2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Oklahoma
Population Size:	3957000

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

a) Pursuant to guidelines provided by the Commissioner of Health in response to the Governor, Oklahoma has set a goal to test 90,000 people each month, or 2.25% of the state's population, for SARS-CoV-2.

To accomplish this, Oklahoma is currently utilizing rRT-PCR for the majority of sample testing being conducted across the state. Some rapid result testing is being utilized in local County Health Departments when deemed appropriate by the evaluating APRN. Initiatives are in place to expand the available testing platforms to include saliva testing and antibody testing, both are pending finalization of laboratory contracts. Oklahoma will continue to monitor the available testing platforms for additional opportunities to expand testing.

To ensure all available testing platforms are achieving the most efficient throughput, a tracking project has begun which will identify samples by geographical areas and assign each area to specific laboratory contracts. Both primary and secondary laboratory options will be identified to mitigate any unforeseen facility capacity loss, thus ensuring a consistent flow of results and access to timely testing. This project will allow the state to maximize the available throughput without overwhelming any given resource.

Samples are currently collected at every County Health Department across the state as well as hospitals, clinics, and private labs. This complements an effort to test 100% of all long-term care facilities across the state, which is expected to complete during June 2020. To supplement these collection sites, local jurisdictions are supported with supplies and staff to conduct mobile collection missions to target underprivileged and vulnerable populations, and a Rapid Collection Group is on standby to address any large facility outbreaks. Partnerships are being enhanced with Department of Corrections, Tribal Governments, and homeless outreach programs to ensure all interested parties across the state have access to testing options within their local community or facility.

In the event that the demand for testing increases, there are opportunities to expand our testing efforts through dedicating more County Health Department appointments to testing or by increasing the number of mobile collection sites provided in each jurisdiction.

- b) The Oklahoma State Department of Health (OSDH) has developed multiple non-traditional laboratory testing options to ensure easy access to testing by our citizens.
- Each of the eleven Health Districts (geographical areas) is maintaining a schedule of mobile testing sites which are held at popular community locations within their counties. These are advertised using local and social media platforms, and are completed on a first-come first serve basis during set hours. These operations are supported with testing supplies and personnel when needed.
- OSDH has mobile collection programs available

- to bring testing sites to underprivileged and vulnerable communities, focusing on areas where significant portions of the population do not have access to adequate transportation or which are remotely located from traditional testing sites.
- A Rapid Collection Group has been built which remains in standby status to address any large facility outbreaks. This group is staffed by nurses and administrative staff and can be deployed on short notice to assist with large-scale testing at locations with outbreaks where immediate response and rapid test results are required to minimize medical and societal impacts.
- c) At this time, Oklahoma does not have a comprehensive serology testing plan, however OSDH, in collaboration with the Governor's office, is working to develop a strategy for large-scale antibody testing to explore potential population immunity.
- d) Governor Stitt has identified COVID-19 as a reportable disease due to its novelty which requires all labs across the state to report their testing to OSDH for tracking purposes. To monitor test kit supplies, OSDH has mobilized the Regional Medical Response System which maintains the local Health Care Coalitions to monitor their medical facility partners. All non-traditional testing at this time is being coordinated directly by OSDH, allowing direct monitoring of kit supplies and staffing needs.

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*	90,000	100,000							190,000
Serology	2,700	10,000							12,700
TOTAL	92,700	110,000	0	0	0	0	0	0	

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 diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Long-term Care Facilities	Commercial or private lab	Aegis, OSU, OSDH PHL, Red Arrow, IMMY, RML, CPL, DLO, Viracor	8,640	N/A		nursing homes , Elderly, disabled, healthcare workers

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Autonomous Health Departments	Commercial or private lab	Aegis, OSU, OSDH PHL, Red Arrow, IMMY, RML, CPL, DLO, Viracor	8,640	N/A		other congregate living settings , Underserved populations such as racial/ethnic minorities and homeless

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
County Health Departments	Commercial or private lab	Aegis, OSU, OSDH PHL, Red Arrow, IMMY, RML, CPL, DLO, Viracor	8,640	N/A		Underserved populations such as racial/ethnic minorities and homeless

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Correctional Facilities	Commercial or private lab	Aegis, OSU, OSDH PHL, Red Arrow, IMMY, RML, CPL, DLO, Viracor	8,640	N/A		prisons, Inmates, correctional staff
Contacts from investigations	Public health lab	PHL	500	N/A		

Name of testing entity	Testing venue (select from drop down)	Performing Lab (if different from testing entity)	Daily diagnostic through- put	Daily serologic through- put	Platforms or devices used (list all)	Specific at-risk populations targeted (list all)
Federally Qualified Health Centers	Commercial or private lab	IMMY	0	25		Outbreaks settings
Tribal Governments	Commercial or private lab	Aegis, OSU, OSDH PHL, Red Arrow, IMMY, RML, CPL, DLO, Viracor	8,640	N/A		other congregate living settings , Any individual qualifying for Medicare/Medicaid or uninsured

