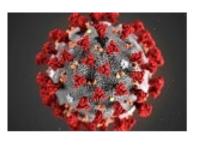
# Future of the Nation's Laboratory Systems for Health Emergency Response

Session VI Part B: Identifying Short-Term Strategies To Enhance Laboratory Capabilities, Capacities, And Coordination: Acceleration, Surge, And Long-Term Response

Strategies and Recommendations from the Association for Molecular Pathology



### Eric Q. Konnick, MD, MS Chair, AMP Professional Relations Committee

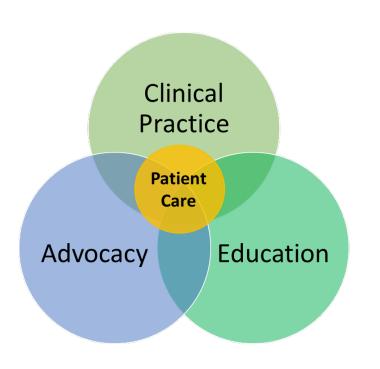
Associate Professor University of Washington Department of Laboratory Medicine and Pathology

Associate Clinical Laboratory Director
Seattle Flu Alliance (Seattle Coronavirus Assessment Network)



### Association for Molecular Pathology

A not-for-profit (501c3) scientific society



Infectious Diseases Hematopathology

rematopatholog

Solid Tumors

Inherited Disease

Informatics

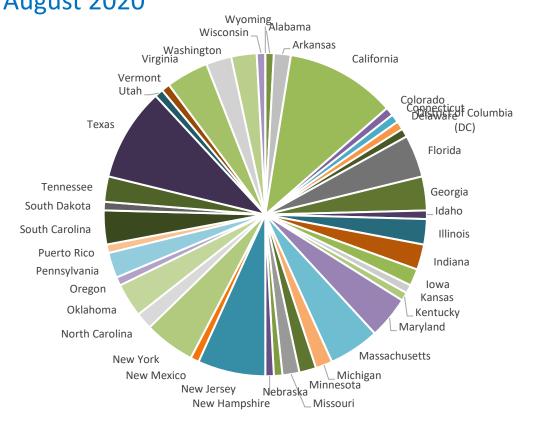


### **Focus and Recommendations**

- 1) Diversity of testing locations and modalities
- 2) Sensible regulatory oversight of laboratories during a public health emergency
- 3) Consistent and predictable reimbursement for clinical testing



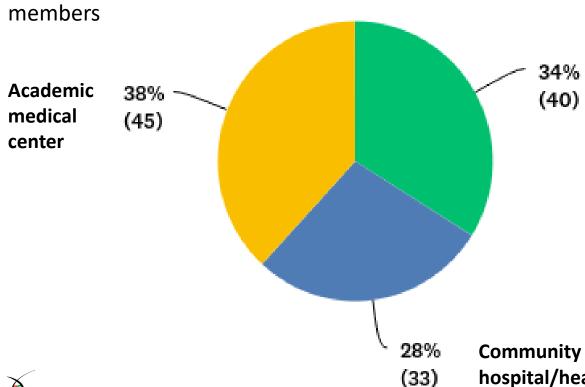
SARS-CoV-2 Molecular Testing Surveys April & August 2020





### **Demographics of Data Subset**

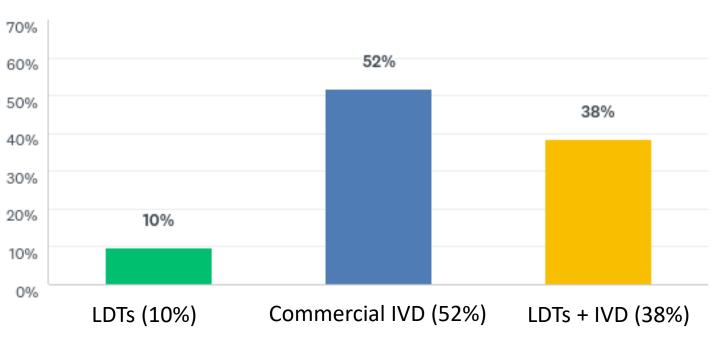
- 118 US-based laboratories only
- 95 AMP members, 23 nonmembers



