#### 2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

|                  | 0           |
|------------------|-------------|
| Jurisdiction:    | Michigan    |
| Population Size: | 9.9 million |

#### 1. Describe the overarching testing strategy in your state or jurisdiction.

Michigan is on pace to conduct 465,000 total tests, or over 2 percent of its population, in May 2020 and has plans to expand testing substantially from here. The state has set a near-term goal of reaching 15,000 diagnostic tests per day and a medium-term goal of reaching 30,000 diagnostic tests per day (approximately 900,000 individuals per month or about 9 percent of the state's population). In mid-May 2020, Michigan averaged about 17,000 total tests completed per day and about 14,400 diagnostic tests per day.

a) Michigan is maximizing use of testing platforms by partnering with a wide range of laboratories to conduct testing. Over 70 entities in the state have some testing capability, whether as a CLIA high-complexity laboratory conducting PCR tests or as a CLIA waived entity conducting point-of-care tests. Together, these entities report capacity to test 25,000 per day if corresponding supplies were available; however, supply shortages continue to significantly restrict Michigan's testing capability.

At least 57 hospital laboratories, 13 (nine with four more expected soon) in-state commercial laboratories, four tribal partners, and six public health laboratories, including the Michigan State Laboratory, have COVID-testing capabilities. Michigan medical providers also regularly send specimens to national commercial laboratories like Quest, LabCorp, and BioReference.

The Michigan State Laboratory has strategically worked to ensure that high-throughput instruments in the state are fully utilized. This includes providing technical assistance to laboratories as they validate tests on that equipment, working directly with test kit manufacturers to ensure allocation of materials to those labs, and providing specimen collection materials when needed to maximize throughput on those machines. For example, Roche high-throughput instruments are in use at McLaren Flint and Sparrow (Lansing) hospitals; the State Laboratory has an overflow contract with Sparrow, so that extra samples from public health uses are testing using their high throughput equipment. Similarly, high-throughput Thermo Fisher equipment is used by NxGen commercial laboratory and others throughout the state. Michigan works directly with Thermo Fisher on allocation strategy to supply these machines and ensure corresponding specimen collections. Finally, the State Laboratory is currently in the process of validating a test on the Hologic Panther system, with capacity to process several hundred tests per day.

For rapid point-of-care testing, four hospital systems in Michigan have received allocations of tests (McLaren, Spectrum, Ascension, and St. Joseph's), as well as the City of Detroit and a CVS-operated drive

through testing site. The State itself has received modest allocations of the kits and has distributed them to regional public health laboratories, state hospitals, and the Department of Corrections. While these tests have made an important contribution to the state's testing capacity, and could be quite valuable for rapid testing in high-risk scenarios (e.g., new admissions to congregate care settings), the state has not been able to purchase sufficient supplies to distribute to these settings, though the state continues to place orders for them through the CDC IRR as instructed. Based on conversations with hospital systems that have received larger allocations, many hospitals have opted to use the kits for hospitalized patients, those in the emergency department, or similarly acute situations.

The State is simultaneously pursuing several approaches to expand testing capacity:

- 1) Continuing work to procure needed supplies, match supply types allocated by FEMA to laboratories able to accept them (e.g., Michigan's first May shipment of foam swabs), and optimize the match of collection materials from FEMA, test kits and reagents from manufacturers, and specimen collection staff from various sources.
- 2) Continuing to provide technical assistance to laboratories working to validate COVID-19 testing on their platforms, including new commercial laboratories and academic laboratories, and discussing with all laboratories the types of supplies with stronger supply chains versus those with interruptions.
- 3) Exploring opportunities to purchase additional laboratory capacity from out-of-state and national commercial laboratories, as needed.
- b) Michigan has supported test sites across a very wide range of entities; over 250 test sites currently operate in the state. The vast majority of Michigan's testing capacity consists of PCR tests rather than point-of-care tests, so these sites largely consist of specimen collection, which is sent to a laboratory for processing.

#### Settings include:

1) Hospital-affiliated and primary care test sites: numerous hospitals across the state manage drive through test sites that serve the broader community and utilize the hospital's laboratory to process samples. Similarly, many urgent care and primary care settings, including over 70 federally qualified health centers, operate test sites, serving general symptomatic individuals with a particular focus on low-income populations. As the COVID-19 response evolves and transitions into a longer-term state, Michigan will work to substantially expand testing in primary care settings, especially as hospitals

transition their staff and laboratory capacity to support screening of patients coming in for general procedures.

