

PPHSN LabNet Catalogue

2022 EDITION

updated 3rd March 2023



Compiled by SPC PHD Laboratory Strengthening Programme





Executive Summary:

The LabNet Catalogue was developed in 2015 through a culmination of ongoing collaborative work of the Laboratory Strengthening Team within SPC Public Health Division, PIHOA, Laboratory Managers/Directors in L1 Laboratories in PICTs and PPHSN L2 and L3 Reference Laboratories. It provides a summary of key public health diagnostic tests available in L1 Laboratories in 22 PICTs to accurately test and efficiently report on PPHSN priority outbreak prone diseases which includes dengue, measles, rubella, influenza, typhoid, cholera, HIV and STIs. It also provides updated key focal contact addresses of Laboratory Managers in PICTs. The catalogue is updated on an annual basis to provide the latest updates both in public health diagnostic capacities and laboratory focal points in all L1 Laboratories. The catalogue also provides updated information from L2 and L3 Reference Laboratories which are currently members of the Laboratory Network under PPHSN and provide diagnostic supports on testing and confirmation for L1 laboratories.

In 2022, through the advice and guidance of SPC PHD Director, Dr Berlin Kafoa, new changes had now been incorporated to the 2022 edition. Clinical diagnostic capacities of L1 Laboratories are now included, and the new edition now includes both Public and Clinical health diagnostic capacities of L1 laboratories in PICTs.

The following new Sections had been included:

- Section C: information on current clinical diagnostic capacities in L1 Laboratories in PICTs;
- Section D: information on EQA Providers;
- Section E: information on Laboratory External Audit/Assessment;
- Section F: Referral and Shipping Information capturing information on certified IATA Trainers and Shippers;
 and
- Section G: information on Laboratory Information System.

The inclusion of the above sections will provide a quick overview of where L1 Laboratories in PICTs are in terms of diagnostic capacities to address and provide accurate, reliable, and timely laboratory results to guide effective interventions for both clinical and public health diseases. In addition, information provided in this catalogue will also greatly assist technical and donor partners to envisage where support is needed most.

The document is a "living document" and will be updated on an annual basis therefore we invite your suggestions and recommendations on what best to be captured from a Laboratory perspective to optimize and streamline laboratory services in all jurisdictions.

The Laboratory Strengthening Team within SPC PHD is indeed very thankful for all the support provided during the compilation of this new 2022 LabNet Catalogue by PIHOA, Laboratory Managers and Directors from L1 Laboratories in the region and our PPHSN L2 and L3 Reference Laboratories.





PPHSN LabNet catalog - 2022 Edition

The LabNet concept

The idea of LabNet came from the recognition that many Pacific Islands have little or no ready access to public health laboratory services. LabNet is one of the six (6) services of PPHSN established in April 2000. LabNet provides recommendations and support for verification and identification of pathogens through the current laboratory network. Existing laboratory services are traditionally hospital-based and have limited provisions. The **LabNet** concept is described as follows:

- 1. LabNet is a three-tier level network of laboratories: L1, L2 and L3, where "level" refers primarily to the role of the laboratory in the network and not to its capacity.
 - L1 labs are the labs of the PPHSN member countries and territories. This level is the closest to
 patients and clinicians facing an outbreak alert. L1 labs collect samples from suspect patients and
 when possible use screening tests. They should have ready access to L2 or L3 lab confirmation
 services for selected diseases.
 - L2 regional labs perform the first level of confirmation tests for L1 labs. The techniques they run require more training and equipment than those used at L1 labs. They are further supported by L3 labs. L2 regional labs may also serve as L1 labs in their country or territory.
 - L3 labs are reference laboratories. They are usually internationally recognised labs (e.g. WHO collaborating centers), located in the Pacific Rim countries (mainly Australia, New Zealand and USA). In addition to the L2 disease-specific role, they perform more sophisticated, less urgently needed tests, giving important epidemiological information for the region or in the context of the worldwide surveillance of major diseases (such as dengue virus genotyping, influenza subtyping or Leptospira serogrouping).
- 2. **LabNet** aims to provide harmonized quality laboratory services with recommendations and technical support provided through the LabNet Technical Working Group. The LTWG is composed of twelve (12) members from regional laboratory partners and training institutions (CDC, ESR, FCDC, FNU, ILM, IPNC, NRL, PIHOA, PPTC, SPC, VIDRL and WHO) and they contribute to the development and strengthening of human (and animal) health laboratory services in Pacific Island countries and territories (PICTs).
- 3. The LabNet Catalog was developed with the objective of providing information regarding the LabNet labs and activities at all three levels. Additionally, the catalogue provides guidance on specimen collection and IATA requirements for referral and shipment of samples for priority PPHSN diseases and for emerging diseases such as COVID-19. The catalogue will undergo evaluations and assessments on a routine basis to have this updated, at a minimum, on an annual basis.

The **LabNet Catalog** is made up of 4 sections:

Section 1: L1 Laboratories Section 2: L2 Laboratories

Section 3: L3 Laboratories and COVID 19 Laboratory Diagnosis

Section 4: Key PPHSN Contacts

Each section has a list of all the defined laboratories, followed by specific details for each country presented following a standard format: A-lab name and contact information; B-testing and referral information for 12 PPHSN relevant diseases; C-referral lab and shipping information. Section 3 contains the same information, although in a slightly different format, and with some specific instructions for shipping specimens from countries to the L3 facility.



SECTION 1

L1 LABORATORY SITES:

No.	Country/Territory
1	American Samoa
2	Cook Islands
3	Federated States of Micronesia - Chuuk
4	Federated States of Micronesia - Kosrae
5	Federated States of Micronesia – Pohnpei
6	Federated States of Micronesia – Yap
7	Fiji (Divisional Laboratories)
8	Kiribati
9	Republic of the Marshall Islands (Majuro an Ebeye)
10	Nauru
11	Northern Mariana Islands
12	Niue
13	Republic of Palau
14	Papua New Guinea
15	Samoa
16	Solomon Islands
17	Tokelau
18	Tonga
19	Tuvalu
20	Vanuatu
21	Wallis and Futuna

Note: In this section, * indicates a commercial or government laboratory, not in the PPHSN-LabNet list. These laboratories have been contracted by the country or jurisdiction and it is important to include them in the catalog for a complete understanding of all testing provisions available in the region.



COUNTRY: AMERICAN SAMOA

LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name LBJ TROPICAL MEDICAL CENTER

Lab Contact Name(s):

Lab Main Contact Mrs Lamanda Ioane, BSCLS, MBAHCM

Lab Manager

Address LBJ Laboratory, Pago Pago USA

E-mail <u>lamanda.ioane@lbj.as</u>

Phone (684) 633 2001/1222, ext: 636

Fax (684) 633 1200

Sr. Tech/Other Contact Ms Seini Biukoto, MLT(ASCP)^{CM}

Microbiology Supervisor

Seine.biukoto@lbj.as

E-mail Dr Amor Gonzales, MD, AMT, Laboratory

Director/Pathologist

Maopa L. Raikabula Acting Lab Manager Laboratory Services

ASG-DOH

PAGOPAGO, Am. Samoa 96799 Maopa.Lewabeci@doh.as

Laboratory Testing Performed

General lab testing, PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	Cepheid GeneXpert CT-NG (same for ASG-DOH Lab)		
Cholera	Culture & AST		
Dengue	NS1 AG, IGM/IGG DENGUE DUO	PCR	ASG-DOH via Hawaii State Lab
Chikungunya		PCR	ASG-DOH via Hawaii State Lab
Zika		PCR	ASG-DOH via Hawaii State Lab
Gonorrhoea	Culture ID & AST Cepheid GeneXpert CT-NG (for both LBJ & ASG-DOH)		
HIV	LBJ: AG & ANB RAPID COMBO ASG-DOH: OraQuick	DIFFERENTIATION TEST	Primax Lab, CA, USA
Influenza	Cepheid GeneXpert (multiplex)-if out of reagents and controls-refer OSOM Rapid Diagnostics	Cepheid GeneXpert (multiplex)	ASG-DOH



	QuickVue Rapid		
SARS-CoV-2 (COVID-19)	Cepheid GeneXpert (multiplex)-if out of reagents & controls- refer	Cepheid GeneXpert (multiplex) ID NOW Accula BIOFIRE- Respiratory panel GI panel	ASG-DOH
Leptospirosis	ELIZA KIT	MAT	ASG-DOH via Hawaii State Lab,
Measles		EIA	Primax Lab, USA
Rubella		ANTIBODY IGM/IGG	Primax Lab, USA
Syphillis	RPR, TPPA, Titer (both for LBJ & DOH)		
Tuberculosis	Direct smear-ZN stain	GeneXpert Smear Concentration method, NAAT, Culture ID & AST	ASGDOH-Lab Diagnostic Lab Services (DLS) Hawaii, USA via PIHOA/CDC
Typhoid	Culture ID & AST		
Мрох		PCR	ASG-DOH via Hawaii State Lab

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology	Sysmex:		
-Full Blood count & type of Analyzer	All Hematology profile		
-Blood Film Analysis	Blood Film: manual		
-Coagulation Profile	differential		
	Coagulation profile:		
	STAGO machine		
Biochemistry	AU 680 BECKMAN	At times when	PRIMEX LAB, USA
-RFTs	COULTER:	we encounter	
-RBS		shipping delays	
-HbA1c	All chemistry profile and	of reagents.	
-LFTs	tumor markers		
-Cardiac Enzymes			
-Lipid Profile	Drug testing for		
-Tumour Markers	employees and patients		
	1	<u> </u>	l



Microbiology -Blood Culture (automated) -Culture -manual -Identification (automated) -AST (automated and manual) -AST International Guideline -Fungal -Urinalysis (Manual or Automated)	Culture ID & AST: VITEK AST International Guideline: CLSI	Some Bacteriology confirmations Fungal Culture Virology Tests	Diagnostic Lab Services (DLS) Hawaii, USA
Molecular testing -RT-PCR -HPV -HBV Viral Load	RT-PCR		ASGDOH-Lab
Cytopathology -Gynae Cytology -Non-Gynae Cytology	PAP SMEAR		Diagnostic Lab Services (DLS) Hawaii, USA
Histology Tissues Biopsies			Diagnostic Lab Services (DLS) Hawaii, USA

