2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Maine
Population Size:	1.3 million

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

It is important to note that the State of Maine has already met and exceeded the stated goal of testing a minimum of 2% of its population, or 26,000 monthly, by implementing several testing strategies. Maine's focus now is on expanding testing even further, focusing on the highest-risk populations, by continuing to implement a number of testing strategies. These include activating multiple testing venues, utilizing varied testing platforms/instruments and PCR tests, granting new healthcare entities opportunities to conduct local testing, leasing/purchasing additional testing equipment, and partnering with various private entities to provide additional test kits and resources for expanded testing. As a result of these efforts, Maine CDC's Health & Environmental Testing Laboratory has removed all testing "tiers" or prioritzations within the public health laboratory and has recommended testing for all congregate settings after a single confirmed COVID-19 case. Given that Maine has already exceeded the 2% monthly minimum, the table below (#1b) provide data on testing capacity and volume already in use in Maine. The final column on the right lists whether the stated value represents a theoretical capacity or actual volume being done at each institution or testing site. We continue to expand beyond the 2% minimum.

a.) Maine CDC - Health and Environmental Testing Lab has leased (2) Thermofisher Kingfisher high throughput platforms from private industry, continued use of existing Hologic Panther and (6) ABI 7500 Fast Dx high throughput instruments, hired additional staff, redeployed lab staff, distributed 15 instruments to FQHCs, hospitals and clinics with a focus on testing vulnerable populations, such as people experiencing homelessness and migrant farm workers. Other entities have begun investigating purchasing Roche rapid testing platforms.

b.) Discussions are ongoing with private sector laboratory entities regarding purchase of a mobile testing lab, establishing multiple 'swab and send' sites at numerous locations (i.e., pharmacies and other retailers), and funding rural hospitals to conduct testing in local communities.

c.)While the laboratory community in the State of Maine is starting to validate serology tests, they are waiting for a mandate from US CDC on how to use and interpret these tests.

d.)State laboratorians hold meetings with the broader testing community on a weekly basis. The State of Maine has also partnered with private entities like IDEXX, which has lent platforms and donated numerous test kits. Maine also executed an agreement to puchase additional test kits from IDEXX, which more than tripled the Maine public health laboratory's overall testing capacity.

BY MONTH:	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	TOTAL
Diagnostics*	33,536	40,000							73,536
Serology	3,112	4,000							7,112
TOTAL	36,648	44,000	0	0	0	0	0	0	

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

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)
Maine CDC Health and Environmental Testing Laboratory	Public health lab		309	0		The public health lab tests all populations, and focuses on at-risk populations not convered by hospitals such as: congregate care settings, correctional facilities, and people experiencing homelessness. Note: diagnostic throughput reflects actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26). Maximum testing capacity is 1000/day, which has been reached on several days.

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)
NDX-CORE LAB	Commercial or private lab		321			Testing from hospitals, including inpatients, transfers, and outpatients. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
Large reference labs (e.g., Mayo, Quest, ARUP, LabCorp)	Commercial or private lab		267			Serves all populations, including outpatient clinics, hospitals, and others. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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)
York Hospital Laboratory 15 Hospital Drive York, ME 03909	Hospitals or clinical facility	HETL, Quest, In house	75	5		Inpatients, HCW, First responders, Presurgical patients, inpatients; symptomatic outpatients; outpatients with a history of symptoms; people experiencing homelessness. Note: actual testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
Maine Medical Center Laboratory 22 Bramhall St Portland, ME 04102	Hospitals or clinical facility		32	0		People experiencing homelessness and ED patients. Note: diagnostic throughput reflects if device were used at maximum capacity.

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)
Southern Maine Health Care Laboratory 1 Medical Center Drive Biddeford, ME 04005	Hospitals or clinical facility		32	0		Inpatients and symptomatic outpatients Note: diagnostic throughput reflects if device were used at maximum capacity.
Mercy Hospital Laboratory 144 State Street Portland, ME 04101	Hospitals or clinical facility		35	0		Presurgical patients, ED patients, patient facility transfers. Note: diagnostic throughput reflects if device were used at maximum capacity.
St. Mary's Health System – Laboratory 318 Sabattus Street Lewiston, ME 04240	Hospitals or clinical facility		32	0		Presurgical patients, ED patients, patient facility transfers. Note: diagnostic throughput reflects if device were used at maximum capacity.
St. Joseph Healthcare St. Joseph Hospital 360 Broadway	Hospitals or clinical facility		32	0		Presurgical patients, ED patients, patient facility transfers. Note: diagnostic throughput reflects if device were used at maximum capacity.