2) National retail pharmacy sites: Michigan has worked with CVS, Kroger, Rite Aid, Walgreens, and Walmart to support approximately 20 specimen collection sites across the state. Some of these operate as large-scale drive through sites. Others operate as smaller-scale drive through sites at retail pharmacies. Finally, a few operate as drive-up sites at grocery or big box stores, with a pharmacist coming out to the car to supervise specimen collection.

The variety of these sites provide Michiganders with diverse testing options to meet their needs. The State has also consulted with each pharmacy around geographic areas that need additional testing resources, to site locations where they will be most impactful.

Moving forward, Michigan will continue to explore the role that pharmacies can play in a longer-term testing access strategy.

- 3) Congregate care facilities: Michigan is working to facilitate broad testing within several types of congregate care facilities, including skilled nursing facilities, adult foster care, prisons, jails, homeless shelters, and settings that host migrant agricultural workers. The Michigan National Guard has assisted with specimen collection throughout the prison system and is now collecting specimens at jails and long-term care facilities. Michigan continues to plan how best to complete testing on-site in other congregate care facilities, including potential staff support for specimen collection where needed or simply provision of collection materials, where facilities have staff able to collect specimens.
- A) Neighborhood testing locations: Michigan plans to establish at least 20 neighborhood testing sites, serving approximately 100 people each per day, sited in marginalized communities based on epidemiological analysis of rates of comorbid conditions, other risk factors, distance from existing test sites, and limited household access to vehicles. Together, this information suggests that the specific ZIP codes selected face high risk of COVID-19 infections and little access to existing test sites. Each site will partner with one or more community organizations (e.g., neighborhood centers, faith-based organizations, etc.) to host the site and serve as a trusted ambassador to the community to encourage underserved populations to access testing.
- 5) Mobile testing: To supplement the fixed-site locations highlighted above, Michigan is also working to expand a successful mobile testing pilot, which currently operates at a variety of sites in Detroit and nearby cities each day. Mobile testing complements other aspects of the strategy in several ways: by filling access gaps in fixed-site locations, by providing a flexible and nimble approach that can

respond to emerging hotspots over time, and by partnering closely with community organizations to create convenient testing options for underserved communities.

- 6) Sentinel surveillance: Michigan is using the influenza-like illness (ILI) sentinel surveillance network to monitor a semi-random sample of flu-negative patient specimens from participating medical providers for COVID-19 across the state. Currently, this encompasses approximately 250 samples per week but will ramp up to 1,200 samples per week in the medium term.
- c) The State Public Health Lab of Michigan is working with several academic partners to plan potential serological studies of COVID-19 presence in the population. Given the utility and limitations of serology testing, the State is interested in using it to understand patterns of COVID-19 spread.
- d) Michigan has several ongoing touch points with the testing community in the state to align on overall strategy and implementation.

Most notably, the State hosts a weekly call with laboratories statewide to share information and discuss the state's testing strategy. In advance, each laboratory submits information on their average daily throughput, maximum possible throughput with existing supplies, and maximum possible throughput with unconstrained supplies, to provide a statewide picture of laboratory processing capacity. Each laboratory also submits information on supply status for collection materials, test kits, and reagents to provide a similar statewide picture of supply needs. Personnel and staffing has not been a challenge noted by laboratories during the pandemic. Laboratories are also able to submit supply requests to the State Laboratory in at any time, and the State Laboratory fulfills these requests using FEMA supplies and occasional ad hoc solutions to prevent any laboratory from running out.

The State is also in ongoing communication with additional partners in testing, including the Michigan Health and Hospital Association and local health departments. These partners are included in the state's pandemic response work groups and thus are directly involved in planning the response together.

MDHHS has also undertaken public communications activities to promote testing. The department launched a social distancing mass media campaign at the beginning of April. This campaign has included television, radio, print, digital and social media advertisements that make the public aware of the risks related to COVID-19 and the importance of social distancing measures, including sheltering at home.