Institution	Panel name	No.of cycles provided
College of American	Hematology PT	3 Cycles/ Events
Pathologist	Chemistry PT	, ,
ŭ	Serology PT	
	Urine Analysis PT	
	Blood Transfusion	
	Bacteriology PT	
	Parasitology PT	
	Mycobacteriology PT	2 Cycles/ Events
	Respiratory PT	
	GeneXpert CT/NG PT	
	GeneXpert Respiratory PT	
PPTC	Blood Transfusion	3 Cycles/ Events
	Hematology (LBJ & ASG-DOH)	
	Chemistry (LBJ & ASG-DOH)	
	Serology (LBJ & ASG-DOH)	
	Microbiology (Bacteriology)	
	COVID 19 (LBJ & ASG- DOH)	
API (ASG-DOH LAB)	Microbiology:	3 Cycles/ Events
	Respiratory- GeneXpert & Biofire	
	GI - Biofire	
	MTB/Rif - GeneXpert	
	CT/NG – GeneXpert	
	Covid 19 – GeneXpert & Biofire &	
	Accula	
	Hematology	
	Serology	
DLS	Microbiology:	Once/Year
	Blind slide Re-checking	
	DLS – PT	
	GeneXpert TB Panel (ASG-DOH only)	2 Cycles/ Events



E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/others)	Assessor/Agency conducting the Audit
2021		CLIA'88, CMS (LBJ & DOH)
2022	AFB ASESSMENT TOOL	PIHOA RLC

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	*Diagnostic Lab Services Hawaii, USA	
	*Primax Lab, CA, USA	
	*Hawaii State Lab, Hawaii, USA	
IATA certified Trainers	YesNumber Certified Trainers:2	No
	Date Training License	
	Expires:2024	
IATA certified Shippers	Yes Number Certified Shippers:9	No
	Date Shipping License	
	Expires:2024	
Airline/Cargo companies the lab uses to ship	Hawaiian Airlines	
to L2/L3 lab		

G. Laboratory Information System

Laboratory Information System (LIS)	In process



COUNTRY: COOK ISLAND

LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name RAROTONGA HOSPITAL LABORATORY

Lab Contact Name(s):

Lab Main Contact Mr. Douglas Tou – Lab Manager

Address Ministry of Health

P. O. Box 109, Rarotonga, Cook Islands_

E-mail douglas.tou@cookislands.gov.ck

Phone (682) 22664 Fax (682) 22670

Sr. Tech/Other Contact Ms Theresa Tatuava, Senior Med Lab Technologist,

Quality Coordinator

E-mail theresa.tatuava@cookislands.gov.ck

Laboratory Testing PerformedGeneral lab testing, PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	GeneXpert DNA Probe No, unless a police or coroner case		LabPlus Auckland, NZ
Cholera	Culture/ID	Yes - Serotyping	LabPlus Auckland, NZ
Dengue	SD Deng NS1 Ag+Ab Comb Rapid Device 25T	Yes	LabPlus Auckland, NZ
Chikungunya	no	yes	LabPlus Auckland, NZ
Zika	No	Yes	LabPlus Auckland, NZ
Gonorrhoea	Gram stain, culture, Beta lactamase test GeneXpert-DNA Probe	No	N/A
HIV	Determine HIV (100T), HIV 1+2 Rapid Test Insti, HIV 1+2, Unigold (20s)	No	N/A
Influenza	Influenza Rapid Test InFlu, PCR Biofire		ESR/NCBID Wellington
SARS-CoV-2	yes	Yes – Whole Genome sequencing	ESR NZ
Leptospirosis	ptospirosis No Yes		LabPlus Auckland, NZ
Measles	No	Yes	LabPlus, Auckland, NZ
Rubella	No	Yes	LabPlus Auckland, NZ
Syphillis	Yes- RPR ,Bioline Syphilis 30, SD Duo HIV/Syphilis	Yes/Confirmation Only	LabPlus Auckland, NZ
Tuberculosis	Yes Direct smear-ZN stain/ GeneXpert – DNAprobe	No	Lab Plus NZ
Typhoid	Culture/ID	Yes	LabPlus, Auckland, NZ



Мрох	No	? yes	? VIDRL or ESR NZ

1 Clinical Diagnostic Tests	T		T
Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology	yes	no	LabPlus Auckland, N
-Full Blood count & type of Analyser			
-Blood Film Analysis			
-Coagulation Profile			
Biochemistry			LabPlus Auckland, N
-RFTs	Yes		
-RBS	Yes		
-HbA1c	Yes		
-LFTs	Yes		
-Cardiac Enzymes	Yes		
-Lipid Profile	Yes		
-Tumour Markers	PSA,Beta HcG,AFP,		
	Others such as CEA ,CA		
	etc referred to Lab Plus		
Microbiology			LabPlus Auckland, Na
-Urinalysis (manual or automated)	Manual		
- Blood Culture (manual or automated)			
-Culture	Manual		
-Identification (manual or automated)			
 AST (manual or automated) 	Manual		
- AST International Guidelines used	Yes		
-Fungal testing	No – only stain for fungal		
-Water testing	elements		
-Food Testing	Yes		
	Yes		ECD NZ
Molecular testing	Yes		ESR NZ
-RT-PCR	Yes	Voc	VCS Victoria
-HPV	None Vos Consynart	Yes	VCS – Victoria
-HB Viral Load	Yes- GeneXpert		Cytology Services
Cytopathology	No	Yes	Australia Ltd
	No No	ies	VCS – Victoria
-Gynae Cytology	No No		Cytology Services
-Non-Gynae Cytology	INU		Australia Ltd
Histology	Ma	Voc	LabPlus NZ
Histology	No	Yes	LabPlus NZ

Institution	Panel name	No.of cycles provided
PPTC NZ	PPTC EQA Microbiology	3
	PPTC EQA Serology PPTC EQA Blood Bank	
	PPTC EQA Blood Ballk PPTC EQA Haematology	
	PPTC EQA Biochemistry	
	PPTC EQA COVID-19	

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool	Assessor/Agency conducting the Audit
rear last Addit colladeted	Type of Assessment Tool	Assessor/ Agency conducting the Addit
	(WHO Minimum	
	Std/SLIPTA/ISO/Others)	



2021	SLIPTA	PPTC-Navin Karan

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	*Auckland LabPlus NZ	
	*VCS Ltd Australia	
	*ESR – Wellington/NZ	
	* VIDRL – Melbourne/Australia	
IATA certified Trainers	YesNumber of Certified Trainers: One	No
	Date Training License Expires: Oct 2023	
IATA certified Shippers	YesNumber Certified Shippers: One	No
	Date Shipping License Expires: Oct 2023	
Airline/Cargo companies the lab uses to ship	Air NZ	
to L2/L3 lab		

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
Still in working progress to be implemented	

FEDERATED STATES OF COUNTRY: MICRONESIA - CHUUK

LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	CHUUK STATE HOSPITAL LABORATORY
Lab Contact Name(s):	
Lab Main Contact	Mr. Yoichy Aut - Lab Supervisor
Address	Chuuk State Hospital
	P.O.Box 400, Weno, Chuuk, FSM 96942
E-mail	YAut@fsmhealth.fm (691) 330 2220/2216(17)
Phone	(691) 330 2220
Fax	
Sr. Tech/Other Contact	Ms. Lisa Barrow - FSM National Lab Coordinator
E-mail	lbarrow@fsmhealth.fm
Phone	(691) 320 8300
Fax	(691) 320 8460
Laboratory Testing Performed	General lab testing, limited PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab
			Location
Chlamydia	GeneXpert (CT/NG)	NO	N/A
Cholera	Microscopy, culture, and sensitivity	Yes/ subtyping	Hawaii Public Health Lab (to be confirmed)
Dengue	SD NS1/lgM/lgG	Serology/PCR	QUT, Australia ,GPHL
Chikungunya			
Zika			



Gonorrhoea	Microscopy, culture,Genexpert	No	N/A
HIV	Determine, confimatory algorithm, Genexpert, Viral load	CD4+ count	Pohnpei state Hospital
Influenza	Antigen testing A/B	PCR	HPHL/GPHL
SARS-CoV-2			
Leptospirosis	SD IgM/IgG	Serology/PCR	QHFSS
Measles	No	yes	Hawaii Public Health Lab /GPHL(to be confirmed)
Rubella	No	No	N/A
Syphillis	RPR, titre, Determine syph TP	No	N/A
Tuberculosis	Direct smear-ZN stain GeneXpert	Culture, ID, sens	Diagnostic Lab Services Honolulu-Hawaii, USA
Typhoid	M/C/S	Yes/subtyping	Hawaii Public Health Lab (to be confirmed)
Мрох			

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology			
- Full Blood count & type of	Yes	NO	NA
Analyser	Sysmex XNL 450		NA
- Blood Film Analysis	Yes	NO	NA
- Coagulation Profile	Yes	NO	NA
Biochemistry			
DET.	Yes	NO	NA
-RFTs	Yes	NO	NA NA
-RBS	Yes	NO	NA
-HbA1c	Yes	NO	NA
-LFTs	Yes	NO	NA
-Cardiac Enzymes	Yes	NO	NA
-Lipid Profile	NO	NO	NA
-Tumour Markers			
Microbiology			
-Urinalysis (manual or automated)	Yes Manual and Auto	NO	NA
- Blood Culture (manual or automated)	Yes manual	NO	NA
-Culture	Yes manual	NO	NA
-Identification (manual or automated)	Manual	NO	NA
- AST (manual or automated)	NO	NO	NA
- AST International Guidelines used	NO	NO	NA
-Fungal testing	NO	NO	NA
-Water testing	NO	NO	NA
-Food Testing	NO	NO	NA
Molecular testing			
-RT-PCR	Genex	NO	NA
-HPV	NO	NO	NA



-HBV Viral Load	NO	NO	NA
Cytopathology -Gynae Cytology -Non-Gynae Cytology	NO NO	NO NO	NA NA
Histology	NO	NO	NA

Institution	Panel name	No.of cycles provided
PPTC	Chemistry	2
	Molecular	1
PPTC	SEROLOGY	1
	Microbilogy	1
PPTC	BLOOD BANK	1
	Hematology	1

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)		
IATA certified Trainers	YesNumber Certified Trainers:2 Date Training License Expires:	
IATA certified Shippers	YesNumber Certified Shippers:2 Date Shipping License Expires:April 13,2024	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airline, and	

G. Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	No
	Planned



FEDERATED STATES OF COUNTRY: MICRONESIA - KOSRAE

LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name KOSRAE STATE HOSPITAL LABORATORY

Lab Contact Name(s):