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Bangor, ME 04401						
EMMC – Laboratory 417 State St Bangor ME 04401	Hospitals or clinical facility		32	0		Presurgical patients, ED patients, patient facility transfers. Note: diagnostic throughput reflects if device were used at maximum capacity.
Maine Mobile Health Program, Inc. 9 Green St. / PO Box 405 Augusta, ME 04332	Community- based		32	0		Seasonal agricultural workers. Note: diagnostic throughput reflects if device were used at maximum capacity.
Waldo County General Hospital 118 Northport Ave, Belfast, ME 04915	Hospitals or clinical facility		32	0		Presurgical patients, ED patients, patient facility transfers. Note: diagnostic throughput reflects if device were used at maximum capacity.

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Central Maine Medical Center - Laboratory 300 Maine St. Lewiston, ME 044240	Hospitals or clinical facility		32	0		Presurgical patients, ED patients, patient facility transfers. Note: diagnostic throughput reflects if device were used at maximum capacity.
Midcoast Hospital 123 Medical Center Dr, Brunswick, ME 04011	Hospitals or clinical facility		34	0		Presurgical patients, ED patients, patient facility transfers. Note: diagnostic throughput reflects if device were used at maximum capacity.
St Joseph's Bangor	Hospitals or clinical facility	Mayo, HETL, NLL	25	0		Inpatients, outpatients, SNFs or presurgical patients requiring negative results. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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Cary Medical Center	Hospitals or clinical facility		5	0		Currently symptomatic inpatients but soon symptomatic outpatients and symptomatic LTCF residents. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
NLMCH	Hospitals or clinical facility	HETL, NLL	20	0		Symptomatic inpatients; pre-surgical; pre-admission for labor; exposed individuals; pre admissiom to screen facilities (transfer). Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
VA ME HCS PLMA	Hospitals or clinical facility		100	0		Employees, Presurgical patients, Inpatients ,CLC, Symptomatic patients. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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Bridgton Hospital	Hospitals or clinical facility	CMMC, NORDX, Quest, HETL	5			Healthcare workers; Inpatients; ED patients pending admission; LTC/nursing home patients pre-op patients. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
InterMed	Hospitals or clinical facility	Quest	28	30		Urgent care. Tier I patients, but are starting to test Tier II patients as well (asymptomatic contacts of positive patients, symptomatic patients < 60 without comorbid conditions). Note: tiers are devised by InterMed. Note: for testing via Panther and Diasorin XL, focus is on Tier II and patients who need pre-surgical screening (not live as of writing). Note: tiers are devised by InterMed. Note: actual testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
Greater Portland Health, 243	Federally Qualified		32	0		People experiencing homelessness and/or loss to follow up. Note:

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Oxford st,	Health					diagnostic throughput reflects if device
Portland Maine	Center					were used at maximum capacity.
NMMC	Hospitals or clinical facility	HETL, NLL, CMC	5			No targeted population. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
NLL (Bangor)	Hospitals or clinical facility		156			No targeted population. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
Redington Fairview G. H.	Hospitals or clinical facility	NLL	15			High risk patients w/ symptoms; e.g. COPD, Oncology patients, immunocompromised patients, pats with uncontrolled diabetes, etc. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based

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						on the past week (May 20 – May 26)
NorDX	Commercial or private lab		250			Patients with symptoms,nursing home residents/employees with symptoms,healthcare worker exposures,presurgical (elective). As of June first, will be testing all admissions. Note: actual PCR testing volume, including positive, negative, and indeterminate

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						results, per day based on the past week (May 20 – May 26)
36 LRN-B sentinel labs	Hospitals or clinical facility	HETL/NorDX/NLL				Many of the hospital labs do not have a microbiology section, and instead ship all samples to HETL (PHL), Nordx (southern Maine reference lab), or NLL (northern maine eference lab)
Affiliated Laboratories Inc	Hospitals or clinical facility		173			Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based

