

ELC ENHANCING DETECTION: HAWAII TESTING PLAN

2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Hawaii
Population Size:	1,416,000

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

a) The State Laboratories Division (SLD) has received 15 Abbott IDNow instruments, which have been distributed to 8 laboratories not previously conducting molecular COVID testing. SLD currently receives 50 test kits (1,200 tests) per week, which are distributed to laboratories which have the instruments we provided. SLD is also adding new high throughput instrumentation (Hologic Panther and ThermoFisher), enabling a several-fold increase in testing capacity. SLD periodically surveys COVID testing laboratories for testing capacities, workforce status, supplies inventories, workload numbers, turnaround times, and related information. Survey results are shared with Hawaii Department of Health (HDOH) stakeholders and Federal partners.

b) The Hawaii Department of Health (HDOH) is engaging a number of partners in long-term care facilities (~3,000 residents and ~8,000 staff in the state), correctional facilities (~7,000), homeless programs, universities (~35,000 students), etc. to establish active surveillance programs to regularly screen persons for symptoms and conduct COVID testing at a low threshold (e.g., only one of the following present: subjective fever, chills, cough, or sore throat; or for certain populations such as elderly, altered mentation or acute change in activities of daily living). Specimens from such persons are being directed to SLD for both COVID-19 and respiratory pathogen panel (RPP) testing to allow monitoring of all potential respiratory pathogens and gain an understanding of their activity and trends in relation to each other. We are also reaching out to those with appropriate clinical support (e.g., home care agencies) to explore potential collaborations to provide testing referral support to our Sentinel Surveillance Providers. Additionally, we have established temporary "swab teams" with National Guardsmen to provide testing referral support for both Sentinel Providers and investigation purposes. We are working to establish permanent care linkage/swab teams to both support Sentinel Surveillance and investigations as well as COVID-19 infected persons who are in isolation and may need support in linking to care providers and require healthcare monitoring and home care services. Finally, as Hawaii moves toward reopening, we intend to support bringing university students from out of state into Hawaii by collaborating with the universities to collect data and support testing that will be required for entry by the Counties and thereby add to our overall COVID-19 surveillance. Further, through health screening of travelers entering Hawaii, COVID-19 testing will be offered, as part of traveler surveillance, for all persons who meet criteria (i.e., have a temp >100.4F on entry thermal screening or report having fever, chills, cough, or sore throat or having taken a fever-reducing medication).

c) We anticipate establishing serological assay capacity (Roche) at SLD in the coming month. We plan to launch a statewide serological survey that will involve a partnership primarily with our Sentinel Providers, especially federally qualified health centers and other community clinics, which serve multiple rural and cultural communities. We plan to collect serial specimens to test concurrently for both presence of antibody to SARS-CoV-2 and the virus every 2 months for one year. A questionnaire to assess potential exposures and illnesses will be administered for each collection time point. This questionnaire may be administered electronically via the HealthSpace application. Additionally, we are

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considering a serosurvey to target the pediatric population to better understand the role of children in COVID-19 disease activity. Saliva antibody testing will be evaluated for this purpose given that collection of serum from young children, especially, may prove too challenging. We are discussing this latter project with pediatric provider partners to determine feasibility.

d) SLD already periodically surveys COVID testing laboratories for testing capacities, workforce status, supplies inventories, workload numbers, turnaround times, and related information and will continue to do so. Survey results are shared with HDOH stakeholders and Federal partners.

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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*	15,200	10,000	40,000	45,000	50,000	55,000	60,000	60,000	335,200
Serology	8,700	10,000	10,000	12,000	15,000	15,000	15,000	15,000	100,700
TOTAL	23,900	20,000	50,000	57,000	65,000	70,000	75,000	75,000	

*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)
State Labs Division	Public health lab		40	67	Symptomatic and at-risk patients
Diagnostic Lab Services	Commercial or private lab		275	19	Symptomatic and at-risk patients
Clin Labs of Hawaii	Commercial or private lab		650	287	Symptomatic and at-risk patients
Kaiser	Hospitals or clinical facility		158	19	Symptomatic and at-risk patients

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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)
Adventist Castle	Hospitals or clinical facility		50	0	Symptomatic and at-risk patients
S & G Laboratories	Commercial or private lab		36	0	Symptomatic and at-risk patients
CLH/Maui Mem Med Ctr	Hospitals or clinical facility		32	0	Symptomatic and at-risk patients

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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 State Laboratories Division (SLD) has received 15 Abbott IDNow instruments, which have been distributed to 8 laboratories not previously conducting molecular COVID testing. SLD currently receives 50 test kits (1,200 tests) per week, which are distributed to laboratories which have the instruments we provided. SLD is also adding new high throughput instrumentation (Hologic Panther and ThermoFisher), enabling a several-fold increase in testing capacity. SLD periodically surveys COVID testing laboratories for testing capacities, workforce status, supplies inventories, workload numbers, turnaround times, and related information. Survey results are shared with Hawaii Department of Health (HDOH) stakeholders and Federal partners.