Lab Main Contact Ms. Aralai N Tuione-Lab Manager

Address Kosrae State Hospital

P.O. Box 127 Kosrae,

FSM 96944

E-mail atuione@fsmhealth.fm
Phone (691) 370 3012/3006

(691) 970 8580

Fax None

Sr. Tech/Other Contact Ms. Lisa Barrow - FSM National Lab Coordinator

E-mail lbarrow@fsmhealth.fm

B: PPHSN Target Disease Testing Information

General lab testing, PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	Bioline RDT Chlamydia Chlamydia&Gonorrhoea (CTNG) Molecular GXpert	No	N/A
Cholera	No	Culture ID	Hawaii Public Health Lab
Dengue	SD NS1/IgM/IgG Dengue Duo	PCR	Guam Public Health Lab. Hawaii Public Health Lab
Chikungunya		Yes	Guam Public Health Hawaii Public Health Lab.
Zika		Yes	Guam Public Health Hawaii Public Health Lab
Gonorrhoea	Grams Screening Chalmydia&Gonorrhoea (CTNG) Molecular GXpert	No	N/A
ніV	RDT HIV/Syphilis Duo Determine HIV-1/2	CD 4 count Viral load	Hawaii Public Health Lab
Influenza	BD Veritor Rapid Flu A+B Biofire GXpert-SARS-COV 2/Flu/RSV	PCR	Hawaii Public Health Lab Guam Public Health Lab
SARS-CoV-2	Binax ID NOW Rapid Antigen Testing Antibody testing	Genome Sequencing	Hawaii Public Health Lab



	Biofire Film Array GeneXpert –SARS-CoV 2 & SARS-COV 2/Flu/RSV		
Leptospirosis	RDT -SD IgM/IgG	MAT	Hawaii Public Health Lab
Measles	No	EIA	Hawaii Public Health Lab Guam Public Health Lab
Rubella	No	EIA	Hawaii Public Health Lab Guam Public Health Lab
Syphillis	RPR,Titre, Determine syph TP RDT-HIV/Syphilis Duo	No	N/A
Tuberculosis	AFB Smear Microscopy,Xpert MTB/RIF Ultra Assay	Culture, ID	Diagnostic Lab Services Honolulu-Hawaii, USA
Typhoid	IgG/IgM antibody Testing	Yes	Hawaii Public Health Lab (to be confirmed)
Мрох	No	Yes	Hawaii Public Health Lab

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology - Full Blood count & type of Analyzer - Blood Film Analysis - Coagulation Profile	-CBC-Sysmex XN 450 & KX 21 (backup) 6 part Diff and Manual Peripheral smear reporting Coagulation-POC testing CoaguCheck XS PT Test	Blood film confirmation	Pohnpei State Hospital- Telepathology
Biochemistry -RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes -Lipid Profile -Tumour Markers	Analyzers-Cobas C111/Fuji film Dry Chemistry/DCA Vantage 2000/Mini Vidas Biomerieux Test:LFTs,RFTs,Lipid Profiles,Glucose HBA1C Cardiac Enzymes-CK-MB/Troponin I Fertility-HCG Thyroid-TSH/T4/T3 Tumour Markers-CA 125 /TPSA	No	N/A
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	Microbiology-Basic microbiology Urine analysis-manual Uri spec 10G/microscopy Blood culture-No blood culture BacT/Alert in place Fungal testing-KOH No water testing No food testing	No	N/A
Molecular testing -RT-PCR -HPV	No	No	N/A



-HBV Viral Load			
Cytopathology -Gynae Cytology -Non-Gynae Cytology	Cytopathology Gynae-Pap smear collection Non Gynae	Yes	FSM Telepathology- Pohnpei
Histology	Histology biopsy	Yes	FSM Telepathology- Pohnpei

Institution	Panel name	No.of cycles provided
Pacific Pathology Training Center-New Zealand(PPTC)	Haematology,Serology,Chemistry,Blood Transfusion and Covid-19	3 Cycles in one year
Diagnostics Laboratory	AFB Proficiency Testing	Annually
Services-Hawaii	Blind Slide	
	Xpert TB Proficiency	Twice a year (Part A & Part B)

E. Laboratory External Audit/Assessment

	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
None	None	N/A

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	Guam Public Health Lab/Hawaii Public Health Lab CDC relevant reference Laboratories	
IATA certified Trainers	YesNumber Certified Trainers:1 No Date Training License Expires: 08/05/2022	
IATA certified Shippers	YesNumber Certified Shippers:4 No Date Shipping License Expires:08/05/2024	
Airline/Cargo companies the lab uses to ship to L2/L3 lab		

G: Laboratory Information System

Laboratory Information System (LIS)	Yes- Sysmex HCLAB the new LIS installed. (LIS interphase
	with equipment & not directly into HIS yet)



COUNTRY: FSM-POHNPEI



A: Contact/General Information

-	
Laboratory Name	POHNPEI STATE HOSPITAL LABORATORY
Lab Contact Name(s):	
Lab Main Contact	Mr. Herbert Johnny – Lab Supervisor
Address	Pohnpei State Hospital
	Kolonia, Pohnpei FSM 96941
E-mail	hjohnny@fsmhealth.fm (691)
Ph	320 2214
Fax	(691) 320 5394
Sr. Tech/Other Contact	Ms. Lisa Barrow – FSM National Lab Coordinator
E-mail	lbarrow@fsmhealth.fm
Laboratory Testing Performed	General lab testing, PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	Rapid Antigen / PCR (GeneXpert)	No	N/A
Cholera	Microscopy, culture and sensitivity	Yes/ subtyping	Hawaii Public Health Lab
Dengue	SD NS1/lgM/lgG	Serology/PCR	Hawaii Public Health Laboratory, GPHL
Chikungunya		No	N/A
Zika		No	N/A
Gonorrhoea	Microscopy, culture PCR (GeneXpert)	No	N/A
HIV	Determine, confimatory algorithm, Viral load	No	N/A
Influenza	PCR- Biofire,	PCR	GPHL, HPHL (sentinel surveillance referred)
SARS-CoV-2	Rapid Antigen/ PCR	Confirmation	Hawaii State Lab
Leptospirosis	SD IgM/IgG	Serology/PCR	HPHL
Measles	No	yes	Hawaii Public Health Lab
Rubella	No	No	HPHL
Syphillis	RPR,titre, Determine syph	No	N/A
Tuberculosis	Direct smear-ZN stain GeneXpert MTB/Rif	Culture, ID, sensi	Diagnostic Lab Services Honolulu-Hawaii, USA
Typhoid	Presumptive culture	No	N/A
Мрох	No	No	N/A

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology -Full Blood count & type of Analyser - Blood Film Analysis - Coagulation Profile	- KX21 Sysmex Analyzer - XS1000i Sysmex Analyzer - No - INR/ APTT-Coagulation	No	N/A
- Coagulation Profile Biochemistry -RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes -Lipid Profile -Tumour Markers	- COBAS C311 (ROCHE) - Renal Function - LFTs - Electrolytes - Cardiac Enzyme - Lipid Profile - Uric Acid - Amylase - Glucose, etc	No	N/A
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	- Microscopic Urine/ O&P - Blood Culture manual - Identification manual - Fungal testing	No	N/A
Molecular testing -RT-PCR -HPV -HBV Viral Load	- SARS-Cov-2 - Flu RFE - GC/ CT - Firal Load	Yes	GPHL/ Hawaii State Lab.
Cytopathology -Gynae Cytology -Non-Gynae Cytology	-Pap smear -Body fluids (Basic Stains)	- Confirmat	Nikon Memorial Hospital - Japan
Histology	-H&E Stains (Basic Stains)	-Special Stains Immuno- Chemistry Test	Nikon Memorial Hospital - Japan

D. EQA Providers

Institution	Panel name	No.of cycles provided
PPTC	- Hematology, Chemistry, Blood Bank, Serology (STIs)	- Two (2) per Department/ Year
RCPA (Cytology)		4 cycle

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit



F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	
IATA certified Trainers	YesNumber Certified Trainers: 1 Date Training License Expires: 2024
IATA certified Shippers	YesNumber Certified Shippers: 2 Date Shipping License Expires: 2024
Airline/Cargo companies the lab uses to ship to L2/L3 lab	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	No other plan yet

COUNTRY: FSM-YAP LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	YAP MEMORIAL HOSPITAL LABORATORY
Lab Contact Name(s):	
``	act Ms. Maria Marfel – Lab Manager
Addre	ess Yap Memorial Hospital
	P. O. Box 148 Colonia, Yap FSM 96943
E-m	ail mmarfel@fsmhealth.fm
	Ph (691) 350 2110/3446
F	Fax N/A
Sr. Tech/Other Conta	act Ms. Lisa Barrow - FSM National Lab Coordinator
E-m	ail <u>lbarrow@fsmhealth.fm</u>
Laboratory Testing Performed	General lab testing, PPHSN disease testing

Target	Test Performed at Lab	Referred Test	Current Referral Lab
Disease			Location
Chlamydia	GeneXpert	No	N/A
Cholera	Microscopy, culture and sensitivity	Yes/ subtyping	GPHL (to be confirmed)
Dengue	SD NS1/lgM/lgG	Serology/PCR Dry Spot	Hawaii State Laboratory, GPHL (to be confirm and subtype) ILM in French Polynesia
Chikungunya		Yes	GPHL & HSL (to be screened; confirm at CDC)



Zika		Yes	GPHL (to be screened;
			confirm at CDC/WHO)
Gonorrhoea	Microscopy, culture, GeneXpert	No	N/A
HIV	Determine, confimatory Algorithm; Viral load on GeneXpert	CD4 count	Diagnostic Lab Services Hawaii, USA
Influenza	Alere BinaxNOW Influenza A & B Card Influenza A & B GeneXpert Influenza A,B&RSV Biofire	Yes/subtyping PCR ABI 7500 by Life Technologies	GPHL
SARS-CoV-2	BinaxNOW & Flowflex Ag Rapid Test GeneXpert PCR; Biofire Film Array	Yes/variant typing	Hawaii State Laboratory Hawaii, USA
Leptospirosis	SD BioLine Leptospira IgM	No	N/A
Measles	No	Yes	GPHL (to be confirmed)
Rubella	No	Yes	GPHL (to be confirmed)
Syphillis	RPR,titre, Determine syph TP	No	N/A
Tuberculosis	Direct smear-ZN stain GeneXpert MRTB Ultra	Yes, Culture, ID, sensi	Diagnostic Lab Services Honolulu-Hawaii, USA
Typhoid	SD BioLine Salmonella typhi IgG/IgM Presumptive culture	Yes	Hawaii Public Health Lab (to be confirmed)
Мрох	No	Yes	Hawaii State Laboratory Hawaii USA