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						on the past week (May 20 – May 26)
BIOREFERENCE LABORATORIES INC	Commercial or private lab		5			Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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)
BRIDGTON HOSPITAL	Hospitals or clinical facility		7			Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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CENTRAL MAINE MEDICAL CENTER	Hospitals or clinical facility		54			Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
Concentra Urgent Care	Commercial or private lab		2			Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based

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						on the past week (May 20 – May 26)		
PCHC, 992 Union Street suite J, Bangor, Maine 04401	Federally Qualified Health Center		32	0		People experiencing homelessness. Note: diagnostic throughput reflects if device were used at maximum capacity.		
MAINE GENERAL MEDICAL CENTER	Hospitals or clinical facility		49			Inpatients; patients prior to transfer to LTCF; presurgical. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)		

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)
MDLAB	Commercial or private lab		1			Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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Mako Laboratories and Mako Medical Laboratories	Commercial or private lab		143			Long-term care facility patients. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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Martin's Point (various sites)	Hospitals or clinical facility		4			Outpatients. Note: actual testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
Massachusetts Dept of Health	Public health lab		3			Maine residents who sought health care in MA. Note: actual PCR testing volume, including positive, negative, and indeterminate

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						results, per day based on the past week (May 20 – May 26)
<u>New Hampshire</u> <u>Public Lab</u>	Public health lab		4			Maine residents who sought health care in New Hampshire. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)
Rumford Community Hospital	Hospitals or clinical facility		3			Symptomatic inpatients. Note: actual PCR testing volume, including positive, negative, and indeterminate results, per day based on the past week (May 20 – May 26)

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 Maine CDC has undertaken a number of actions to vastly expand the state's testing capacity. These initiatives include the following:

Executing a contract with IDEXX, including IDEXX loaning a KingFisher platform to the Health and Environmental Testing Lab, donating 3,000 tests, and Maine CDC purchasing a robust number of test kits from IDEXX. Maine CDC is also utilizing the Hologic Panther platform to perform higher throughput testing, including securing an agreement to purchase 5,000 tests, with the ability to reorder as needed. We have also distributed 15 platforms and 100+ test kits to FQHCs, hospitals, and clinic throughout the state with a focus on migrant workers and vulnerable populations, including people experiencing homelessness. We are utilizing existing PCR capability with (6) ABI 7500 Fast DX instruments and purchasing another KingFisher testing platform. Until a purchased platform can be delivered, another KingFisher platform has been lent from a private industry partner. Maine is also working to establish 'swab and send sites' at multiple locations around the state (i.e. pharmacies and other retailers) with a focus on vulnerable populations. We are also continuing discussions with private sector laboratory providers on the purchase of a mobile testing lab to further enhance testing capacity. We are also actively exploring how to fund rural hospitals to conduct testing in local communities, such as already occuring at a community hospital in rural northern Maine. Maine CDC is also evaluating redistribution of a lower-throughput instrument (i.e Qiagen platform) to a rural health faciliaites to expand testing at a local level. From a staffing perspective, Maine CDC has redeployed numerous staff to quickly respond to the pandemic in Maine. We have also hired additional staff at the Health and Environmental Testing Lab (HETL), and plan to hire, very roughly, an additional 6-12 contracted staff for every additional 1000 tests conducted. HETL expanded hours of operation from 5 to 7 days a week with extended hours of operations, running 2 shifts daily M-F, with the possibility of adding a 3rd shift, if needed. HETL also purchased 2 freezers and 2 refrigerators for additional storage capacity of reagents and other lab consumables.

b) Vulnerable populations are a focus of our testing strategy. Maine CDC has removed all 'tiers' or prioritizations for testing at its state public health lab, HETL, and also recommends universal testing for all congregate settings after a single case is identified. Among our many strategies, Maine has focused on testing vulnerable populations including people experiencing homelessness by conducting universal testing of shelter residents, establishing contracts with local hotels for housing the homeless and other populations for isolation and quarantine, providing social services for these populations while isolated or quarantined, hiring a medical doctor/epidemiologist with international expericence with infectious disease outbreaks in vulnerable populations to connect COVID-19 cases to necessary social services, providing 15 rapid test instruments to FQHCs, hospitals and clinics to address needs of vulnerable populations who may lack a health care provider or medical home; recommending universal testing in congregate living settings when one case (resident or staff) is identified, providing outbreak response teams to each congregate care facility outbreak, providing recruitment specialist to congregate care facilities to locate and retain supplemental staff for these facilities, that experience staff shortages due to cases among staff, especially nursing homes, working to procure PPE for staff working in congregate