As the State of Michigan increased its COVID-19 testing capacity and encouraged individuals to get tested more broadly, MDHHS has added new content and messaging to the campaign asking that

eligible individuals get tested. We currently have multiple TV and radio spots running that encouraging testing and targeted social media ads promoting the availability of testing at specific locations.

Table #1a: Number of individuals planned to be tested, by month

| BY MONTH:    | May-20  | Jun-20  | Jul-20  | Aug-20    | Sep-20    | Oct-20    | Nov-20    | Dec-20    | TOTAL     |
|--------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Diagnostics* | 450,000 | 705,000 | 930,000 | 1,050,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 7,935,000 |
| Serology     | 2,000   | 3,000   | 7,000   | 10,725    | 10,725    | 10,725    | 10,725    | 10,725    | 65,625    |
| TOTAL        | 452,000 | 708,000 | 937,000 | 1,060,725 | 1,210,725 | 1,210,725 | 1,210,725 | 1,210,725 |           |

Table #1b: Planned expansion of testing jurisdiction-wide

| Name of testing entity  | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)  |
|---|---------------------------------------|---|--|---------------------------------------|---|---|
| Michigan Bureau of<br>Laboratories (MDHHS)                                | Public<br>health lab                  |   | 2,000                                  | 1,000                                 |   | Uninsured, high risk congregate care, healthcare workers, critical infrastructure, underserved and homeless |
| Michigan Region 2N<br>(Oakland County<br>Health Department<br>Laboratory) | Public<br>health lab                  |   | 500                                    | 100                                   |   | Uninsured, high risk congregate care, healthcare workers, critical infrastructure, underserved and homeless |

| Name of testing entity  | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)  |
|---|---------------------------------------|---|--|---------------------------------------|---|---|
| Michigan Region 3<br>(Saginaw County<br>Health Department<br>Laboratory)                          | Public<br>health lab                  |   | 500                                    | 100                                   |   | Uninsured, high risk congregate care, healthcare workers, critical infrastructure, underserved and homeless |
| Michigan Region 5<br>(Kalamazoo County<br>Health Department<br>Laboratory)                        | Public<br>health lab                  |   | 500                                    | 100                                   |   | Uninsured, high risk congregate care, healthcare workers, critical infrastructure, underserved and homeless |
| Michigan Region 6<br>(Kent County Health<br>Department<br>Laboratory)                             | Public<br>health lab                  |   | 500                                    | 100                                   |   | Uninsured, high risk congregate care, healthcare workers, critical infrastructure, underserved and homeless |
| Michigan Region 7 (Health Department of Northwest Michigan/Northern Michigan Regional Laboratory) | Public<br>health lab                  |   | 500                                    | 100                                   |   | Uninsured, high risk congregate care, healthcare workers, critical infrastructure, underserved and homeless |

| Name of testing entity                                 | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)                      |
|--|---------------------------------------|---|--|---------------------------------------|---|---|
| Helen Joy Newberry                                     | Hospitals or clinical facility        |   | 100                                    | 25                                    |   | Rural population  |
| War Memorial   | Hospitals or clinical facility        |   | 160                                    | 25                                    |   | Rural population  |
| Garden City Hospital &<br>Lake Huron Medical<br>Center | Hospitals or clinical facility        |   | 160                                    | 25                                    |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |
| Schoolcraft Memorial<br>Hospital                       | Hospitals or clinical facility        |   | 40                                     | 25                                    |   | Rural population  |
| VA Medical Center Ann<br>Arbor                         | Hospitals or clinical facility        |   | 100                                    | 100                                   |   | Verteran population,<br>homeless, under insured                             |
| Hurley   | Hospitals or clinical facility        |   | 160                                    | 100                                   |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |

| Name of testing entity   | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)                       |
|--|---------------------------------------|---|--|---------------------------------------|---|--|
| Upper Peninsula<br>Health System-<br>Marquette (DLP<br>Marquette General<br>Hospital | Hospitals or<br>clinical<br>facility  |   | 100                                    | 25                                    |   | Rural population   |
| Upper Peninsula<br>Health System- Portage  | Hospitals or clinical facility        |   | 25                                     | 25                                    |   | Rural population   |
| OSF Healthcare St.<br>Francis Hospital and<br>Medical Group                          | Hospitals or clinical facility        |   | 25                                     | 25                                    |   | Rural population   |
| Munson Health<br>Systems   | Hospitals or clinical facility        |   | 1,000                                  | 250                                   |   | Rural population, high risk migrant worker population, tourist area of state |
| U of M   | Hospitals or<br>clinical<br>facility  |   | 800                                    | 500                                   |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients  |