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology - Full Blood count & type of Analyser - Blood Film Analysis - Coagulation profile (PT/INR)	FBC; Sysmex XS1000i & backup pocH100i Peripheral smear manual CoaguCheck XS System		DLS confirm diagnosis
-RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes (Troponin I) -Lipid Profile -Tumour Markers	Vitros350 chemistry analyzer OneTouch Ultra LifeScan DCA2000+ miniVidas Biomerieux		DLS for confirmation diagnosis
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated)	All microbial testing are manual at present; No fungal, water and food testing at present	Yes	DLS for confirmation



- AST International Guidelines used -Fungal testing -Water testing -Food Testing			
Molecular testing -RT-PCR -HPV -HBV Viral Load	HPV and HBV viral load	Yes	DLS for confirmation
Cytopathology -Gynae Cytology -Non-Gynae Cytology	Cytopathology		Telehistopathology Lab, Pohnpie FSM
Histology	Histology		Telehistopathology Lab, Pohnpie FSM

Institution	Panel name	No.of cycles provided
Pacific Pathology Training Centre	Hematology, Serology, Microbiology,	3-cycle per annum
based in NZ	Chemistry, Blood transfusion, COVID-19	
Diagnostic Laboratory Services	, , ,	Annually
based in Hawaii	Recheck	
	Xpert TB Proficiency	Twice a year (Part A and Part B)

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
NONE	SLIPTA	N/A

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	GPHL, HSL and CDC/WHO Relevant Reference Laboratories	
IATA certified Trainers	YesNumber of Certified Trainers:2 Date Trainer License Expires:5 th Aug 2022	No
IATA certified Shippers	YesNumber Certified Shippers:8 Date Shipping License Expires:6 th Sep 2022	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airline	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only) – A new LIMS will be installed
	later this month)
	No
	Planned



COUNTRY: FIJI LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name COLONIAL WAR MEMORIAL HOSPITAL LABORATORY

Lab Contact Name(s):

Lab Main Contact Ravendra Prasad

Address Pathology Laboratory,

Colonial War Memorial Hospital

E-mail Ravendra.prasad@gmail.com

Ph 9962201Fax N/A

Sr. Tech/Other Contact Nesia Chaya Refaela

E-mail Nesia.refaela@gmail.com

Laboratory Testing Performed

General lab testing, PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	No	No	
Cholera	No	No	
Dengue	Yes		
Chikungunya	No	Yes	Fiji CDC
Zika	No	Yes	Fiji CDC
Gonorrhoea	Yes		
HIV	Yes		
Influenza	No	Yes	Fiji CDC
SARS-CoV-2	Yes		
Leptospirosis	Yes		
Measles	No	Yes	Fiji CDC
Rubella	No	Yes	Fiji CDC
Syphillis	Yes		
Tuberculosis	Yes		
Typhoid	Yes		
Мрох	No	Yes	Fiji CDC



Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology	Yes – XN-1000		
-Full Blood count & type of	BF – Yes		
Analyser	Coagulation - yes		
- Blood Film Analysis			
- Coagulation Profile			
Biochemistry			
-RFTs	Yes		
-RBS			
-HbA1c			
-LFTs			
-Cardiac Enzymes			
-Lipid Profile			
-Tumour Markers			
Microbiology			
-Urinalysis (manual or automated)	Manual		
 Blood Culture (manual or automated) 			
-Culture	Yes		
-Identification (manual or automated)			
 AST (manual or automated) 	Both		
- AST International Guidelines used	CLSI Fungal – basic testing		
-Fungal testing	No	No	
-Water testing	No	No	
-Food Testing			
Molecular testing			
-RT-PCR	No	Yes	Fiji CDC
-RT-PCR -HPV	No	Yes	Fiji CDC
-RT-PCR -HPV -HBV Viral Load		Yes	Fiji CDC
-RT-PCR -HPV -HBV Viral Load Cytopathology	No No	Yes	Fiji CDC
-RT-PCR -HPV -HBV Viral Load Cytopathology -Gynae Cytology	No No Yes	Yes	Fiji CDC
-RT-PCR -HPV -HBV Viral Load Cytopathology	No No	Yes	Fiji CDC

D. EQA Providers

Institution	Panel name	No.of cycles provided
RCPA	Biochemistry, Blood Bank, Haematology, Serology, Microbiology, Anatomical Pathology	Quarterly
PPTC	Biochemistry, Blood Bank, Haematology, Serology, Microbiology, Anatomical Pathology	Quarterly

E. Laboratory External Audit/Assessment

	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
2022	WHO Minimum Std	Dr. Litia Tudravu, Ravendra Prasad, Nesia Refaela



F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)		
IATA certified Trainers	Yes Number Certified Trainers:1 Date Training License Expires:2023	No
IATA certified Shippers	YesNumber Certified Shippers:7 Date Shipping License Expires:30/06/2024	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Fiji Airways	

G: Laboratory Information System

Laboratory Information System (LIS)	√ Yes (LIS interphase with equipment & directly into HIS)	
	Yes (LIS to equipment only)	
	No	
	Planned	

COUNTRY: FIJI LABNET DESIGNATION: L1



A: Contact/General Information

LABASA HOSPITAL LABORATORY

Lab Contact Name(s):

Lab Main Contact Ms Makarita Baleinadogo **Address** P.O.Box 577 Labasa

E-mail mbaleinadogo@govnet.gov.fj

Ph 8811444

Fax

Sr. Tech/Other Contact:

E-mail:

Laboratory Testing Performed General lab testing, PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamudia	No	Yes	Mataika House
Chlamydia	I NO	res	Mataika nouse
Cholera	yes	No	
Dengue	Yes	No	



Chikungunya	No	Yes	Mataika House
Zika	No	Yes	Mataika House
Gonorrhoea	Yes	No	
HIV	Yes	No	
Influenza	No	Yes	Mataika House
SARS-CoV-2	Yes	No	
Leptospirosis	Yes	No	
Measles	No	Yes	Mataika House
Rubella	No	Yes	Mataika House
Syphillis	Yes	No	
Tuberculosis	Yes	No	
Typhoid	Yes	No	
Мрох	No	Yes	Mataika House/VIDRL

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology - Full Blood count & type of Analyser - Blood Film Analysis - Coagulation Profile	Yes	-HB Electrophoresis -Compliment studies -Coagulation factor studies -Factor assays	LabPlus
-RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes -Lipid Profile -Tumour Markers	Yes	Yes	CWMH/Lautoka
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	Yes	Yes	Mataika House



	No	Yes	Mataika House
Molecular testing	G V I		
-RT-PCR	GeneXpert	Yes	
-HPV -HBV Viral Load		Yes	Mataika House
Cytopathology			
-Gynae Cytology	No	Yes	CWMH
-Non-Gynae Cytology	No	Yes	
Histology	Yes		

Institution	Panel name	No.of cycles provided
PPTC	Hematology, Serology, Blood Bank, Biochemistry, Microbiology, Molecular COVID 19	4 cycles

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
February 6 th 2019	WHO Minimum Std	Ravendra Prasad. LS CWMH

F. Referral and Shipping Information

Tritererrar and Shipping information		
Recommended L2/L3 Referral Lab(s)		
IATA certified Trainers	YesNumber certified Trainers: 1	No
	Date Training License Expires: 2024	
IATA certified Shippers	YesNumber certified Shippers: 8	No
	Date Shipping License Expires:30/09/2024	
Airline/Cargo companies the lab uses to ship	CDP courier/ EMS courier	
to L2/L3 lab	Fiji Airways	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)	
	Yes (LIS to equipment only)	
	No	
	Planned	



COUNTRY: FIJI LABNET DESIGNATION: L1



A: Contact/General Information

LAUTOKA HOSPITAL LABORATORY

Lab Contact Name(s):

Lab Main Contact Mr Charles Wetzel

Address Aspen Medical Lautoka Hospital

E-mail Ph Fax

Sr. Tech/Other Contact: Rejieli Bari

E-mail: rejieli.bari@govnet.gov.fj

Laboratory Testing PerformedGeneral lab testing, PPHSN disease testing

Target	Test Performed at Lab	Referred Test	Current Referral Lab
Disease			Location
Chlamydia	No	Yes	Mataika House
Cholera	No	Yes	Mataika House
Dengue	Yes		
Chikungunya	No	Yes	Mataika House
Zika	No	Yes	Mataika House
Gonorrhoea	No	Yes	Mataika House
HIV	Yes		
Influenza	No	Yes	Mataika House
SARS-CoV-2	Yes		
Leptospirosis	Yes		
Measles	No	Yes	Mataika House
Rubella	No	Yes	Mataika House
Syphillis	Yes		
Tuberculosis	Yes		
Typhoid	Yes		
Мрох	No	Yes	Mataika House



1 Clinical Diagnostic Tests		1 -	T
Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology - Full Blood count & type of Analyser - Blood Film Analysis - Coagulation Profile	XN 1000 -FBC -Retics -ESR Manual staining -Bone marrow (Special Stains) -Leishman (bloodfilm) Manual method -PT/ INR -APTTK -FDP -D-dimer Semen Analysis	- HB Electrophoresis -Compliment studies -Coagulation factor studies -Factor assays	LabPlus
-RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes -Lipid Profile -Tumour Markers	BS800M1	-Chromosomal studies -ANA, DsDNA -Polucythemic studies -ENA -Catocholamine -Protein Electrophoresis -Iron Studies	LabPlus
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	Manual BacTAlert Manual culture Manual Manual KirbyBauer Manual	SARI/ ARI/ ILI Pos. NPS ≥ 10 cells CSF SPN Pos TB Sputum New Bacteria For Vitek confirmation AFP	Mataika House Twomey Hospital CWMH Melbourne, Aus
Molecular testing -RT-PCR -HPV -HBV Viral Load Cytopathology -Gynae Cytology -Non-Gynae Cytology Histology	PCR (SarsCov2 & MTB) Screening at Cytology PapSmear Aspirates Body Fluids & Cell block 1. H&E stain 2. Stain- ZN,		Mataika House CWMH



Institution	Panel name	No.of cycles provided
PPTC	Hematology, Serology, Blood Bank, Biochemistry, Microbiology, Molecular COVID 19, Anatomical Pathology	3 cycles

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
February 6 th 2019	WHO Minimum Std	Ravendra Prasad. LS CWMH

