



MEMORANDUM

Date: November 19, 2021

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Leshner 
Chief Deputy County Administrator

Re: **COVID-19 Testing Strategy Expansion**

Pima County has provided, coordinated and supported COVID-19 testing for individuals in this community throughout this pandemic. Our Health Department was among the first in the country to create the infrastructure for SARS-CoV2 testing when it was not readily available in Arizona ensuring the equitable distribution of this resource. By July of 2020, the County began operating testing sites in collaboration with a variety of contractors and partners.

Since the beginning of the pandemic, over 2,264,000 tests have been performed in Pima County. Currently, testing is broadly available at over 88 different fixed sites including retail pharmacies, urgent cares, grocery stores, medical offices and other locations scattered throughout Pima County. These fixed locations are robustly supplemented with mobile efforts that bring testing into schools, long term care facilities, churches, low-income housing and other community settings. The vast majority of testing is available at no cost to individuals who are symptomatic and those who are close contacts of COVID-19 cases. The Health Department and Analytics & Data Governance have built a robust dashboard that provides real time situational awareness of the utilization and distribution of testing within Pima County. (Attachment)

One critical component of our strategy has been placing rapid antigen testing kits (for self-administered as well as supervised use) into the hands of community members. More than 93,000 of these rapid antigen testing kits have been distributed predominantly through schools, churches, first responders, behavioral health agencies, the health department and starting this week through the Pima County Public Library system.

Testing Approaches

The public health goal for testing is to quickly identify infected individuals for the purpose of informing and modifying individual behavior to interrupt transmission. To achieve this goal, we rely largely on two testing modalities: Reverse Transcriptase Polymerase Chain Reaction (PCR) and Antigen (Ag) testing.

The PCR tests detect very small fragments of the SARS-CoV2 virus in the specimen collected from an individual. Sometimes the amount of viral material detected is so small that the individual may not be capable of infecting others. The PCR test is more expensive compared to other testing modalities. It requires an approved laboratory with specialized equipment and requires trained staff to handle and process the specimen. Typically, results are obtained and

communicated within 24 to 48 hours, and individuals who have symptoms test are required to isolate until that time.

Rapid antigen tests detect viral proteins expressed on the surface of the SARS-CoV2 virus. Antigen testing is performed on site in mobile or static settings. It does not require special laboratory processing, and a broad range of personnel (even patients) can conduct the specimen collection, testing and interpretation of results. Most importantly the results are available within 15 to 20 minutes, and are communicated within a few hours when performed at a test site or are available immediately when self-administered.

The Health Department has invested substantial effort in creating capacity by supporting and resourcing a broad range of community entities in the use of rapid antigen testing. Schools, long-term care facilities, and other entities have been provided with supervised point of care antigen testing to ensure easy access and availability to their users. Thousands of self-collection antigen test kits have been distributed (as noted above) at community events, to schools, community partners, libraries and many other entities to ensure individuals can easily test when they are exposed to COVID-19, have symptoms, or other reasons that may warrant COVID-19 testing. Supporting proctored point of care testing and distributing self-test antigen kits to schools has allowed for efficient identification of COVID-19 cases, identified multiple outbreaks, and permitted students returning to classroom when uninfected. These efforts have broad user acceptance and respond to community demand for immediate actionable testing information.

Testing Capacity Costs

Testing is presumed adequate within a community when 1.5 tests per 1000 individuals are performed on a daily. By this measure Pima County residents should be testing at just over 1500 tests per day. There are no specific recommendations for the relative proportion of PCR or Antigen testing.

At the current time, the volume of testing in Pima County exceeds this goal thanks to County sponsored as well as non-sponsored sites and is a remarkably similar volume compared to the first half of the winter surge last year. However, the substantial gradual increase in test positivity beyond the 3% threshold suggests that a substantial increase in testing is justified.

Current testing costs are approximately \$160,000 per week for the sites operated by the County and its contractors. At this rate the Health will exhaust its funding from federal and state sources by December 2021. However, based on the current state of the pandemic, the Health Department proposes to continue testing at a robust level and to expand the availability of laboratory-based Antigen and PCR testing performed by our vendors. This is in addition to continued expansion of our current self-administered test distribution strategy. The estimated costs for doubling testing to approximately 3000 tests/day and increasing the availability of PCR testing (e.g. increase by 1500/day to include 750 PCR and 750 Antigen) is estimated at \$200,000/week.

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This increased volume and intensity of testing is projected to continue to be required well into spring. Based on this projected expenditure level, we ask that the Board consider earmarking an initial \$3 million from its ARPA contingency funds for the provision of supporting testing capacity. Additionally, given the substantial resources required to purchase testing capacity and the likely need to continue this services into the future, it is appropriate to build capacity within the Health Department in the first quarter of 2022 to conduct this type of large scale rapid antigen testing at its own facilities to decrease our reliance on contractors and control the costs associated with this service.

