

ELC ENHANCING DETECTION: KANSAS TESTING PLAN

2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Kansas
Population Size:	2,913,314 (Census, 2019)

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

Kansas currently has an initial statewide strategy for COVID-19 specimen collection and testing. The goal of this strategy is to facilitate a rapid increase in statewide testing using all testing sites and platforms available. KDHE will work with vendors, laboratories, and local sampling sites to help ensure that testing supplies and platforms are in place or easily mobilized to support communities, Kansas local health departments, and to support the early detection of outbreaks in congregate settings.

a) KDHE has developed an interactive map with all current and potential laboratories capable of performing diagnostic and serological SARS-CoV-2 tests. This map provides locations, instrumentation, capacity and any current barriers to testing at that site. Utilizing this map and a simplified public facing map and commercial laboratory list, organizations, facilities and others can identify local testing options or alternate testing facilities to ensure reasonable turn around times and performance. These tools will also enable KDHE to facilitate supplies or deploy equipment to laboratories in areas where there is either not enough testing being performed or where there is an outbreak and a need for rapid testing locally. By having both current and potential capacities, KDHE can monitor the available capacity across the state to ensure it is adequate and facilitate expanding that capacity as needed for any given circumstance. The table #1b shows the highest volume laboratories that are producing data for Kansas residents. It is not comprehensive as there are over 45 more labs that may not have provided capacity values yet or that are smaller rural clinics utilizing Abbott or Cepheid. This table also does not include Antigen testing labs using Quidel's Sofia platform. Also of note in this table is that most of these facilities are not targeting specific populations at this time. We know that some are working with nursing homes and several are doing health care workers, but this is not documented. Also for serological testing volumes, this was not provided by many of the facilities so a '1' was used to note that they had serological capability but not clear on capacity.

b) Kansas currently has partnered with WalMart to provide testing in three counties through their mobile testing units and will be transitioning to provide testing in some of their physical locations. CVS pharmacies will also be providing at least 10 collection/testing sites in local Kansas markets. Kansas also currently deploys the Abbott ID NOW point of care machines, along with the needed test kits, to counties dealing with outbreaks in meat packing facilities. KDHE provides sampling supplies and provides testing for a number of local health department-led drive through testing sites across the state. KDHE is looking to develop specific strategies for placement of rapid testing platforms in mobile units.

c) Kansas has purchased the Diazyme automated platform for serology testing (IgG and/or IgM). KDHE has received IRB approval for their large scale geographic and community-level seroprevalence surveys. Recruitment will be initially through clinics with incentives to cover cost of participation by the clinic as well as incentive for participating patients.

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d) As described above, KDHE has already established locations and details about the testing facilities available in Kansas. KDHE has also established relationships with most of the vendors with testing equipment located in Kansas. KDHE will set up a combination of calls, emails and/or surveys to maintain current communications with these facilities and vendors to identify any needs or changes to either their scope or their capacity. This may be accomplished utilizing the relationship with the CLIA surveyors (part of the Office of Laboratory Services and KDHE), the State Preparedness Training Coordinator, trade associations and direct communications between laboratory directors/managers.

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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*	58,300	60,000	60,000	60,000	70,000	90,000	70,000	60,000	528,300
Serology		1,000	3,000	6,000	10,000	10,000	10,000	10,000	50,000
TOTAL	58,300	61,000	63,000	66,000	80,000	100,000	80,000	70,000	

*Each jurisdiction is expected to expand testing to reach a minimum of 2% of the jurisdictional population.

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	Specific at-risk populations targeted (list all)
Kansas Office of Laboratory Services (KDHE Laboratories)	Public health lab		1,200	500	Corrections Facilities; nursing homes and congregate living facilities, homeless shelters and support of local health departments.
4M Healthcare	Commercial or private lab		1,000		
Cytocheck Laboratory	Hospitals or clinical facility		1,000		

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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	Specific at-risk populations targeted (list all)
K-State University Rabies Lab	Commercial or private lab		500		
KUMC - University of Kansas Medical Center	Hospitals or clinical facility		1,000		
LabCorp - Overland Park	Commercial or private lab		10,000	1	
Labette Health	Hospitals or clinical facility		1,192		
MAWD Pathology Group	Hospitals or clinical facility		2,000	1	
Quest Diagnostics - Lenexa	Commercial or private lab		4,000	1	
Saint Luke's Hospital of Kansas City	Hospitals or clinical facility		128	1	