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)		
IATA certified Trainers	YesNumber certified Trainers: 1 Date Training License Expires: 17/09/2021	No
IATA certified Shippers	YesNumber certified Shippers: 8 Date Shipping License Expires:30/09/2024	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	CDP courier/ EMS courier Forwarder: EMS/ DHL, W & G- Fiji Airways	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)	
	Yes (LIS to equipment only)	
	No	
	Planned	



COUNTRY: KIRIBATI LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name KIRIBATI HEALTH LABORATORY

Lab Contact Name(s):

Lab Main Contact Ms. Rosemary Tekoaua –Chief of Laboratory Services,

Address Ministry of Health & Medical Services

P. O. Box 268, Bikenibeu, Tarawa, Kiribati_

E-mail <u>rosemarytek@gmail.com</u> **Phone** (686) 74028100 Ext 236

Fax (686) 28568 / 28152

Sr. Tech/Other Contact Ms Bineta Ruaia - Acting Deputy Chief of

Laboratory Services

E-mail binetalab@gmail.com Phone (686) 74028100 Ext 237

Laboratory Testing Performed

All general lab testing, PPHSN disease testing

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	Yes	No	N/A
Cholera	Culture-ID, serotype,	No	N/A
Dengue	Yes	Serotyping	IPNC, WHO Arbovirus Reference Centre Brisbane Australia
Chikungunya	Yes, Serology	Yes - confirmation	Fiji Centre for Disease Control
Zika	No	Yes	Fiji Centre for Disease Control
Gonorrhoea	Culture-ID	No	N/A
HIV	Determine, Unigold, Insti CD4 count Viral Load GenXpert	No	N/A
Influenza	Fluorescent Stain	PCR	Fiji Centre for Disease Control
SARS-CoV-2			
Leptospirosis	No	Yes	Suva Private Hospital Fiji
Measles	No	Yes	VIDRL Melbourne, AU
Rubella	No	Yes	VIDRL Melbourne, AU
Syphillis	Determine-TPHA, RPR TITRATION TPHA	No	
Tuberculosis	Direct smear-ZN stain GeneXpert MTB/RIF	Limited culture/ID, sensi	IMVS Lab Adelaide, AU
Typhoid	Culture-ID, serotype	No	N/A
Мрох	No	Yes	



Test Parameters	Test Performed at Lab	Referred Test	Current Referral La
Haematology			
-Full Blood count & type of	Yes Swelab and	No	
Analyser	Mindray	110	
- Blood Film Analysis	Yes	No	
- Coagulation Profile	Yes	No	
Biochemistry			
-RFTs	Yes	All	Queensland
-RBS	Yes		Pathology, Brisbane
-HbA1c	Yes	tests should be	
-LFTs	Yes	referred if	
-Cardiac Enzymes	Yes	machine is	
-Lipid Profile	Yes	down or stock	
-Lipid Profile -Tumour Markers	Yes	out	
-Tumour Markers	Yes		
Microbiology			
-Urinalysis (manual or automated)	Yes		
- Blood Culture (manual or automated)	Yes		
-Culture	Yes		
-Identification (manual or automated)	Yes		
- AST (manual or automated)	Yes - manual		
- AST International Guidelines used	CLSI		
-Fungal testing	Yes		
-Water testing	Yes	Yes	None
-Food Testing	Yes - Limited	res	None
Molecular testing			
-RT-PCR	Yes	Yes -	
-HPV	No	confirmation	
-HBV Viral Load	Yes		
Cytopathology			
-Gynae Cytology	Yes	No	
-Non-Gynae Cytology	Yes	No	
Histology	No	Yes	Queensland
			Pathology, Brisbane
			Australia

D. EQA Providers

Institution	Panel name	No.of cycles provided
	✓ Microbiology	(3 Dispatch's)
	✓ Serology ✓ Haematology (Blood Film Morphology – stained slides only)	(3 Dispatch's)
	✓ Blood Bank	(3 Dispatch's)
	✓ Biochemistry	(3 Dispatch's)
	HbA1C	(2 Dispatch's)



٧	/	Molecular Panel (SARS-CoV-2)	
			(3 Dispatch's)

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
2021	SLIPTA	SPC

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	L2/L3	
IATA certified Trainers	Yes √ Number Certified 1 Trainers:Rosemary Tekoaua Date Training License Expires: 30 September 2023	No
IATA certified Shippers	Yes √ Number Certified 13 [2021 (8) & 2022 (5)] Date Shipping License Expires: 5 June 2023 & 24 June 2024	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Fiji Airways, Solomon Airways & DHL	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)	
	Yes (LIS to equipment only)	
	No	
	Planned	

COUNTRY: NAURU LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	Nauru Public Health Laboratory
Lab Contact Name(s):	
Lab Main Contact	Mrs Shanyko Benjamin
Address	RoN Hospital
	Denig District
	NAURU
E-mail	shanyko137@gmail.com
Phone	(674) 557 2906
Fax	
Laboratory Testing Performed	General lab testing, limited PPHSN disease testing



B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	Molecular (Cepheid GeneXpert)	No Sometimes	QLD Medical Lab, AU
Cholera	Culture and sensitivity	Confirmation	QLD Medical Lab, AU
Dengue	(SD Dengue DUO)	Serotyping	QLD Medical Lab, AU
Chikungunya	SD Biosensor, IgM, IgG	No	N/A
Zika	No	All	QLD Medical Lab, AU
Gonorrhoea	Culture/ID Molecular (Cepheid GeneXpert)	No Sometimes	QLD Medical Lab, AU
HIV	Abbott-Determine, Unigold and Insti, Molecular - Viral Load (Cepheid GeneXpert)	CD4 Count ELISA	QLD Medical Lab ,AU
Influenza	Alere BinaxNOW Influenza A & B Card,	PCR	WHOCC VIDRL Melbourne
SARS-CoV-2	Cepheid GeneXpert, ELITe InGenius – RT-PCR	Genomic sequencing	WHOCC VIDRL Melbourne
Leptospirosis	SD Bioline Leptospirosis, IgM	No	N/A
Measles	No	All	WHOCC VIDRL Melbourne
Rubella	No	All	WHOCC VIDRL Melbourne
Syphillis	Determine-TPHA, RPR Titre	No	N/A
Tuberculosis	Direct smear-ZN stain GeneXpert MTB/RIF	Culture, ID, AST	QLD Medical Lab, AU
Typhoid	Culture/ID/Sensitivity	Serotyping	QLD Medical Lab, AU
Мрох	No	All	WHOCC VIDRL Melbourne

C.1 Clinical Diagnostic Tests

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology - Full Blood count & type of Analyser - Blood Film Analysis - Coagulation Profile	FBC – Roche Sysmex XP 100, PT/INR	Blood film analysis and other Coagulation profile	QLD Medical Lab, AU
Biochemistry -RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes	All except for Tumour Markers	Tumour Markers	QLD Medical Lab, AU
-Cardiac Enzymes -Lipid Profile			



-Tumour Markers			
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	Urinalysis (manual and automated), Blood Culture (manual), Culture (manual), Identification (Microgen ID system), AST (manual), AST (EUCAST), Fungal testing (KOH, Culture), no water & food testing		N/A
Molecular testing -RT-PCR -HPV -HBV Viral Load	' '	HPV, HBV Viral Load, Genomic sequencing	WHOCC VIDRL Melbourne & QLD Medical Lab, AU
Cytopathology -Gynae Cytology -Non-Gynae Cytology	No	All	QLD Medical Lab, AU
Histology	No	All	QLD Medical Lab, AU

Institution	Panel name	No.of cycles provided
Centre	Biochemistry, Haematology, Blood Bank, Molecular, Serology & Microbiology	Every 3 months

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
Feb 2017	Stepwise Accrediation Audit Score - Unsure	PPTC? Unsure

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	WHOCC VIDRL Melbourne	
IATA certified Trainers	YesNumber Certified Trainers: Date Training License Expires:	No
IATA certified Shippers	YesNumber Certified Shippers: 3 Date Shipping License Expires: May 2024	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Nauru Airline & Pak Fresh (Brisbane Australia)	



G: Laboratory Information System

Laboratory Information System (LIS)	No (LIS interphase with equipment & directly into HIS)
	No (LIS to equipment only)
	No
	Planning to - Yes. October 2022

COUNTRY: NORTHERN MARIANA

ISLANDS

LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	Commonwealth Health Center Laboratory
Lab Contact Name(s):	
Lab Main Contact	Dr. Philip Dauterman, MD, Lab Director
Address	Commonwealth Health Center, Lower Navy Hill,
	P.O. Box 500409 CK, Saipan, MP 96950 USA -
E-mail	chclab@gmail.com or chcclab@chcc.health
Phone	(670) 234-8950 ext.2319
Fax	(670) 236-8612
Sr. Tech/Other Contact	Mr John Duenas, Clinical Lab
E-mail	Technician chclab@gmail.com
Phone	(670) 236-8395/96
Fax	(670) 236-8612
Laboratory Testing Performed	General lab testing, PPHSN disease testing
_	

Targ et Dise ase	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	YES – on GeneXpert	N/A	N/A
Cholera	No	Serotyping	Diagnostic Lab Services Hawaii, USA
Dengue	No	EIA	Univ. of Hawaii-Trop Med Dept, Hawaii, USA
Chikungunya		Trioplex Test	Guam Public Health Lab
Zika		Trioplex Test	Guam Public Health Lab
Gonorrhoea	YES – on GeneXpert	N/A	N/A
HIV	No	EIA, Western Blot	Diagnostic Lab Services Hawaii, USA
Influenza	Quidel-Rapid Test GeneXpert	PCR	Diagnostic Lab Services Hawaii, USA
SARS-CoV-2	YES – on GeneXpert, Abbott ID Now, Biofire RP2		



Leptospirosi s	No	EIA, confirmation	Diagnostic Lab Services Hawaii, USA
Measles	No	EIA	Diagnostic Lab Services Hawaii, USA
Rubella	No	EIA	Diagnostic Lab Services Hawaii, USA
Syphillis	RPR	FTA	Diagnostic Lab Services Hawaii, USA
Tuberculosis	YES – on GeneXpert	Culture, ID, sensitivity	Diagnostic Lab Services Hawaii, USA
Typhoid	No	EIA	Diagnostic Lab Services Hawaii, USA
Мрох	No	PCR Test	CDC Atlanta