| Name of testing entity                | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)           |
|---------------------------------------|---------------------------------------|---|--|---------------------------------------|---|--|
| Laboratory Specialists<br>of Michigan | Commercial or private lab             |   | 25                                     | 0                                     |   | High risk population   |
| Michigan State<br>University          | Other                                 |   | 700                                    | 0                                     |   | congregate care settings,<br>overflow testing for other<br>sites |
| Memorial Healthcare -<br>Owosso       | Hospitals or clinical facility        |   | 250                                    | 25                                    |   | Rural population   |
| Orchard Toxicology                    | Commercial or private lab             |   | 1,000                                  | 0                                     |   | Paired with drive up testing                                     |
| NxGen MDX                             | Commercial<br>or private<br>lab       |   | 10,000                                 | 0                                     |   | Paired with drive up testing                                     |

| Name of testing entity       | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)     |
|------------------------------|---------------------------------------|---|--|---------------------------------------|---|--|
| Vibra Health<br>Laboratories | Commercial<br>or private<br>lab       |   | 1,000                                  | 0                                     |   | Paired with drive up testing                               |
| Progenity                    | Commercial<br>or private<br>lab       |   | 750                                    | 0                                     |   | Paired with drive up testing                               |
| Helix Dagnostics             | Commercial<br>or private<br>lab       |   | 1,000                                  | 0                                     |   | Paired with drive up testing, home nursing/hospice         |
| Trident Biometrics           | Commercial<br>or private<br>lab       |   | 500                                    | 1,000                                 |   | Paired with drive up testing                               |
| Garcia                       | Commercial<br>or private<br>lab       |   | 2,000                                  | 1,000                                 |   | Department of corrections and paired with drive up testing |
| Genemarkers                  | Commercial<br>or private<br>lab       |   | 700                                    | 0                                     |   | Paired with drive up testing                               |

| Name of testing entity | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)                      |
|------------------------|---------------------------------------|---|--|---------------------------------------|---|---|
| Arctic Laboratories    | Commercial<br>or private<br>lab       |   | 500                                    | 0                                     |   | Paired with drive up testing  |
| LynxDx                 | Commercial<br>or private<br>lab       |   | 500                                    | 0                                     |   | Paired with drive up testing  |
| Northwest labs         | Commercial<br>or private<br>lab       |   | 500                                    | 0                                     |   | Paired with drive up testing  |
| Olive Biosciences      | Commercial<br>or private<br>lab       |   | 2,500                                  | 0                                     |   | Paired with drive up testing  |
| Detroit Medical Center | Hospitals or clinical facility        |   | 1,000                                  | 1,000                                 |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |

| Name of testing entity | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)                      |
|------------------------|---------------------------------------|---|--|---------------------------------------|---|---|
| Sparrow                | Hospitals or clinical facility        |   | 1,500                                  | 1,000                                 |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |
| McLaren                | Hospitals or<br>clinical<br>facility  |   | 500                                    | 500                                   |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |
| Beaumont               | Hospitals or<br>clinical<br>facility  |   | 2,000                                  | 500                                   |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |
| Spectrum               | Hospitals or<br>clinical<br>facility  |   | 1,500                                  | 500                                   |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |

| Name of testing entity               | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all)                      |
|--------------------------------------|---------------------------------------|---|--|---------------------------------------|---|---|
| Hawthorne Center                     | Hospitals or clinical facility        |   | 10                                     | 0                                     |   | State Psychiatric Center  |
| Trinity Health Systems               | Hospitals or<br>clinical<br>facility  |   | 3,000                                  | 1,000                                 |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |
| Ascension Health Systems             | Hospitals or clinical facility        |   | 2,000                                  | 500                                   |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |
| Bronson                              | Hospitals or clinical facility        |   | 200                                    | 50                                    |   | homeless, congregate care,<br>high risk tertiary medical<br>center patients |
| Michigan Technological<br>University | Hospitals or clinical facility        |   | 400                                    | 25                                    |   | Rural population  |
| Forensic Fluids                      | Commercial<br>or private<br>lab       |   | 1,000                                  | 1,000                                 |   | Saliva for home care testing  |