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) Oklahoma State Department of Health (OSDH) in collaboration with the Governor's Office is working to expand laboratory testing through adding equipment to our Public Health Laboratory (PHL) and implementing new testing contracts with multiple commercial labs. OSDH PHL will expand capacity by purchasing additional equipment including an additional Hologic Panther and GeneXpert, ABI 7500 Fast DX instruments, robotic fluid handler, an eMag extractor, and an Abbott Alinity m, as well as kits/reagents/supplies for assays performed on existing instruments. The PHL will continue to engage qualified local, state, regional, and national laboratories to partner in expanding Oklahoma's SARS-CoV-2 testing capacity. Continued distribution of point of care (POC) equipment and tests to County Health Departments (CHD), Local Health Departments (LHD) along with identifying other POC partners, including mobile assets (investigating partnership with National Guard's Civil Support Team for mobile lab testing), will add to state testing capacity. The Red Arrow laboratory will add saliva testing to our current platform options, and IMMY has capacity for a large number of serological tests every day. Other labs under consideration include MAKO and Aegis. Adding these four labs to our existing contracts could bring the daily testing capacity within the state to well over 10,000 tests which will exceed the daily goal of 4,186 (90,000 tests per month).

b) OSDH has mobile collection capability to bring sites to underprivileged and vulnerable communities, focusing on areas where significant portions of the population do not have access to adequate transportation or which are remotely located from traditional collection sites. This effort compliments the Long-term Care initiative which has conducted focused sample collection in congregate care settings across the state. This initiative is expected to reach 100% completion during June 2020.

To ensure that these populations receive priority testing as clinically indicated, the PHL COVID-19 Test Requisition form includes fields to assess priority. Daily monitoring of the PHL testing supplies and turn-around-times of partner surge laboratories will aid in selecting the best testing opportunity for these populations.

c) Oklahoma experienced significant barriers to testing efficiency during the early part of May 2020 when most of our contracted labs experienced some level of capacity deterioration. In response to this, we have begun to build out a robust testing plan which includes identifying sample sources and assigning each source to specific laboratory contracts. Both primary and secondary laboratory options will be identified to mitigate any unforeseen facility capacity loss, thus ensuring a consistent flow of results and public access to timely testing. This project is intended to maximize the available throughput without overwhelming any given resource and to quickly react to supply chain issues.

The PHL will continue to work with the OSDH Incident Command Structure (ISC), FEMA, FDA, CDC, and private companies to provide a steady flow of testing and specimen collection supplies. Real-time OSDH PHL testing and specimen collection supply inventories are published daily as are anticipated of incoming specimens for testing. This daily information exchange allows for managing the ebbs and flow of supply shortages and testing surges.

- d) At this time, Oklahoma does not have a comprehensive serology testing plan, however OSDH, in collaboration with the Governor's office, is working to develop a strategy for large-scale antibody testing to explore potential population immunity. A request was made through the ELC CARES grant to purchase the Alinity i, a high throughput in-house serology screening instrument, so that screening could begin in 2021.
- e) Currently, Oklahoma is reviewing the Sentinel Surveillance project for updates to include CLI. At this time the project only addresses ILI and is effective from October to May. In lieu of this, surveillance is being conducted at OSDH using daily case monitoring through the reportable diseases requirements.
- f) OSDH is working with multiple employment agencies to take full advantage of the local workforce and any available qualified individuals who may be experiencing job loss due to COVID community impacts. This allows OSDH to minimize new staff on-boarding time by requesting personnel with immediate availability.

To address supply chain concerns, OSDH is actively monitoring testing kit, reagent, and PPE use for all partners. Mobilization of the Health Care Coalitions has allowed for quick response to medical facility needs through regional supply caches, while local jurisdictions rely on regular distributions from OSDH's central warehouse to maintain their supplies.

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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	7 PHL, 45 Supply management, 20 Rapid Collection, 18 mobile testing	3 additional PHL							0
		FOR DIA	AGNOSTIC TI	ESTING					
How many additional* testing equipment/devices are needed to meet planned testing levels? (provide an estimated number, and include platform details in narrative above)	2 PCR instruments	2 PCR instruments and extractors							0
Volume of additional swabs needed to meet planned testing levels**	90,000	100,000							190,000
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels**	90,000	100,000							190,000

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - Thermofisher)	5,000/month Cephied; 8,000/month CDC RT-PCR assay + consumables; 4,800 Abbott ID Now test	5,000/month Hologic; 5,000/month Cephied; 8,000/month CDC RT-PCR assay + consumables; 5,000/month Abbott ID Now test; 2,000 ThermoFisher TaqPath							50,800
FOR SEROLOGIC TESTING									
Number of additional* equipment and devices to meet planned testing levels	n/a (See narrative)	n/a (See narrative)							0

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - Thermofisher)	n/a (See narrative)	n/a (See narrative)							N/A

^{*} Report new monthly additions only, not cumulative levels

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