care settings. Since early in COVID19 epidemic, Maine has been in frequent communication with tribal health centers and their leadership to provide assistance (where needed) and testing supplies. Maine has also focused on expanding testing to racial/ethnic minorities through parterships with FQHCs and community-based organizations that serve those communities. We have also begun working with organizations that serve populations of migrant agricultural workers to ensure their needs are met.

c)SOM testing capacity was significantly expanded with the acquisition of two additional high throughput platforms and a generous donation of test kits. With these resources the department was able to remove the earlier prioritization of individuals necessitated by a lack of available tests nationwide and in Maine, and open testing up to anyone with a health care provider's order. We continue to search for avenues in which to expand capacity and better utilize existing capacity. In addition, HETL is working with the Association of Public Health Laboratories (APHL) to set up our StarLims to implement iConnect's Lab Web Portal (LWP). APHL has selected LWP as the electronic test order and results (ETOR) portal for public health laboratories. LWP supports grant requirements to advance electronic implementation exchange and enhance collaboration between state epidemiology and laboratory groups. Crucially, LWP will allow the providers that send samples to HETL to electronically enter the patient metadata. This will help alleviate a constraint in our workstream. Providers will also be able to retrieve and print the reports for the submitted samples after our tested has been completed. This will eliminate the printing and faxing of the reports as is our current workflow. This enhancement to StarLims will lessen our administrative burden for Covid-19 testing.

d)The lab community reported that while they are starting to validate serology tests they are waiting for a mandate from the US CDC on how to use and interpret these tests. At present roughly 7% of all COVID-19 testing in Maine is via serology.

e)Maine CDC maintains sentinel surveillance sites for influenza working primarily with primary health providers and hospitals. In June Maine CDC will investigate opportunties for sentinel surveillance for COVID-19 among vulnerable populations. Sentinel testing may occur at existing health care facilities and may also be offered in highly trafficked areas, such as rest stops along interstate highways.

f.) Maine CDC has implemented an emergency procurement process for sole sourcing entities in this declared extreme public health emergency, has stood up a streamlined review and approval process, including implementing a specialized prioritization for COVID related agreements and purchases, and has increased the credit line on the State procurement card to expedite purchases. In addition, Maine has entered into an exclusive agreement with IDEXX for numerous tests (5,000 weekly) on an ongoing basis. Maine has also entered into an agreement with Hologic to receive numerous tests (5,000 initally) for the Panther platform, bringing the total test capacity at HETL to 7,000 tests per week. GETL continues to regularly procure supplies, regaents, and other collection material as needed with the streamlined procurement processes noted above. For hiring and on-boarding of new staff, Maine has a multi-pronged approach including the re-deployment of dozens of Maine CDC and other state staff to assist with administrative tasks related to testing, entering of metadata, conducting case investigations and contact tracing, scheduling, training. Maine is hiring additional contracted staff through an accelerated request for quote (RFQ) bidding process with staffing agencies. The staffing agency that wins the bid through the RFQ process can hire up to 124 individuals in 7-11 different types of positions, all of which support the public health agency's efforts to conduct timely case investigations and contact

tracing. This includes hiring enrollers and monitors for tracking close contacts in the SARA ALERT system, bringing on project managers to manage a greatly increased+B1 workforce and cases, informatics experts, and others to support increased testing and entering of metadata.

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		6							6	
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)	0	6							6	
Volume of additional swabs needed to meet planned testing levels ⁺⁺	0	10,000	20,000						30,000	
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels ⁺⁺	0	10,000	20,000						30,000	
Volume of additional reagents needed to meet planned testing levels, by testing unit and platform (i.e. 100K/day - Hologic panther; 100k/day - Thermofisher)	0	10,000	20,000						30,000	
	FOR SEROLOGIC TESTING									
Number of additional* equipment and devices to meet planned testing levels	0								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)	0								

* 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.