JL/dym

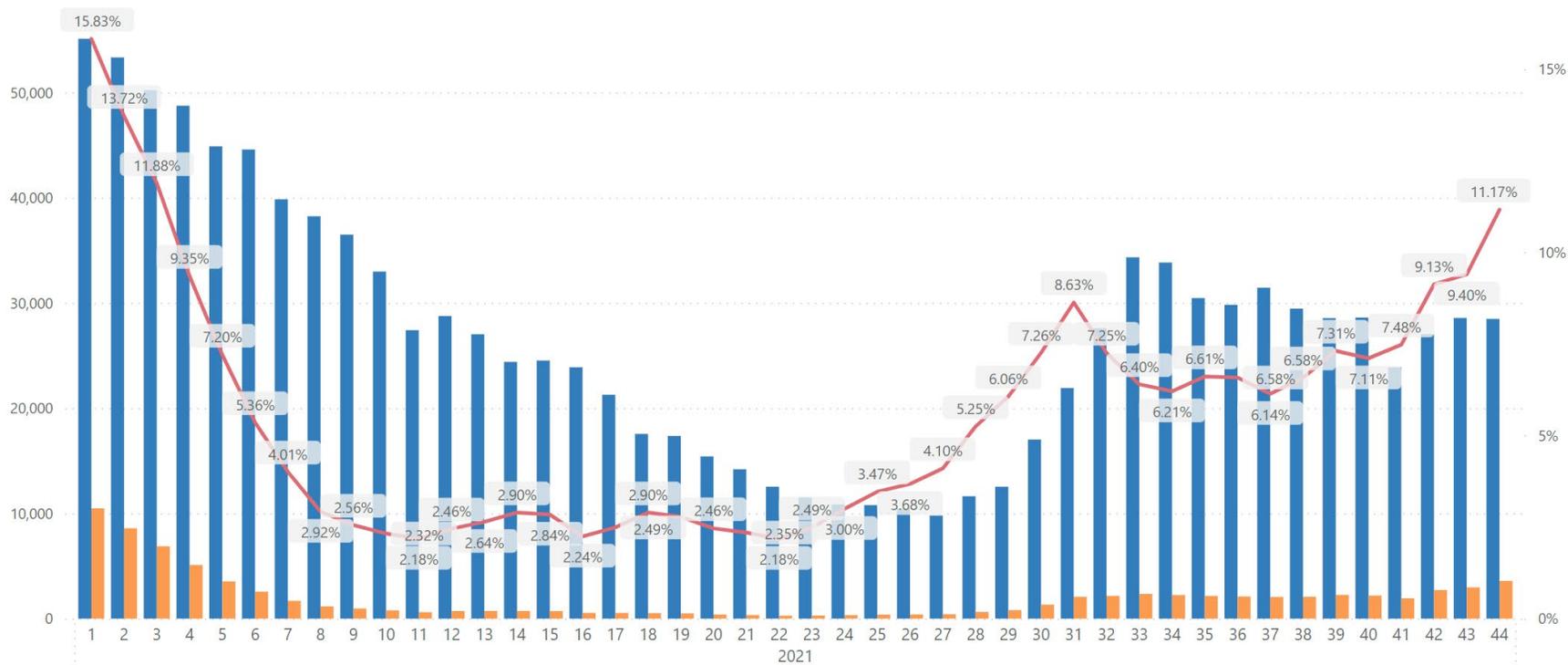
Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator for Public Works
Francisco García, MD, MPH, Deputy County Administrator & Chief Medical Officer,
Health and Community Services

| Testing Facility | Testing | Current Facilities | Current negotiated cost | Avg Turnaround Time | Utilization |
|---|--|---|--|---------------------|---|
| Paradigm Lab | Nasal PCR Antigen | 5 including TIA | PCR: \$110.00 Antigen: \$34.00 | 1.12 days | PCR: 351,148 Antigen: 34,400 ~\$46,900,000 billed |
| ASU | PCR Saliva | Elle Town Open 6 days/week, 4 hrs/day | Funded through AzDHS on | 24-48 hours | ~150 tests per day; ~900 tests/week |
| PMG | Antigen | None currently active | PCR: \$100.25 Antigen: \$34.25 | 4 hours | ~ 9,000 |
| Mobile - through MC3 | Rapid Antigen | 6 mobile testing sites in the last 3 months | Personnel time; funded by grant | 15 minutes | |
| Pima County Schools | Antigen Pooled testing PCR testing | All public, private, charter, parochial schools with a CLIA waiver for antigen testing | \$0; distributed by the state | 15 minutes | |
| Pima County Self-Tests | Proctored Antigen | Multiple sites | PCHD obtains tests from state for free; distributed to public at no cost; one person present with demo info collected at distribution | 15 minutes | ~20,000 per week distribution anticipated |
| Independent Pima County Testing Facilities | PCR Antigen | Multiple, including pharmacies, providers' offices, FQHC, VHA, hospitals | Depends on symptomatic or not | | |

Aggregate Weekly Testing Trend

Result ● Negative ● Positive — % Positive



*Weekly Diagnostic Testing Trend, all zip codes, all labs; 1/3/21 – 11/6/21; includes antigen and PCR tests, not serology; total n = 1,290,733