Commercial reference laboratory

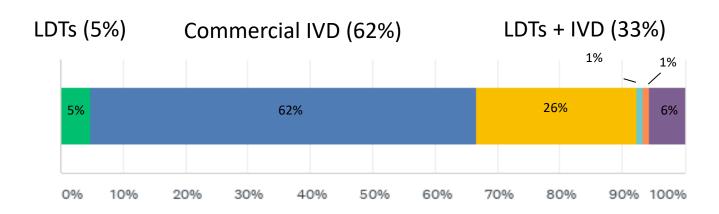
hospital/health system laboratory 5

### April 2020 - SARS-CoV-2 Testing Methodology





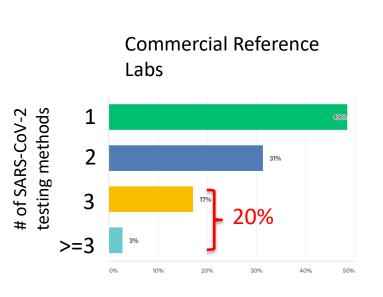
### August 2020 - SARS-CoV-2 Testing Methodology

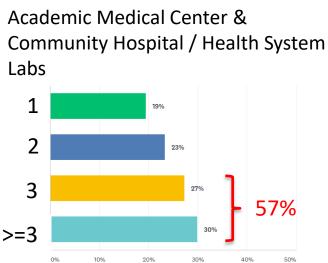


- Laboratory developed testing procedure (LDPs, also called LDTs) only
- Commercial testing kits with Emergency Use Authorization (EUA) only
- Combination of both LDPs and Commercial Kits
- Combination of both LDPs and IRB-approved/non-EUA assay
- Combination of both IRB-approved/non-EUA assay and Commercial Kits
- LDPs, IRB-approved/non-EUA assay and Commercial Kits



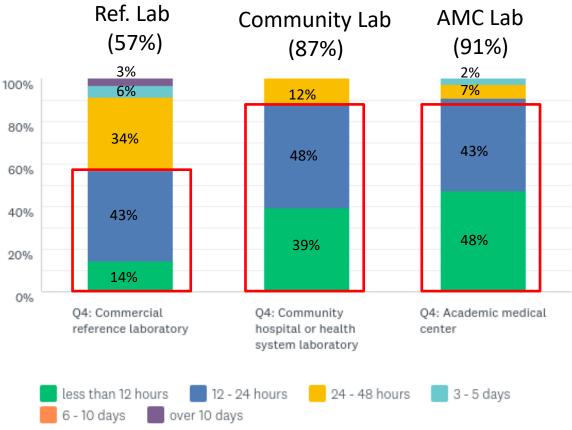
# Laboratories deployed multiple testing methodologies due to supply shortages and uncertainties