| Name of testing entity                      | Testing venue (select from drop down) | Performing Lab (if different from testing entity) | Daily<br>diagnostic<br>through-<br>put | Daily<br>serologic<br>through-<br>put | Platforms or devices used<br>(list all) | Specific at-risk populations<br>targeted<br>(list all) |
|---|---------------------------------------|---|--|---------------------------------------|---|--|
| Center for Forensic<br>Psychiatry of Saline | Hospitals or clinical facility        |   | 10                                     | 0                                     |   | State Psychiatric Center                               |
| Walter Reuther                              | Hospitals or clinical facility        |   | 10                                     | 0                                     |   | State Psychiatric Center                               |
| Caro Center                                 | Hospitals or clinical facility        |   | 10                                     | 0                                     |   | State Psychiatric Center                               |
| Kalamazoo Psychiatric<br>Center             | Hospitals or clinical facility        |   | 10                                     | 0                                     |   | State Psychiatric Center                               |

# 2020 Direct Expansion of SARS-COV-2 Testing by Health Departments

#### 2. Describe your public health department's direct impact on testing expansion in your jurisdiction.

a) Over 70 entities in the state have some testing capability, whether as a CLIA high-complexity laboratory conducting PCR tests or as a CLIA waived entity conducting point-of-care tests. Together, these entities report capacity to test 25,000 per day if corresponding supplies were available; supply shortages continue to significantly restrict Michigan's testing capability. That includes numerous hospital laboratories, commercial laboratories in-state, and public health laboratories. To maximally utilize available capacity, Michigan is working closely with each of these labs to allocate available collection materials, to monitor ability to procure test kits and reagents from manufacturers, and to collect them with medical providers conducting testing, if needed.

Michigan plans to expand capacity in several ways. First, and most significantly, the State continues to work tirelessly to procure needed supplies to ensure that laboratory capacity available can be utilized. Second, the State Laboratory continues to provide technical assistance to new laboratories working to bring testing online. Third, the State is in active conversations with many commercial laboratories out-of-state around purchasing additional materials and laboratory processing capacity.

b) As discussed in question one, the State is currently utilizing the National Guard to conduct broad-based testing in congregate settings during May 2020. This includes testing all state prisoners, offering to test all jail inmates, and offering to test long-term care facilities as needed, working closely with local health departments that have already tested long-term care facilities in some counties. The State expects that the National Guard will be a key resource in testing additional congregate settings, including adult foster care settings and homeless shelters. Finally, the State is working to expand testing for migrant agricultural workers, partnering with local health departments and employers. The State is currently planning longer-term arrangements for how recurrent testing will occur in each of these settings, including supply availability and staff to collect specimens.

In terms of other populations, health care workers in hospitals remain a top testing priority, and hospitals have taken the lead in ensuring their testing. Health care workers in other settings are also a priority population; staff have been offered testing during National Guard testing visits and may also access drive through test sites to secure testing.

Finally, racial and ethnic minorities have been a key focus of Michigan. Governor Whitmer has established a Racial Disparities Task Force to recommend actions to reduce observed racial disparities in COVID-19 outcomes. The Task Force is highly involved in efforts to expand neighborhood test sites, which focus on underserved and majority-minority ZIP codes, expand mobile testing, increase

connections to primary care during testing, and provide safe isolation options for individuals with COVID-19 exposure.

c) The State monitors barriers in both sample collection sites and in corresponding laboratory capacity. For sample collection sites, the State conducted a survey of all test sites in operation, including their average daily number of patients served, daily maximum capacity with existing supplies, and daily maximum capacity with unlimited supplies, as well as information on the site's practices and supply chain. Importantly, the survey asked sites to identify barriers to reaching full capacity, if running below capacity.