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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	Specific at-risk populations targeted (list all)
Sinochips Diagnostics (Breidenthal)	Hospitals or clinical facility		500		
ViraCorp	Commercial or private lab		6,000		
Red Arrow Analytical (Oklahoma, serves Wichita)	Commercial or private lab		1,000		
Wesley Medical Center	Hospitals or clinical facility		800		
Stormont-Vail Regional Medical Center	Hospitals or clinical facility		128		
Susan B Allen Memorial Hospital	Hospitals or clinical facility		96		
Topeka Veterans Affairs Medical Center (Colmery-O'Neil)	Hospitals or clinical facility		188		

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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	Specific at-risk populations targeted (list all)
Truman Medical Center Hospital Hill	Hospitals or clinical facility		128		
Salina Regional Health Center	Hospitals or clinical facility		100		
Lawrence Memorial Hospital	Hospitals or clinical facility		160		
Lyon Count Health Department	Hospitals or clinical facility		96		
Neosho Memorial Regional Medical Center	Hospitals or clinical facility		140		
Newton Medical Center	Hospitals or clinical facility		128		
Kearny County Hospital	Hospitals or clinical facility		160	1	
Hitchinson Clinic	Hospitals or clinical facility		300		

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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	Specific at-risk populations targeted (list all)
AdventHealth Ottawa - Ransom Memorial Hospital	Hospitals or clinical facility		224		
AdventHealth Shawnee Mission	Hospitals or clinical facility		96		
AMS Lab - SJ Family Practice	Hospitals or clinical facility		60		
AMS Lab - East 21st	Hospitals or clinical facility		100		
AMS Lab - North Amidon	Hospitals or clinical facility		60		
Ascension Medical Group Via Christi Hospital St Joseph	Hospitals or clinical facility		144		
Ascension Medical Group	Hospitals or clinical facility		100		

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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	Specific at-risk populations targeted (list all)
Via Christi on Murdock					
Ascension Medical Group Via Christi on West Maple	Hospitals or clinical facility		60		
Ascension Medical Group Via Christi St Teresa	Hospitals or clinical facility		104		
Ascension Medical Group Via Christi St. Francis	Hospitals or clinical facility		278	1	
Atchison Hospital	Hospitals or clinical facility		156		
Central Plains Lab (DBA Quest)	Hospitals or clinical facility		64		
Clinical Reference Laboratory	Commercial or private lab		2,000		

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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	Specific at-risk populations targeted (list all)
Heartland Health Laboratory	Hospitals or clinical facility		64	38	
Great Plains Lab	Hospitals or clinical facility			1,000	
McPherson Center for Health	Hospitals or clinical facility		58	1	
Herington Municipal Hospital	Hospitals or clinical facility			1	
Affiliated Medical Services Lab	Hospitals or clinical facility		340	200	
Citizens Medical Group	Hospitals or clinical facility		2	1	
Finney County Health Department	Hospitals or clinical facility		96		
Ford County Health Department	Hospitals or clinical facility		96		

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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	Specific at-risk populations targeted (list all)
Geary Community Hospital	Hospitals or clinical facility		10		
Irwin Army Hospital	Hospitals or clinical facility		40		
Nemaha Valley Community Hospital	Hospitals or clinical facility		96		
Pratt Regional Medical Center	Hospitals or clinical facility		50		
Republic County Hospital	Hospitals or clinical facility		16		
Seward County Health Department	Hospitals or clinical facility		100		
VA Medical Center (Robert J. Dole)	Hospitals or clinical facility		64		

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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) The KDHE Office of Laboratory Services expanded capacity in May from 300 to 1000 plus samples per day. This expansion included the addition of PerkinElmer Chemagic extraction platform and a Janus liquid handling system. Prior to this, the office added additional Qiagen Qiacubes to increase capacity using the CDC EUA. The state public health lab has the capability to further expand if necessary to 2,000 plus samples per day if needed using current equipment but expanding staff to include multiple shifts per day. KDHE will continue to evaluate other high throughput platforms such as the Hologic Panther as well as purchasing an additional Chemagic high throughput extraction platform. Further expansion is being realized through partnerships with charitable organizations and a university health system as well as increasing capacity in a university laboratory and various commercial labs. KDHE will continue to partner with local health departments and other organizations to conduct drive through testing and/or collection sites as needed around the state. The state lab will also explore contract laboratory services to support overflow testing as well as expanded testing in long term care facilities. KDHE has also established a working relationship with the Kansas State University Veterinary Diagnostic Rabies lab (CLIA certified) to perform overflow for the state lab as well as support for specific collection events or populations (such as an outbreak at a given nursing home or congregate living facility).