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology	Siemens Advia		
-Full Blood count & type of Analyser			
-Blood Film Analysis	Sysmex XN-1000 (by		
-Coagulation profile	Fall 2022)		
Biochemistry	Siemens Dimensions		
-RFTs	EXL		
-RBS			
-HbA1c			
-Cardiac Enzymes			
-Lipid Profile			
-Tumour Markers			
Microbiology	Siemens CLINITEK		
-Urinalysis (manual or automated)	STATUS		
-Blood Culture (manual or			
automated)	BACTEC		
-Culture			
-Identification (manual or	VITEK		
automated)			
-AST (manual or automated)	Agar Petri Plates		
-AST International Guideline used			
-Fungal testing			
-Water testing			
-Food testing			
Molecular testing	GeneXpert		
-RT-PCR	Biofire		
-HPV	Abbott ID NOW		
-HBV Viral Load			
Cytopathology		Pap Smear	Diagnostic Lab Services
-Gynae Cytology			Hawaii, USA
-Non-Gynae Cytology			
Histology		Histology	Diagnostic Lab Services
			Hawaii, USA

D. EQA Providers

Institution	Panel name	No.of cycles provided
College of American Pathologist (CAP)	Hema, Coag, Micro, Chem	3 per year
American Proficiency Institute (API)	Hema, Coag, Micro, Chem	3 per year

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
September 2021	CLIA/CMS	CLIA/CMS

F. Referral and Shipping Information

Triceral and Shipping morniation		
Recommended L2/L3 Referral Lab(s)	*Diagnostic Lab Services; University of Hawaii-Trop. Med Department Hawaii, USA; *US Mil. Lab, Texas, USA, CDC Atlanta	
IATA certified Trainers	YesNumber of Certified Trainers1	No
IATA certified Shippers	YesNumber of Certified Shippers:13 Date Shipping License Expires:2024	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)



COUNTRY: NIUE LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name Niue Foou Hospital Laboratory

Lab Contact Name:

Pathologist/Manager Andy Manu – Lab Scientist.

Niue Health Department

Address PO Box 33, Alofi, Niue

andy.manu@gov.nu

E-mail (683) 4100

Phone

Fax Martina Siataga – Laboratory Technician Assistant

Sr. Tech/Other Contact <u>Martina.Siataga@gov.nu</u>

E-mail (683) 4100

Ph Fax

Laboratory Testing Performed

All general lab testing, limited PPHSN disease testing

B: Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Test at L2 – L2 Location
Chlamydia	Rapid Test-Hexagon GenXpert	DNA Probe	Lab Plus Auckland, NZ
Cholera	Presumptive culture	Confirmation ID	Lab Plus Auckland, NZ
Dengue	PanBio-lgG/lgM	Confirmation	No
Chikungunya			
Zika			
Gonorrhoea	Presumptive culture, gram stain GenXpert	Confirmation	Lab Plus Auckland, NZ
HIV	Determine, Unigold, Insti	CD4 & Viral Load	Lab Plus Auckland, NZ
Influenza	Quidel-Rapid Test	PCR	ESR NCID, Wellington NZ
SARS-CoV-2			
Leptospirosis	No	Screen/Confirmation	Lab Plus Auckland, NZ
Measles	No	EIA	Lab Plus Auckland, NZ
Rubella	No	EIA	Lab Plus, Auckland, NZ
Syphillis	RPR, TPHA	Titer	Lab Plus Auckland, NZ
Tuberculosis & MTRif	Yes – ZN stain, GeneXpert	DST	Lab Plus, NZ
Typhoid	Yes – presumptive culture	Culture-ID, serotyping	Lab Plus, Auckland, NZ
Мрох			



Test Parameters	Test Performed at Lab	Referred Test	Current Referral La
Harmatalam			
Haematology			
- Full Blood count & type of			
Analyser			
- Blood Film Analysis			
- Coagulation Profile			
Biochemistry			
-RFTs			
-RBS			
-HbA1c			
-LFTs			
-Cardiac Enzymes			
-Lipid Profile			
-Tumour Markers			
Microbiology			
-Urinalysis (manual or automated)			
- Blood Culture (manual or automated)			
-Culture			
-Identification (manual or automated)			
- AST (manual or automated)			
- AST International Guidelines used			
-Fungal testing			
-Water testing			
-Food Testing			
Molecular testing			
-RT-PCR			
-HPV			
-HBV Viral Load			
Histology			

D. EQA Providers

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool	Assessor/Agency conducting the Audit
	(WHO Minimum	
	Std/SLIPTA/ISO/Others)	



F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	*Lab Plus, Auckland, NZ	
IATA certified Trainers	YesNumber Certified Trainers: Date Training License Expires:	No
IATA certified Shippers	YesNumber Certified Shippers: Date Shipping License Expires:	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air New Zealand	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	No
	Planned

COUNTRY: PALAU LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	Belau National Hospital Laboratory
Lab Contact Name(s):	Lily Ulitech – Laboratory Manager,
Lab Main Contact	Belau National Hospital
Address	Laboratory P. O. Box 6027 Koror,
	Palau 96940
E-mail	lily.ulitech@palauhealth.org (680)
Phone	4886100, 488 2552/4508
Fax	(680) 488 4503
Sr. Tech/Other Contact	Carmin Pipit
E-mail	Carmin.pipit@palauhealth.org
Phone	(680) 4886100, 488 2552/4508
Fax	(680) 488 4503
Laboratory Testing Performed	General lab testing, PPHSN disease testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	GeneXpert	No	N/A
Cholera	Culture/ID	No	N/A
Dengue	SD Dengue Duo	Serotyping	Hawaii State Laboratory
Chikungunya	No	PCR	Hawaii State Laboratory
Zika	No	PCR	Hawaii State Laboratory



Gonorrhoea	GenXpert	No	N/A	
HIV	Determine, Unigold, Insti	Drug Sensitivity	Diagnostic Lab Services Hawaii, USA	
Influenza	Rapid Influenza A&B Biofire respiratory panel	Further Characterization	CDC, Atlanta, USA	
SARS-CoV-2	GeneXpert Biofire Respiratory panel	Advanced Molecular Detection	CDC, Atlanta, USA Hawaii State Lab	
Leptospirosis	SD Leptospirosis	No	Diagnostic Lab Services Hawaii, USA	
Measles	No	Measles IgG/IgM	Hawaii State Laboratory	
Rubella	No	Rubella IgG/IgM	Hawaii State Laboratory	
Syphillis	RPR, Determine	No	N/A	
Tuberculosis	Direct smear-ZN stain GeneXpert	Culture, ID, sensitivity	Diagnostic Lab Services Hawaii, USA	
Typhoid	Culture/ID	No	N/A	
Мрох	No	PCR	CDC, Atlanta, USA	

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology Full Blood count & type of Analyser Blood Film Analysis Coagulation Profile	Full Blood Count Sysmex XP-300 Sysmex XP-100 Yes, manual method	None	None
Biochemistry -RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes -Lipid Profile -Tumour Markers	Routine Chemistry - Vitros 350 Tumor Markers - mVIDAS	None	none
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	Urinalysis- semi automated Siemens Culture & AST Manual methods AST Reference - CLSI Culture, KOH None	None	None



Molecular testing -RT-PCR -HPV		None	None
-HBV Viral Load	GeneXpert		
Cytopathology -Gynae Cytology -Non-Gynae Cytology	None	Gynae	Diagnostic Lab Service, Hawaii
Histology			

D. EQA Providers

Institution	Panel name	No.of cycles provided
	Hematology, Blood Bank, Chemistry, Serology, Microbiology,	3
DLS	TB-Xpert Proficiency AFB Smear Proficiency	1

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
2022	SLIPTA	PIHOA

F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	Diagnostic Lab Services, Hawaii; Hawaii State Laboratory; CDC Atlanta, USA;	
IATA certified Trainers	YesNumber Certified Trainers: 1 Date Training License Expires: 8/5/2022.	No
IATA certified Shippers	YesNumber Certified Shippers: 10 Date Shipping License Expires: 12/9/2022 - 2 8/31/2023 - 3 5/12/2024 - 5	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)	
	Yes (LIS to equipment only)	
	No	
	Planned	



COUNTRY: PAPUA NEW GUINEA

LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	CENTRAL PUBLIC HEALTH LABORATORY
Lab Contact Name:	
Pathologist/Manage	er Mr. Willie Porau, Director
Addre	ss Central Public Health Laboratory
	Port Moresby General Hospital, Free Mail Bag, Boroko
	National Capital District, Papua New Guinea
E-ma	nil porauw@gmail.com
Phor	ne (675) 324 8146
Fa	(675) 325 6342
Sr. Tech/Other Conta	ct Janlyn Kemoi-A/Lab Manager
	Central Public Health Laboratory
E-ma	nil kumbuj@gmail.com
Laboratory Testing Performed	General lab testing, PPHSN disease testing

B: Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	No	No	N/A
Cholera	Culture/ID, serotyping	No	NA
Dengue	PanBio strips – IgM	Serotype, PCR	Institute of Medical Research (IMR), PNG
Chikungunya	No	No	NA
Zika	No	No	NA
Gonorrhoea	No	No	No
HIV	Determine, statpack,	No	N/A
Influenza	Biofire film Array	PCR (ILI cases)	Institute of Medical Research (IMR), PNG
SARS-CoV-2	Rapid panbio test kit, GeneXpert, PCR	Sequencing	Doherty Australia
Leptospirosis	No	No	NA
Measles	EIA	No	N/A
Rubella	EIA-Dade	No	N/A
Syphilis	Alere-TPHA RPR, TPPA, Titer	No	N/A
Tuberculosis	TB Culture, LPA, GenXpert & Direct smear-ZN stain,DST	MTB Rif isolates & DST	Qnsld. Mycobact. Ref. Lab Brisbane, AU NB: CPHL has been performing TB culture ,DST but right now our PC3 lab is down hence we are referring samples for



			culture to QMRL
Typhoid	Culture/ID	No	N/A
Мрох	No	No	NA

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology - Full Blood count & type of Analyser - Blood Film Analysis - Coagulation Profile	No	Yes	Port Moresby General Hospital
- Coagulation Profile Biochemistry -RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes -Lipid Profile -Tumour Markers	No	All Biochemistry test refered to PMGH	Port Moresby General Hospital
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	Water testing and Food testing	All microbiology test	Port Moresby General Hospital
Molecular testing -RT-PCR -EID -Viral Load	Yes	NA	NA
Cytopathology -Gynae Cytology -Non-Gynae Cytology	No	Yes	Port Moresby General Hospital
Histology	No	Yes	Port Moresby General Hospital

