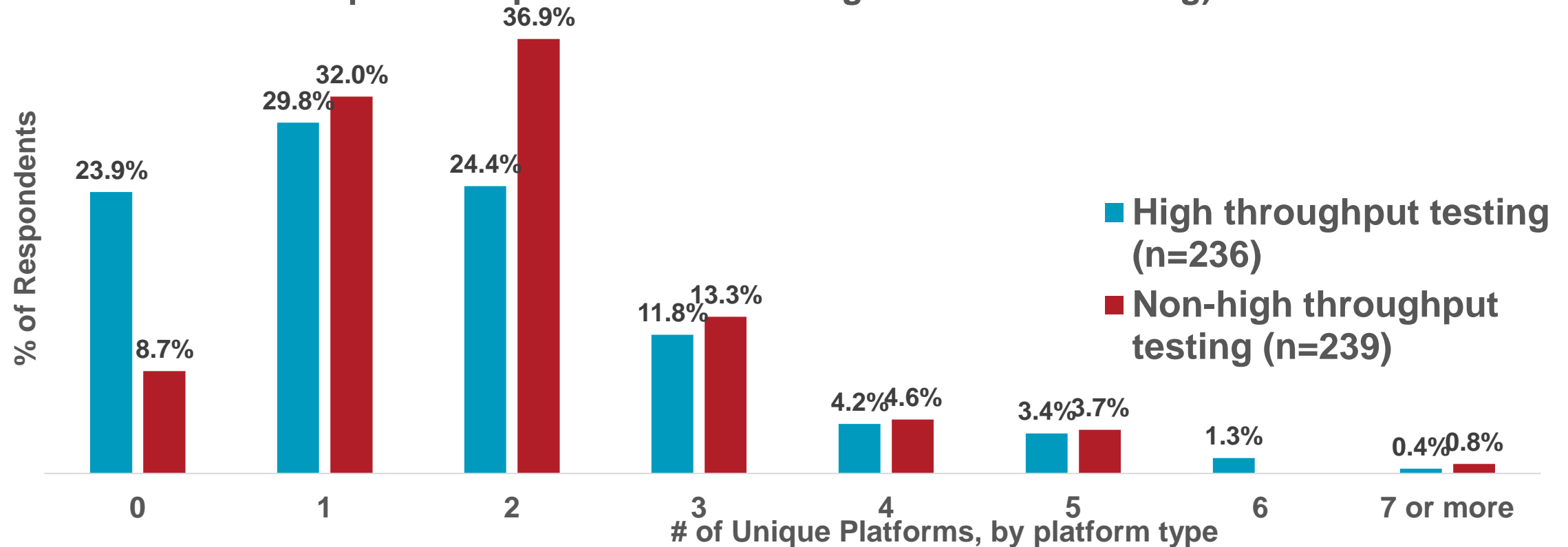
On how many different (unique) platforms does your laboratory perform molecular (PCR) COVID-19 testing? (Includes only respondents whose practices provide PCR or antigen COVID-19 testing)



***Note: Excludes one observation of 80 High Throughput PCR platforms and one observation of 100 High Throughput PCR platforms**

Many laboratories have multiple versions of the same type of testing platform (high throughput vs. non-high throughput)

On how many different (unique) platforms does your laboratory perform molecular (PCR) COVID-19 testing? (Includes only respondents whose practices provide PCR or antigen COVID-19 testing)



*Note: Excludes one observation of 80 High Throughput PCR platforms and one observation of 100 High Throughput PCR platforms

Laboratory directors reported problems acquiring reagents, pipette tips for COVID-19 testing; other supplies still difficult to acquire for some laboratories

Testing item	February 2021	June 2020	April 2020
Reagents for platforms/test kits	45%	64%	69%
Pipette tips	30%	-	-
SARS-COV-2 instruments	19%	43%	42%
Flocked nasopharyngeal swab	18%	60%	66%
Viral transport media/universal transport media	17%	55%	62%
Personal protective equipment (PPE)	16%	30%	42%
Assay positive control material	15%	25%	24%
Extraction control material	14%	34%	30%
Extraction platform	13%	42%	40%

Many laboratory directors report difficulties in acquiring adequate staffing for COVID-19 testing

Staffing Item	CLIA Laboratory Directors (n= 129)
Specimen collection personnel (nurses, physicians, phlebotomists, etc.)	35.7%
COVID-19 testing personnel	43.4%
Accessioners	23.3%
Other staffing difficulties	17.1%
No staffing difficulties	38.8%
n	129

Lessons Learned

Lessons Learned

- **Testing supplies will be strained as laboratories ramp up capacity and meet demands for testing in their communities during health crises.**
- **Our health care system needs a reliable supply source for testing materials during pandemics.**
 - Laboratories will compete for the same resources.
 - Supplies need to be targeted to “hot spots.”
- **We can improve the monitoring and communication of shortages of testing supplies when they occur.**
- **We need to address the workforce pipeline for laboratory professionals.**
- **We must have testing available close to the patient.**

Recent Actions to Address Future Shortages

- **The CAP has engaged with Congress and the Administration to support various efforts to mitigate supply shortages.**
- **The FDA's 2022 budget included \$21.6 million for the new Resilient Supply Chain and Shortages Prevention Program.**
- **At the CAP, we continue to serve as a resource for federal agencies by providing them with additional information and expertise.**



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Resources

- [CAP Laboratory COVID-19 Impact Study May 2020](#)
- [CAP Laboratory COVID-19 Impact Study June 2020](#)

The background features a stylized globe with various network-like elements. A prominent dark blue arc curves across the top, with several nodes and arrows pointing upwards and to the right. A larger, lighter-colored arc curves across the middle, also with nodes and arrows. The bottom right corner shows a circular path with nodes and arrows. The overall aesthetic is clean and modern, with a color palette of blues, greys, and muted colors.

MENTIMETER ACTIVITY

Go to www.menti.com and use the code **4877 4703**

 Mentimeter

What questions do you still have regarding supply chain issues?



The background features a stylized globe with various colored dots (black, blue, orange, grey) and lines connecting them, suggesting a network or data flow. The globe is centered on the left side of the slide. The text 'Q&A' is positioned to the right of the globe's center.


Q&A

Next OneLab Network Event

Collaborative Education Event: Point of Care Testing



Registration coming soon!



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

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