b) KDHE is working with KU and the Patterson Family Foundation to do facility wide testing of LTCFs in a few rural, hardest hit counties that may have difficulty assessing testing. KDHE is also supporting testing through the state laboratory of all asymptomatic and symptomatic staff and residents in congregate settings once the first case is identified in that setting. The state laboratory has supported expanded testing of both symptomatic and asymptomatic staff and inmates at several state correctional facilities. It is expected that the state laboratory will also support homeless shelters as needed. KDHE continues to work with the Kansas Department of Aging and Disabilities (KDADS) to develop ongoing testing strategies for LTCFs. KDHE has also been supporting drive through collection sites or mobile testing sites through local community centers or organizations in neighborhoods that may be underserved.

c) As described in the jurisdictional overarching strategy, KDHE will maintain contact with all testing facilities in the state. KDHE has begun to utilize a survey of testing labs to determine what their testing system are (including daily capacity) and if there are areas that they need help in. If areas of underutilization are identified, KDHE will work with local health departments and organizations to make sure that resources are being utilized fully. KDHE will also support these efforts with their public information office and messaging encouraging testing of citizens. Likewise if there are issues with supplies in these facilities, KDHE will attempt to direct supplies to them. Currently all SARS-CoV-2 testing in Kansas (positive and negative) is reported to the state surveillance system (EPITRAX). This data is then sent to the CDC for assimilation into the national database. This system also ensures that all local health departments can access results of testing done on their county residents. Couriers and overnight shipping is utilized by both commercial laboratories as well as the state laboratory. The state has utilized national guard and Civil Air Patrol to support some of these mobile efforts and courier services.

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d) KDHE has purchased and installed two Diazyme instruments to perform serological testing. These instruments can be used for either IgG or IgM or both and have a modest daily capacity of 800 samples. As noted in the jurisdictional strategy, Kansas has developed plans for seroprevalence surveys that would use these instruments. The Kansas plan has received IRB approval and includes various aspects of prevalence including geographic, random, age and occupation related prevalence. Recruitment into the program will involve electronic support and reimbursement for the provider and gift cards for participation. In addition there are several other laboratories that have various serological testing equipment that may be used for various purposes.

e) KDHE will continue to work with local health departments and other community partners to expand testing in vulnerable populations through implementing rapid testing platforms and community-based specimen collection in vulnerable populations to ensure access to testing and to quickly identify areas with increasing risk of transmission in order to ensure rapid deployment of community mitigation efforts and resources .

f) Expansion of testing in the state public health laboratory will mostly occur due to increase staffing to allow the continued diagnostic testing while at the same time increasing serological testing. KDHE has already partnered with a local university for temporary staffing needs. KDHE will address additional staffing needs through a combination of the CDC Foundation, temporary agencies as well as direct recruitment. Currently much of the laboratory staff are cross trained with their current duties as well as various components of the SARS-CoV-2 assays. This means that new staff can be trained into the other/traditional programs which is often quicker with more support. KDHE has been working with vendors to assure supply chain for their expanded testing. No additional supplies are anticipated for May/June, beyond what the agency has or is receiving from FEMA. For the period beyond June, KDHE will be going back to the vendors and confirming their supply chains to meet the testing goals outlined

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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		3	3	2					8
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)				2					2

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BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Volume of additional swabs needed to meet planned testing levels ⁺⁺									0
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels ⁺⁺									0

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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)			1000/day PerkinElmer; 200/day Cepheid	1000/day PerkinElmer (purchase additional Chemagic); 200/day Cepheid; 1000/dayHologic Panther	1000/day PerkinElmer; 200/day Cepheid; 1000/dayHologic Panther	1000/day PerkinElmer; 200/day Cepheid; 1000/dayHologic Panther	1000/day PerkinElmer; 200/day Cepheid; 1000/dayHologic Panther	1000/day PerkinElmer; 200/day Cepheid; 1000/dayHologic Panther	
FOR SEROLOGIC TESTING									
Number of additional* equipment and devices to meet planned testing levels	2								2

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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)		200/day Diazyme IgG and IgM	800/day IDiazyme IgG and IgM	800/day IDiazyme IgG and IgM	800/day IDiazyme IgG and IgM	800/day IDiazyme IgG and IgM	800/day IDiazyme IgG and IgM	800/day IDiazyme IgG and IgM	

* 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.