2020 Overarching Jurisdictional SARS-COV-2 Testing Strategy

Jurisdiction:	Palau
Population Size:	17,661 (2015 Census)

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

Prior to March 2020, Palau relied on a referral system for testing through the Hawaii State Laboratory Division and Guam Public Health Laboratory. The MOH began efforts to establish local diagnostic capacity in February and by April had secured a molecular diagnostic testing platform with 100,000 test kits and worked quickly to train laboratory staff to conduct testing. In March, all commercial flights were suspended, effectively cutting off Palau from access to all reference laboratories for COVID-19 testing. There are currently two full-time laboratory technologists who are trained to perform COVID-19 diagnostic testing using a high-throughput RT-PCR testing platform, the COBAS Z 480, which is able to analyze 46 samples per run with a turnaround time of 24 - 48 hours. In addition to the COBAS Z 480, the BNH Lab also has one (1) GeneXpert and one (1) Abbott ID NOW available for COVID-19 testing with a total of 1,788 kits/cartridges available. The GeneXpert and Abbott ID NOW test kits are are intended for testing of PUI's, with 200 tests designated as a "First Case Reserve" intended for investigation of the first COVID-19 case and contacts. Given concerns over reliability of results from the Abbott ID NOW, samples are run in parallel on the Abbott ID NOW and GeneXpert. Diagnostic testing is a vital part of the Palau Ministry of Health's (MOH) strategy to prevent the importation of COVID-19 into the country and to contain the spread of the disease if it is introduced. During the month of May, a total of 650 individuals were tested for COVID-19 using the COBAS Z 480. All tests conducted thus far have been negative. This was part of a campaign targeted at testing persons demonstrated risk due to the nature of their work, including staff deployed to points of entry for passenger screening, first responders, healthcare workers, critical infrastructure workers and those with recent travel history outside of the country. Currently, all patients presenting with respiratory illness at the Belau National Hospital and patients admitted for community-acquired pneumonia and SARI are tested for COVID-19. There have been no lab-confirmed cases of COVID-19 identified through hospital-based active surveillance. Between June and August, there will be three (3) scheduled repatriation flights carrying stranded Palau citizens and residents from the CNMI, Guam, Hawaii, Japan and the US Mainland to Palau. Each flight will carry no more than 50 individuals who will be held in quarantine for no less than 14 days upon arrival in Palau with daily monitoring by public health staff. These persons will be tested at 7 days post arrival and again at 14 days to satisfy evaluation criteria for discharge from a quarantine facility. Testing will be conducted using the RT-PCR COBAS Z 480 due to its high-throughput capacity and reliability. In anticipation of these repatriation flights, efforts have been focused on ensuring quarantine and isolation facilities and processes are in place with adequate staff to manage potential COVID-19 cases. In preparation for the possibility of introduction and the potential for local transmission, plans are to expand testing to include community health centers for surge capacity. Expansion will require recruitment and training of additional laboratory staff to keep up with routine demands of the national hospital laboratory and additional demands for COVID-19 testing. At present there are no plans to expand testing capacity to non-traditional sites such as retail sites and pharmacies. Plans to implement serology testing in the country have been put off until the serological tests available have been validated and a protocol for serological testing has been approved. Currently, the Belau National Hospital Laboratory is the only lab

with diagnostic capacity for COVID-19 and two trained and competent laboratory staff to conduct testing. Despite having multiple platforms for testing, human resource capacity is a barrier to being able to test 2% of the population (~354 tests).

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*	650	150							800
Serology									0
TOTAL	650	150	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)
Belau National Hospital	Hospitals or clinical facility		46			Travelers in quarantine and targeted screening for indvididuals including, but not limited to first responders, healthcare workers, critical infrastructure workers. Testing will be conducted for exposed HCWs and contacts of supect and confirmed cases of COVID-19.
Belau National Hospital	Hospitals or clinical facility		168			PUIs, patients presenting with ILI, SARI or community-acquired pneumonia.

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)
Belau National Hospital	Hospitals or clinical facility		48			PUIs, patients presenting with ILI, SARI or community-acquired pneumonia.

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.

The Ministry of Health is exploring potential enhancements to community health center laboratories to increase testing capacity especially in remote areas of the country. There are no commercial laboratories in Palau, however three private clinics maintain small laboratories that could potentially be included in the MOH testing strategy. There is a severe shortage of skilled laboratory technicians for surge testing capacity. Increased transmission and testing may overwhelm the health system and interrupt routine testing services. Plans are to recruit and hire experienced laboratorians to support the additional testing workload and train local staff. A Laboratory Technician Training Program is being developed to train a cohort of technicians to bolster the pool of available laboratorians. This program will be based on a model program, the Health Assistant Training Program, which successfully trained and transitioned more than 15 interns to permanent positions within the public health workforce.The current testing strategy prioritizes testing of anyone who meets the case definition of COVID-19 or presents with respiratory illness and requires hospitalization. This reflects the current transmission scenario in the country of no laboratory confirmed cases. Healthcare workers, first responders, hospitality industry workers and critical infrastructure workers who are at increased risk of contact with the first case of COVID-19 will be prioritized for routine testing. The current testing protocol also prioritizes individuals who are above the age of 55, pregnant, disabled, suffer from a chronic disease or who are otherwise immunocomprised. While there is currently no shortage of test kits available, as we move forward it will be important to forecast and procure additional testing supplies to meet increased testing demand and to suppress and mitigate COVID-19 in the country. Plans to implement serology testing in the country have been put off until the serological tests available have been validated and a protocol for serological testing has been approved.

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
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	0							0
Volume of additional swabs needed to meet planned testing levels[++]	0	0							0
Volume of additional media (VTM, MTM, saline, etc.) needed to meet planned testing levels[++]	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 - Thermofisher)	0	0							0
FOR SEROLOGIC TESTING									
Number of additional* equipment and devices to meet planned testing levels	0	0							0

ELC ENHANCING DETECTION: PALAU TESTING PLAN

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	0							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.