



Tracking US Coronavirus Testing Capacity

VOLUME 5, ISSUE 8

June 15, 2022

Updated Monthly Capacity Numbers: Current EUA's

904M	814M	734M	706M	614M
February 2022	March 2022	April 2022	May 2022	June 2022

Updated estimates this week. The most significant change is a reduction in PCR lab capacity. [State](#) after [state](#) has announced that it is closing free testing sites because of a lack of federal funds. Not surprisingly, this has resulted in a reduction of capacity - although large labs are not reporting a reduction in time to results to test takers (TRTT). As for rapid-antigen manufacturing capacity, there is some reduction, but we believe manufacturers are waiting for clarity on federal spending and / or another surge to make decisions about potential slow-downs or closures.

What Happened Last Week

The FDA issued one new EUA, eight amendments to existing EUAs, and no new safety/policy communications in the past week:

- New EUAs (1):
 - Molecular (Sequencing) (1): [Labcorp VirSeq SARS-CoV-2 NGS Test](#)
- New Amendments to Existing EUAs (8):
 - Molecular Tests (4): SML Genetree Ezplex | Helix OpCo LLC | Standard BioTools Advanta Dx (2)
 - Antigen Tests (3): AccessBio CareStart Home Test | Salofa Oy | GenBody
 - Collection Kits (1): Color Health

New & Noteworthy

Commentary #1

Misleading reporting: NYT on COVID's racial inequalities

If you read "The Morning" newsletter from *The New York Times*, please read this: They misinterpreted the numbers in a recent article about COVID and race, due to a fundamental statistical error. As Dr. Katelyn Jetelina ("[Your Local Epidemiologist](#)") pointed out, yes, the overall death rate for White Americans did recently start to exceed that for Black Americans (42.9 versus 37.2 per 100,000 people; this was the premise of the NYT piece), but *only because Whites on average live longer, and age is the single biggest factor driving COVID mortality*. Adjusting for this, the more meaningful comparison is 31.4 deaths among Whites versus 39.5 deaths among Blacks per 100,000 people.

The gap in death rates between the two groups has indeed narrowed, for the reasons stated in the NYT: improved vaccination rates among communities of color due to ongoing grassroots effort vs. stagnant vaccination rates among conservative White communities due to partisan vaccine resistance. But the sad reality is that Black people are still - when age is taken into account - dying from COVID at a higher rate than White people in the US.

Commentary #2

Misleading reporting: The Atlantic on rapid tests

A recent *Atlantic* article on rapid tests' performance during the first few days of a COVID infection also gave us pause. As we all know, the virus is evolving rapidly (looking at you, BA.4 and BA.5), and our nation's immunity profile has changed dramatically due to both prior infection and vaccination. If and how these might affect test reliability moving forward are unknown. Among hypotheses covered by the article: faster development of post-exposure symptoms due to a faster immune response in a primed population; changes in the levels of infection in the nose, mouth, or lungs that might reduce the amount of virus captured in a sample; symptoms due to other respiratory viruses falsely attributed to COVID.

Even if more people are indeed testing negative during early infection (the basis for the article, an as-yet-unproven claim), they may simply be showing immune-activation symptoms before their viral load is high enough for them to be contagious. The *Wall Street Journal* also discussed the same [challenge](#). (Note: Mara is quoted in this article.) For better or worse, antigen tests have always been better suited as a test for infectiousness rather than as a test for infection. So, it is definitely possible that an antigen test will read negative and a PCR positive - especially at the start and end of an infection.

Testing innovation continues, albeit incrementally

New testing modalities for COVID continue to arrive. MicroGem recently received an EUA for the first POC saliva-based test, and Labcorp has debuted an "add-on" whole-genome sequencing test for RT-PCR-positive samples, using the leftover sample material from the initial test. Commentary: Labcorp's VirSeq SARS-CoV-2 NGS is a time-consuming process. It would only be worthwhile when variant identification has important epidemiological, research, or clinical consequences - for example, to track viral evolution in immunocompromised individuals. At the moment, we can do "cost-free" discrimination between the two sets of Omicron sub-variants in play in the US using S gene target failure (SGTF) in the Thermo TaqPath PCR test. (BA.2 and BA.2.12.1 do not have the deletion that causes SGTF, but BA.4 and BA.5 do.) If we get to a point where SGTF doesn't tell us what we need to know, Labcorp's test will have more utility.

Food for Thought

Vegas innovation: Airport slot machines and rapid-test vending machines

Getting rapid tests to underserved and at-risk populations is more important than ever given the decreased number of free testing sites. Clark County (home to Las Vegas) had a creative idea: use vending machines for distribution. Eligible people register online, get a code to put into the machine, and get up to five free tests a month. The [program](#) is a joint effort between the Southern Nevada Health District and the CDC - who presumably haven't had anything to do with the placement of Las Vegas' more famous types of machines.

The role of testing for monkeypox

The monkeypox outbreak [continues to expand in the US](#), with 49 reported cases thus far and [1600+ reported cases](#) worldwide (suspected cases double that number). We are still not worried that it will cause a COVID-like pandemic, because we already have tests, treatments, and vaccines for monkeypox - we had none of the above in the early days of COVID. Commentary: Why is testing especially important NOW? Testing, isolating positives, and thereby limiting spread is the only chance to stop monkeypox from becoming endemic here in the US.

The Good News Is...

Sticks & stones and names CAN hurt: Monkeypox getting new name

Monkeypox and its clades are in the process of getting [new, non-species, non-geographic](#) names from the WHO, just like SARS-CoV-2 variants did, thanks to the efforts of a group of scientists from Africa, Europe and North America. The goal: [decrease discrimination and stigma](#).

Latest Monthly Capacity Estimates

Test Type	Jan '22	Feb '22	Mar '22	April '22	May '22	June '22
ANTIGEN						
Antigen Professional + Point of Care EUA	187	187	181	165	156	131
Antigen OTC: Home/Self EUA	260	535	462	418	422	380
Antigen Total	447M	722M	643M	583M	578M	511M

MOLECULAR						
Molecular Professional, Point of Care, OTC EUA	36	36	34	33	32	30
Lab Based PCR	125	130	124	108	90	68
Add'l Lab Based PCR with Pooling	16	16	12	11	7	5
Molecular Total	177M	182M	171M	151M	128M	103M

Total Test Capacity	624M	904M	814M	734M	706M	614M
----------------------------	-------------	-------------	-------------	-------------	-------------	-------------

Editors Mara G. Aspinall, Arizona State University
Liz Ruark, DVM, COVID-19 Response Advisors

Contributors Sarah Igoe, MD, Arizona State University
Simon Johnson, PhD, Massachusetts Institute of Technology

Designer Grace Gegenheimer, Health Catalysts Group

Technology Casey Miller, Health Catalysts Group

*Based on published reports, company interviews, and proprietary analysis.
Content and commentary represents the views of the editors alone and not their organizations.
A collaboration between Health Catalysts Group & COVID-19 Response Advisors.
www.healthcatalysts.com & www.covidresponseadvisors.org*