D. EQA Providers

Institution	Panel name	No.of cycles provided
Central Public Health	TB Panel, HIV Panel, Malaria Panel	2
Laboratory		
WHO	COVID19 Genexpert Panel, Measles &	1
	Rubella Panel	
CDC	EID Panel, Syphillis Panel	1
Vietnam EQA-CDC	TB gene Xpert Panel	1



E. Laboratory External Audit/Assessment

	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
COVID19 PCR LAb	WHO tool assessment	WHO 2021
Measles and Rubella EIA Lab	WHO tool assessment	WHO-2015

F.Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	Qnsld. Health Scientific ServQueensland, AU; *Qr Mycobact Ref Lab, Brisbane, Doherty Institute (Pol Covid Sequencing)	
IATA certified Trainers	YesNumber Certified Trainers1 Date Training License Expires30 September 2023	yes
IATA certified Shippers	YesNumber Certified Shippers13 Date Shipping License Expires:October 30 2023	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air Niugini	

G: Laboratory Information System

Laboratory Information System (LIS)	No LIS but planning and implémentation Underway for a
	new LIS in CPHL-Local company developing the LIS for CPHL

COUNTRY: SAMOA LABNET DESIGNATION: L1



A: Personnel/Contact Information

Ms Hinauri Leaupepe – Ngau Chun, Manager Laboratory Service Samoa National Health Service Private Mail Bag, Apia, Samoa hinauril@health.gov.ws (685) 66 651
Laboratory Service Samoa National Health Service Private Mail Bag, Apia, Samoa <u>hinauril@health.gov.ws</u>
Private Mail Bag, Apia, Samoa hinauril@health.gov.ws
hinauril@health.gov.ws
(685) 66 651
Perenise Eti
perenisee@health.gov.ws
(685) 66655

B: Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	Gene Expert	No	N/A
Cholera	Presumptive culture	ID, confirmation	LabPlus Auckland, NZ



Dengue	SD Bioline Dengue NS1Ag +	Yes for DenV PCR and	WHO Arbovirus
	Ab Combo	Serotyping	Reference Centre,
			Brisbane, Australia.
al 11			ESR/NCBID NZ
Chikungunya	No	Yes	LabPlus Auckland, NZ
Zika	No	Yes	LabPlus Auckland,
			NZ
Gonorrhoea	Presumptive culture, gram stain, PCR Genexpert	No	N/A
HIV	Determine, Unigold,	No	N/A
	Insti, HIV Viral load on		
	GeneXpert		
Influenza	Standard Q Influenza A&B RDT	No	N/A
	Veritor		
SARS-CoV-2	Gene Expert	Yes for WGS	ESR, Wellington NZ
Leptospirosis	SD Bioline Leptospirosis	EIA	LabPlus, Auckland,
	IgM		NZ
Measles	No	EIA	LabPlus Auckland,
			NZ
Rubella	No	EIA	LabPlus Auckland,
			NZ
Syphillis	RPR,TPHA and Anti TP	No	
Tuberculosis	Direct smear-ZN stain,	culture/ID, Sensitivity	LabPlus, Auckland
	GeneXpert		NZ
Typhoid	Culture/ID	Phage typing	LabPlus and ESR NZ
Мрох	No	Yes	

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology			
- Full Blood count & type of	Yes (Sysmex XN1000i, XN550 &	No	
Analyser	KX21)		
- Blood Film Analysis	Yes	No	
- Coagulation Profile	Yes (HumaClot)	No	
Biochemistry			
• RFTs	Yes (EasyRA & Cobas C311)	No	
• RBS	Yes (EasyRA & Cobas C311)	No	
• HbA1c	Yes (Affinion2 & DCA Vintage)	No	
• ACR	Yes (Affinion2 & DCA Vintage)	No	
• LFTs	Yes (EasyRA & Cobas C311)	No	
Cardiac Enzymes	Yes (EasyRA & Cobas C311)	No	
	Yes (EasyRA & Cobas C311)	No	
Lipid Profile	Yes (Cobas E411)	No	
Tumour Markers	Yes (Cobas C311 & E411)	No	
 Iron studies 	Yes (Cobas E411)	No	
Troponin-T	Yes (Cobas E411)	No	
 Vitamin B12 & Folate 	Yes (Cobas E411)	No	
 Blood Gas 	Yes (ABL90 and EasyStat)	No	
Microbiology			
 Urinalysis (manual or 	Yes (Manual and automated -	No	
automated)	EA Aution)		
	Yes (Automated – Bactec 240)	No	



		I	I
Blood Culture (manual or automated)		No No	
• Culture	Yes (Manual and automated –		
 Identification (manual or automated) 	Phoenix M50) Yes (EUCAST and CLSI)	No	
AST (manual or automated)	Yes	No	
 AST International Guidelines used 	No	_	MOH Public Health Lab
Fungal testing	No	No	
Water testing			
Food Testing			
Molecular testing			
-RT-PCR	GeneXpert PCR	Yes for WGS	ESR NZ
-HPV	No	Yes	LabPlus
-HBV Viral Load	No	Yes	LabPlus
 Cytopathology Gynecological smears (Conventional smears) Papanicolaou staining 	Yes (Manual and automated)	No	
 Non-gynecological specimens Papanicolaou staining Giemsa staining Cellblock 	Yes (Manual and automated)	No	
 Fine Needle Aspiration (FNA) Papanicolaou staining Giemsa staining Diff-Quik staining Cellblock 	Yes (Manual and automated)	No	
Histology Histology grossing/cut-up Tissue processing Embedding Microtomy Routine staining – H&E Special stains – PAS and ZN Others – Decalcification (calcified tissue) Immunohistochemistry staining	Yes (manual) Yes (automated) Yes (manual) Yes (manual Yes (manual & automated) Yes (manual) Yes (manual) Yos (manual)	No No No No No No No Yes	LabPlus, Auckland NZ



D. EOA Providers

Institution	Panel name	No. of cycles provided
Pacific Pathology Training	PPTC-EQAP	
Centre	 Microbiology 	3 cycles per year
	 Serology 	3 cycles per year
	Haematology (Blood Film morphology)	3 cycles per year
	Blood Bank	3 cycles per year
	Biochemistry	2 cycles/4 assessments) per year
	o HbA1C	
	 Anatomic Pathology 	3 cycles per year

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
2021	SLIPTA	Pacific Pathology Training Centre

F.Referral and Shipping Information

· · · · · · · · · · · · · · · · · · ·		
Recommended L2/L3 Referral Lab(s)	Fiji Centre for Disease Control; *LabPlus Auckland, ARbovirus Reference Centre, Brisbane, AU; *VIDRL Melbourne, AU	-
IATA certified Trainers	YesNumber Certified Trainers:	Yes 2
	Date Training License Expires:	2019
IATA certified Shippers	YesNumber Certified Shippers:	Yes 5
	Date Shipping License Expires:	2019
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air New Zealand	

G: Laboratory Information System

Laboratory Information System (LIS)	Planned (to be implemented into the Tupaia system)

COUNTRY: SOLOMON ISLANDS

LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	NATIONAL REFERRAL HOSPITAL LABORATORY
Lab Contact Name:	
Chief Medical Technologist	Mr. Alfred Dofai; Head of Medical Lab
Address	National Referral Hospital
	P. O. Box 349, Honiara, Solomon Islands_
E-mail	ADofai@nrh.gov.sb
PhONE	(677) 44066 DL – 677 25436
Fax	(677) 24 243 or 23 761
Sr. Tech/Other Contact	Mr Elliot Puiahi – Lab Manager
E-mail	EPuiahi@nrh.gov.sb
Phone	(677) 23446



Laboratory Testing Performed

General lab testing, PPHSN disease testing

B: Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	No	Yes	Royal Brisbane Hospital
Cholera	Presumptive culture/ID	Culture confirmation, serotyping	Qnsld Hlth Sci Serv-Royal Brisbane Brisbane, AU
Dengue	SD Bioline NS1AglgM/lgG	Serotype, PCR	WHO Arbovirus Reference Centre, Brisbane, Australia
Chikungunya	No	Yes	ILM, Tahiti
Zika	No	Yes	ILM, Tahiti
Gonorrhoea	Gram stain, culture	No	N/A
HIV	Determine, Unigold, Insti	Gene Expert	Qnsld Hlth Sci Serv-Royal Brisbane Brisbane, AU
Influenza	BD Veritor System	PCR	WHO-CC Melbourne, AU
SARS-CoV-2	qPCR	PCR	Doherty Institute, Melbourne, AU
Leptospirosis	RDT	Screen, Confirmation	Qnsld Hlth Sci Serv Brisbane, AU
Measles	No	EIA	Qnsld Hlth Sci Serv-Royal Brisbane Brisbane, AU
Rubella	No	EIA	Qnsld Hlth Sci Serv-Royal Brisbane Brisbane, AU
Syphillis	RPR, TPHA	No	N/A
Tuberculosis	Direct smear-ZN stain /GeneXpert	Limited culture/ID, sensi	Adelaide Supra Reference Laboratory
Typhoid	Culture/ID	Serotyping confirmation	Qnsld Hlth Sci Serv-Royal Brisbane Brisbane, AU
Мрох			

C.1 Clinical Diagnostic Tests

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology	FBC- Hb, Wcc, Plts, RBC,	Vit B12	Qnsld Hlth Sci Serv-
Full Blood count & type of	MCV, MCH, MCHC	Iron studies	Royal Brisbane
Analyser	(Analyzer – Sysmex	Bone marrow	Brisbane, AU
Blood Film Analysis	XN1000).	aspirate/trephi	
- Coagulation Profile	Coagulation- PT, PTT, D-	ne	
ŭ	Dimer, Fibrinogen		
Biochemistry	RFTs, RBCs, LFTs,	- Tumor	Qnsld Hlth Sci Serv-
-RFTs	Cardiac, Lipid, Lipid	markers,	Royal Brisbane
-RBS	Profile, HBA1c.	Hormones,	Brisbane, AU
-HbA1c	Machine - Cobas c311 -	Enzymes	
-LFTs			
-Cardiac Enzymes			
-Lipid Profile			
-Tumour Markers			