The State is working to resolve many of the barriers identified in the survey, for example by broadening the types of medical providers that can order COVID-19 testing, by advertising sites with available capacity, by partnering with community organizations to help drive more patient traffic to locally-available sites, and by simplifying the patient journey to test sites, increasing the clarity of public information, and expanding resources available to help patients navigate the testing process (e.g., call center staff, one-stop-shop website for finding test site and scheduling appointment). Going forward, the State is assessing the cadence and subjects of ongoing information collection to help navigate patients to test sites with capacity.

In terms of laboratory capacity challenges, as described in question one, the State has several means of monitoring laboratory throughput and supply chain challenges and some ability to work with sites to resolve challenges, specifically by allocating swabs provided by FEMA. The State has made significant strides in matching sample collections with available laboratory capacity and is broadly making efficient use of available laboratory capacity (when corresponding supplies are available).

d) Michigan plans to expand capacity and develop successful strategies for serology testing in several ways. The first is through a data coordination team comprised of the state public health lab, clinical, and commercial partners. The team members will each be sharing collected serology data from the platforms available at their site. This team will identify potential pitfalls and help address testing concerns from outside entities. The state will ensure an array of testing availability, namely by clinical lab partners, is available for populations deemed appropriate for surveillance, at risk of exposure due to a known encounter, or as possible pre-PCR screening. The greatest immediate interest is in determining seroprevalence of specific populations. Although the state's public health laboratory will assess multiple FDA EUA approved ELISA options, it is anticipated that a high-throughput, automated system, such as the BioRad will be selected. Partners in the coordination team are known to be using Roche and Abbott systems currently.

Michigan is intending to perform a large-scale, longitudinal cohort, seroprevalence survey beginning in fall and carrying forward until the end of the next respiratory season. Cohort groups of healthcare

workers, first responders, child-care workers, critical infrastructure workers, corrections employees, and general public will be recruited for participation under an approved public health research study format. Study parameters will allow for collection of both molecular and serum over set time points. Collaborating partners at Michigan State University and University of Michigan are expected. Positive molecular results will have viral sequencing performed and tracked to determine risk to the state's population of changes that may affect immune status in future years.

Michigan will closely monitor the national body of research in regard to utility of serology, specifically tied to either naturalizing antibody status, use as a diagnostic aid, or for possible "return to work / immune passport". Educational information regarding serology will be developed and released to various interest groups such as healthcare providers, general public, first responders, students, and others as requested.

- e) The Michigan Department of Health and Human Services (MDHHS) plans to use the resources provided by the Paycheck Protection Act to support testing and contact tracing in several primary areas:
- 1) Direct testing costs for vulnerable populations. The State will cover the costs of testing key vulnerable populations that either lack insurance or for whom the State is directly providing specimen collection. This includes incarcerated individuals, homeless individuals, individuals in skilled nursing facilities or adult foster care facilities, and migrant agricultural workers. Broad-based testing in these settings will provide surveillance information to quickly identify COVID-19 outbreaks.
- 2) Expanding community-based testing. The State will also use the funds to support expanded drive through testing sites in key cities, providing high-volume testing capacity for lower-risk populations like asymptomatic critical infrastructure workers. The State will also support 20+ neighborhood testing sites targeted to underserved and marginalized communities and expanded mobile testing with 10+ teams and vehicles focused on emerging "hotspots" and areas with limited testing access. Together, these tactics will support a high volume of daily testing, multiple testing options depending on each individual's needs, and testing services for typically underserved communities to ensure that all Michiganders have access to testing.

The sites will both expand the state's overall sample collection capacity and support a transition to community-based and primary care-based specimen collection as hospitals begin restarting non-essential procedures, shifting staff and laboratory capacity currently utilized for COVID-19 to those activities. Broad-based testing in these settings will provide surveillance information to quickly identify COVID-19 community spread.

- 3) Expanding the contact tracing workforce and technology capabilities. Funding will support hiring approximately 1,000 staff to expand the contact tracing workforce, in partnership between MDHHS and local health departments. Funding will also support technology to assist contact tracing, namely a text messaging system to automate outreach to case contacts and to provide 14 days of symptom monitoring for individuals who opt in.
- 4) Additional projects to come. The State continues to plan for how funding could most impactfully expand COVID-19 testing, contact tracing, and isolation and expects to add additional workstreams.