b) Among the laboratories acquiring the IDNow instruments are District Health Laboratories in neighbor islands, where testing was not previously available. This added new capability for underserved communities. To date Hawaii has had one outbreak in a skilled nursing or long-term care facility and clusters in 5 care homes. Swab teams and testing capacity are available should additional outbreaks occur. Additionally, DOH is working with partners in long-term care facilities and correctional facilities as well as those working with the homeless to provide technical assistance for ensuring infection control measures, establish active surveillance for COVID-19 with a low threshold for testing suspect cases at SLD, and implement a protocol to test at least all close contacts of a confirmed case. Direct testing support for contact testing by SLD is anticipated for at least correctional facilities and homeless shelters, and potentially for long-term care facilities which may not be able to secure their own testing support.

c) Public and private sector laboratories at present have sufficient inventory to perform approximately 59,000 molecular tests for the presence of SARS-CoV-2. Testing reagents are ordered from a variety of manufacturers, assuring a diversity of supply chain and making stock-outs less likely. However, peak demand from mainland laboratories challenges the inventory of test materials. SLD has accumulated the largest inventory of testing materials and is ready to assist private sector laboratories should they experience stock-outs. The Hawaii Department of Health (HDOH) Office of Public Health Preparedness (OPHP) has in stock more than 30,000 collection kits including viral transport medium and collection swabs. We recognize, however, that healthcare providers may continue to be challenged in assuring their PPE supply to test patients. Therefore, in the interim we have established "swab team" support in collaboration with the Hawaii National Guard. Using ELC Enhanced Detection funds, we plan to establish permanent swab/care linkage teams, which will also support community outreach activities especially to support education of racial and ethnic minorities as well as facilitate linkage to home care as needed. Additionally, we are reaching out to other partners with appropriate clinical support (e.g., home care agencies) with the plan to further establish a referral network for providers to refer patients for testing.

d) SLD has chosen and ordered the Roche high-throughput testing platform. In anticipation, the Disease Outbreak Control Division (DOCD [Epi]) is developing a serosurvey protocol that will involve a collaboration with our Sentinel Surveillance Providers and other similar clinical partners to identify persons from across the state to be included in the serosurvey. We plan to collect serial specimens to test concurrently for both presence of antibody to SARS-CoV-2 and the virus every 2 months for one

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year. A questionnaire to assess potential exposures and illnesses will be administered for each collection time point. This questionnaire may be administered electronically via the HealthSpace application. Additionally, we are considering a serosurvey to target the pediatric population to better understand the role of children in COVID-19 disease activity. Saliva antibody testing will be evaluated for this purpose given that collection of serum from young children, especially, may prove too challenging. We are discussing this latter project with pediatric provider partners to determine feasibility.

e) HDOH has a sentinel surveillance program based on the influenza-like illness (ILI)-NET surveillance framework with collaborating healthcare providers. HDOH continues to aggressively recruit more providers, especially federally qualified health centers and other community health clinics to ensure inclusion of rural and other vulnerable populations in our community. Testing of symptomatic patients (at least fever, chills, new onset cough, or sore throat) is provided without charge by SLD. Active surveillance is also planned for nursing home/long term care facilities in all four counties, as noted above in b).

f) New key staff positions have been requested of the CDC Foundation to support recruiting and hiring positions, as this method seemed to be the most rapid means to do so. We will evaluate other key positions and are working to establish some positions through the regular State process for establishing exempt positions under a new special project, while we recruit and hire others via the Research Corporation of the University of Hawaii , which will act as a 3rd party similar to the CDC Foundation to more quickly recruit and hire positions. OPHP has taken the lead in assuring specimen collection materials are available in the State. Swabs and viral transport media have been procured and are being distributed to public health laboratories and, when shortages occur, to private sector laboratories.

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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	0	2	2	6	5				15
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	1							1

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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	10,000	5,000	5,000	8,000	8,000	10,000	10,000	56,000
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels ⁺⁺	0	10,000	5,000	5,000	8,000	8,000	10,000	10,000	56,000

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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)		5000 HolPnth 5000 ThrmFsh	4500 Hol Pnth 4500 ThrmFsh 1000 CDC	4500 Hol Pnth 4500 ThrmFsh 1000 CDC	4500 Hol Pnth 4500 ThrmFsh 1000 CDC	4500 Hol Pnth 4500 ThrmFsh 1000 CDC	4500 Hol Pnth 4500 ThrmFsh 1000 CDC	4500 Hol Pnth 4500 ThrmFsh 1000 CDC	70000
FOR SEROLOGIC TESTING									
Number of additional* equipment and devices to meet planned testing levels	0	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)		10,000 Roche	5000	5000	5000	5000	5000	5000	40000

* 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.