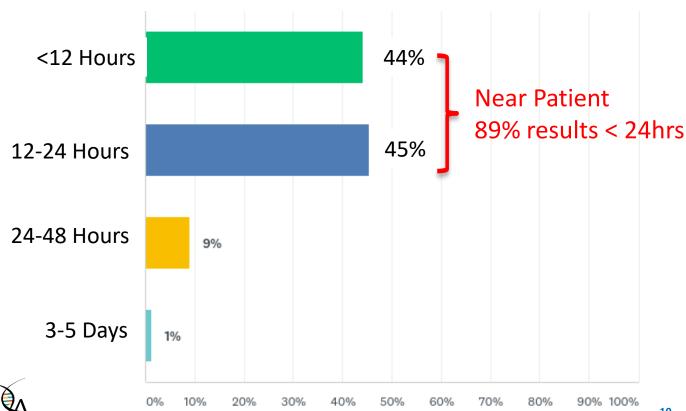


### Testing close to patient = rapid turnaround time (<=24hr)





### Testing close to patient = rapid turnaround time (<=24hr)



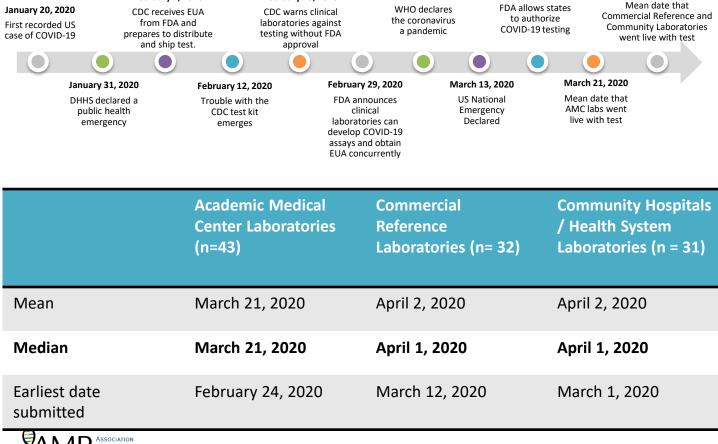
### **EUA Process**



### Laboratories acted quickly to provide testing

February 18, 2020

February 4, 2020



March 11, 2020

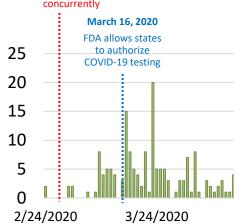
April 2, 2020

March 16, 2020

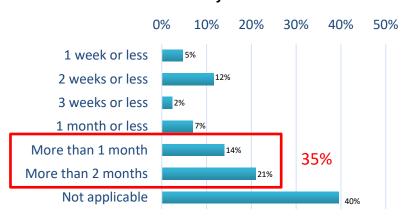
# FDA EUA process severely lagged Laboratory Efforts (APRIL 2020)

#### February 29, 2020

FDA announces clinical laboratories can develop COVID-19 assays and obtain EUA concurrently



### How long did it take your laboratory to receive an EUA from the FDA?



First Tests Launched Per day

Data shown above from all laboratory types. 43 responses total.

Data shown above combined from both April and August surveys, and represent both IVDs and LDPs from all laboratory types. 202 responses total. Data displayed through April 13, 2020 only.



# Reimbursement



### 'It will bankrupt my department': How private labs are paying the price for testing

The ACLA has requested \$5 billion to keep private labs up and running.

By Olivia Rubin

March 20, 2020, 2:59 PM







Dr. Geoff Baird, the acting chair of laboratory medicine at the University of Washington School of Medicine -- home to one of the largest COVID-19 testing labs in a state at the epi-center of the outbreak-- told ABC News his lab has spent about \$10 million since it first began testing on March 1.

"It will bankrupt my department in a month," Baird said in an interview with ABC News. "But I don't have an option; it's what's needed."

#### Focus and Recommendations

- 1. Leverage all types of clinical laboratories throughout the US
  - increase capacity and resiliency
  - support rapid turnaround times
  - including hospital and academic based laboratories, as part of the Laboratory Response Network.
- Distribute testing supplies to locations based on disease prevalence and provide access to positive control samples to validate tests.

#### 3. Regulatory

- Allow high-complexity CLIA-certified laboratories to immediately deploy testing ahead of any regulatory submission
- Streamline the EUA review process for IVD manufacturers to enable authorization within 4 weeks of submission.
- Provide adequate and predictable pathways to reimbursement for clinical testing to ensure laboratory solvency when responding to an emergency.

#### **RESOURCES**

Access AMP's Full SARS-CoV-2 Survey Reports here:



Access AMP's Whitepaper on Economics of Testing During a PHE here:





# 'It's Just Everywhere Already': How Delays in Testing Set Back the U.S. Coronavirus Response

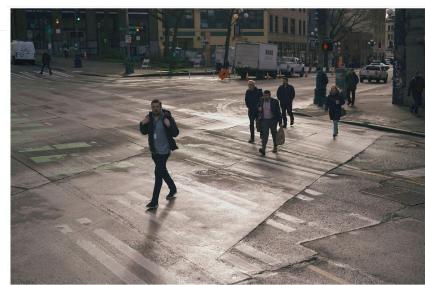
A series of missed chances by the federal government to ensure more widespread testing came during the early days of the outbreak, when containment would have been easier.





By Sheri Fink and Mike Baker

Published March 10, 2020 Updated March 16, 2021



A research project in Seattle tried to conduct early tests for the new coronavirus but ran into red tape before circumventing federal officials and confirming a case. Grant Hindsley for The New York Times

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nature > nature medicine > correspondence > article

Correspondence | Published: 22 December 2021

# The Seattle Flu Study: when regulations hinder pandemic surveillance

Michael Boeckh, Helen Y. Chu, Janet A. Englund, Christina M. Lockwood ⊡, Deborah A. Nickerson, Jay Shendure & Lea Starita

Nature Medicine 28, 7–8 (2022) | Cite this article

Nat Med. 2022 Jan;28(1):7-8. PMID: 34937879