Testing per population and percent positivity are two core metrics that affect appropriate community mitigation policies. The Governor's MI Safe Start plan outlines six phases of the pandemic and the metrics that the State will closely watch to determine when regions have safely transitioned between phases. Public health capacity, alongside epidemiological indicators and health system capacity, is core to these determinations.

The Governor has set a near-term goal of completing 15,000 tests per day across the state and a medium-term goal of completing 30,000 tests per day. The regional distribution of testing and the distribution of testing across populations within a region (e.g., congregate care v. community testing) will help to measure how well testing in a given region could identify new community spread. This helps inform determinations about community mitigation practices needed to prevent uncontrolled growth or persistent spread.

f) During a declared State of Emergency, Michigan's typical procurement laws do not apply. The State has successfully completed several very rapid but competitive bid processes in recent weeks, to balance the need to move expeditiously with ensuring high-quality and cost-effective services. Supplies and services moving forward may utilize similar practices. In general, procurement policies have not presented a barrier to moving quickly during the pandemic, including for purchases of supplies, collection materials, test kits, and reagents.

The State will similarly prioritize competitive but urgent hiring where needs arise. In some instances, this may involve partnering with outside staffing firms or external contractors with expertise in human resource management. In other cases, this may involve expedited hiring through the State's typical channels.

Table #2: Planned expansion of testing driven by public health departments

| BY MONTH:  | May-20  | Jun-20                            | Jul-20  | Aug-20                          | Sep-20  | Oct-20  | Nov-20  | Dec-20  | TOTAL     |  |
|--|---------|-----------------------------------|---------|---------------------------------|---------|---------|---------|---------|-----------|--|
| Number of additional* staff to meet planned testing levels   | 1       | 1                                 | 2       | 3                               | 0       | 0       | 0       | 0       | 7         |  |
| FOR DIAGNOSTIC TESTING   |         |                                   |         |                                 |         |         |         |         |           |  |
| How many additional* testing equipment/devices are needed to meet planned testing levels? (provide an estimated number, and include platform details in narrative above) |         | 1 Roche<br>serology<br>instrument |         | 3 Panther<br>PCR<br>instruments |         |         |         |         | 0         |  |
| Volume of<br>additional swabs<br>needed to meet<br>planned testing<br>levels <sup>++</sup>   | 100,000 | 200,000                           | 700,000 | 800,000                         | 900,000 | 900,000 | 900,000 | 900,000 | 5,400,000 |  |
| Volume of additional media (VTM, MTM, saline, etc.) needed to meet   | 100,000 | 200,000                           | 700,000 | 800,000                         | 900,000 | 900,000 | 900,000 | 900,000 | 5,400,000 |  |

| BY MONTH:  | May-20 | Jun-20                     | Jul-20                                   | Aug-20                                   | Sep-20                                   | Oct-20                                      | Nov-20                                      | Dec-20                                      | TOTAL |  |
|--|--------|----------------------------|--|--|--|---|---|---|-------|--|
| planned testing<br>levels**  |        |                            |  |  |  |   |   |   |       |  |
| Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - ) | 0      | 0                          | 56,000 -<br>Hologic<br>Panther<br>7,000- | 56,000 -<br>Hologic<br>Panther<br>7,000- | 56,000 -<br>Hologic<br>Panther<br>7,000- | 112,000 -<br>Hologic<br>Panther<br>14,000 - | 112,000 -<br>Hologic<br>Panther<br>14,000 - | 112,000 -<br>Hologic<br>Panther<br>14,000 - |       |  |
| FOR SEROLOGIC TESTING  |        |                            |  |  |  |   |   |   |       |  |
| Number of additional* equipment and devices to meet planned testing levels   | 0      | 0                          | 0  | 0  | 0  | 0   | 0   | 0   | 0     |  |
| Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - ) |        | 30000-<br>Biorad<br>Evolis | 30000-<br>Biorad<br>Evolis               | 30000-<br>Biorad<br>Evolis               | 30000-<br>Bioplex<br>2200                | 30000-<br>Bioplex<br>2201                   | 30000-<br>Bioplex<br>2202                   | 30000-<br>Bioplex<br>2203                   |       |  |

<sup>\*</sup> Report new monthly additions only, not cumulative levels

<sup>++</sup> For May and June, only include needs beyond the supplies provided by FEMA. Report new monthly additions only, not cumulative levels.