Microbiology	-Urinalysis (manual)		Qnsld Hlth Sci Serv-
-Urinalysis (manual or automated)	- Blood Culture (_	Royal Brisbane Hosp
- Blood Culture (manual or automated)	automated)		Brisbane, AU
-Culture	1-Cultule	DSTs.	
-Identification (manual or automated)	-Identification (manual)	- Confirm ESBL	
- AST (manual or automated)	- AST (manual)	and MRSA.	
- AST International Guidelines used	- AST		
-Fungal testing	International		
-Water testing	Guidelines used		
-Food Testing	-Fungal testing		
Molecular testing	-RT-PCR plus Gene-	Confirmation	VIDRL Doherty
-RT-PCR	Xpert and Biofire	of Identified	Institute.
-HPV			Microbiology
-HBV Viral Load		whole genome	Diagnostic Unit.
		sequence	
Cytopathology		All cytologies	Qnsld Hlth Sci Serv-
-Gynae Cytology			Royal Brisbane, Hosp
-Non-Gynae Cytology			Brisbane, AU
Histology	Tissue processing and	90% tissues	Qnsld Hlth Sci Serv-
	reporting 10%		Royal Brisbane Hosp
			Brisbane, AU

D. EQA Providers

Institution	Panel name	No.of cycles provided
PPTC-NZ	Biochemistry, Haematology, Serology	Quarterly
WHO EQAP Hong Kong	SARS-CoV-2	Quarterly

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit
2019	SLIPTA	Russel Cole / PPTC

F.Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	Qnsld Health Scientific Services,WHO Arbovirus Reference Centre, Brisbane, AU, *Royal Brisbane Hospital In Queensland, AU; * Adelaide Supra Reference Laboratory	
IATA certified Trainers	YesNumber Certified Trainers: Date Training License Expires:	No
IATA certified Shippers	YesNumber Certified Shippers:11 Date Shipping License Expires:23 rd Sept 2024	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Solomon Airlines - Mr. Peter Omani Ph. (677) 36291	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	(No)
	(Planned)



COUNTRY: TOKELAU

LABNET DESIGNATION: L1



A: Personnel/Contact Information

HOSPITAL LABORATORY Laboratory Name

Lab Contact Name:

Pathologist/Manager Ms Rosa TOLOA; Director of Health

> Address c/o Tokelau Apia Liaison Office

P. O. Box 865, Apia, Samoa

E-mail

Phone rosa.toloa@tokelau.org.nz

Fax

(690) 4211 (685) 21761 or (685) 29143 Sr. Tech/Other Contact Dr Susana Letu

E-mail leihana@gmail.com

Laboratory Testing Performed Limited general lab testing and PPHSN disease testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	No	No	N/A
Cholera	No	Culture/ID	LabPlus or ESR, NZ Via Samoa National Hospital
Dengue	No	Confirmation	LabPlus or ESR, NZ Via Samoa National Hospital
Chikungunya			
Zika			
Gonorrhoea	No	Culture	LabPlus or ESR, NZ Via Samoa National Hospital
HIV	Determine	Confirmation	LabPlus or ESR, NZ Via Samoa National Hospital
Influenza	Quidel-Rapid Test	PCR	ESR NCID, Wellington NZ Lab Plus NZ
SARS-CoV-2			
Leptospirosis	No	No	N/A
Measles	No	No	N/A
Rubella	No	No	N/A
Syphillis	Determine	No	N/A
Tuberculosis		No	N/A
Typhoid	No	Culture	*LabPlus or ESR, NZ Via Samoa National Hospital
Мрох			



Test Parameters	Test Performed at Lab	Referred Test	Current Referral La
Haematology			
-Full Blood count & type of			
Analyser			
- Blood Film Analysis			
- Coagulation Profile			
Biochemistry			
-RFTs			
-RBS			
-HbA1c			
-LFTs			
-Cardiac Enzymes			
-Lipid Profile			
-Tumour Markers			
Microbiology			
-Urinalysis (manual or automated)			
- Blood Culture (manual or automated)			
-Culture			
-Identification (manual or automated)			
- AST (manual or automated)			
- AST International Guidelines used			
-Fungal testing			
-Water testing			
-Food Testing			
Molecular testing			
-RT-PCR -HPV			
-HPV -HBV Viral Load			
Cytopathology			
-Gynae Cytology			
-Non-Gynae Cytology			
5, 6,			
Histology			

D. EQA Providers

Institution	Panel name	No.of cycles provided

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool	Assessor/Agency conducting the Audit
	(WHO Minimum	
	Std/SLIPTA/ISO/Others)	



F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	LabPlus, ESR, New Zealand Via Samoa National Hospital Lab	
IATA certified Trainers	YesNumber Certified Trainers: Date Training License Expires:	No
IATA certified Shippers	YesNumber Certified Shippers: Date Shipping License Expires:	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	By Sea to Samoa and Air New Zealand (via Sam Hospital)	noa National

G: Laboratory Information System

C. Laboratory information System	
Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	No
	Planned



COUNTRY: TONGA LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name VAIOLA HOSPITAL LABORATORY

Lab Contact Name:

Pathologist/Manager Dr. Luke Huni, MO i/c Laboratory

Address Services, Vaiola Hospital, P. O. Box 59

Nukualofa, Tonga

E-mail <u>luke.huni18@gmail.com</u>

Phone (676) 23 200 ext 1397 or (676) 7400218

Fax (676) 28 964

Sr. Tech/Other Contact Mrs. Telesia Apikotoa, Principal Medical Scientist

E-mail <u>t.apikotoa@gmail.com</u>

Phone (676) 23 200 ext 1323 or (676) 7400162

Fax (676) 28 964

Laboratory Testing PerformedGeneral lab testing, PPHSN disease testing

B: Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	Gene Xpert	No	N/A
Cholera	Presumptive culture	Serotyping	LabPlus Auckland, NZ
Dengue	SD Dengue Duo NS1/IgM/IgG	Serotyping	WHO Arbovirus Reference Centre, Brisbane, AU
Chikungunya	No	PCR	ESR, Wellington
Zika	No	PCR	ESR, Wellington
Gonorrhoea	Gram stain, Gene Xpert	No	N/A
HIV	Determine, Duo, Unigold, Insti, Viral Load	No	LabPlus Auckland, NZ
Influenza	No	PCR	ESR/NCBID Wellington
SARS-CoV-2	Yes	WGS	ESR, Wellington
Leptospirosis	No	EIA	LabPlus Auckland, NZ
Measles	No	EIA	LabPlus, Auckland, NZ
Rubella	No	EIA	LabPlus, Auckland, NZ
Syphillis	Determine, RPR, Duo	TPA, FTA	LabPlus, Auckland, NZ
Tuberculosis	Direct smear-ZN stain, Gene Xpert	No	LabPlus Auckland, NZ
Typhoid	Culture, Serotyping	No	LabPlus Auckland, NZ
Мрох	No	PCR	ESR, Wellington



Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology	Yes	No	N/A
-Full Blood count & type of			
Analyser			
- Blood Film Analysis	Yes		
- Coagulation Profile	Yes		
Biochemistry			LabPlus Auckland, NZ
-RFTs	Yes	-CA125	
-RBS	Yes	-CEA	
-HbA1c	Yes		
-LFTs	Yes		
-Cardiac Enzymes	Yes		
-Lipid Profile	Yes		
-Tumour Markers	Yes		
Microbiology			LabPlus Auckland, NZ
-Urinalysis (manual or automated)	Yes		
- Blood Culture (manual or automated)	Yes	-Organism ID	
-Culture	Yes	-Typing of	
-Identification (manual or automated)	Yes	isolated	
- AST (manual or automated)	Yes	organism	
- AST International Guidelines used	Yes		
-Fungal testing	Yes		
-Water testing	No		
-Food Testing	No		
Molecular testing			
-RT-PCR	Yes		
-HPV	Yes		
-HBV Viral Load	Yes		
Cytopathology			LabPlus Auckland, NZ
-Gynae Cytology	Yes	None	112
-Non-Gynae Cytology	Yes		
Histology	Yes	-ER/PR stain	LabPlus Auckland, NZ
		-Second opinion	

D. EQA Providers

Institution	Panel name	No.of cycles provided
PPTC	Hematology, Molecular, Serology, Blood bank	3
	Biochemistry	2

E. Laboratory External Audit/Assessment

Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit



F. Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	*LabPlus, ESR, New Zealand; Queesland Health Scientific Services Queensland, AU, WHO Abovirus Reference Centre, Brisbane, AU.	
IATA certified Trainers	Yes1 Date Training License Expires:30.09.23	No
IATA certified Shippers	Yes4 Date Shipping License Expires:3.08.22	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air New Zealand	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	No
	Planned

COUNTRY: TUVALU LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name		PRINCESS MARGARET HOSPITAL LABORATORY
Lab Contact Name:		
Pat	hologist/Manager	Ms Puae & Taupesa.
	Address	Lab Technician
		Ministry of Health-Health Department
		P. O Box 41, Funafuti, TuvalU
	E-mail	Laboratoryservices28@gmail.com
	Phone	(688) 20480
	Fax	(688) 20481
Sr. Te	ch/Other Contact	Ms Taupesa Latasi
	E-mail	pesalatasi@gmail.com
	Phone	(688) 20480/ (688) 7000392
	Fax	(688) 20481
Laboratory Testing Performed		General lab testing, PPHSN disease testing

B: Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	Gene Xpert (using CT/NG cartridges)	No	N/A
Cholera	No	No	N/A
Dengue	Yes	Confirmation	ESR
Chikungunya	NO		
Zika	NO		
Gonorrhoea	Gene Xpert (using CT/NG cartridges)	No	N/A



HIV	Determine, Unigold, Insti, Confirmation	CD4 & Viral Load	N/A
Influenza	Quidel-Rapid Test	PCR	Fiji CDC
SARS-CoV-2	YES	NO	PETER DOHERTY INSTITUTE
Leptospirosis	RDT	No	N/A
Measles	No	Confirmation	Fiji CDC
Rubella	No	Confirmation	Fiji CDC
Syphillis	VDRL	No	N/A
Tuberculosis	Direct smear-ZN stain Gene Xpert MTB cartridges	No	LabPlus, PPTC
Typhoid	No	ID, confirmation	CWM Hospital Suva, Fiji
Мрох	NO	YES	FIJI CDC

Test Parameters	Test Performed at Lab	Referred Test	Current Referral L
Haematology			
- Full Blood count & type of	- YES (XP 100)	- NO	- N/A
Analyser	- YES (XP 100)	- NO	- N/A - N/A
	- YES(MANUAL)	- NO	- N/A
- Blood Film Analysis - Coagulation Profile	TES(IVIAIVOAL)	110	IV/A
Biochemistry			
DET.	- YES	- NO	- N/A
-RFTs	- YES	- NO - NO	- N/A - N/A
-RBS	- YES	- NO	- N/A - N/A
-HbA1c	- YES	- NO	- N/A - N/A
-LFTs	- YES	- NO	- N/A
-Cardiac Enzymes	- YES	- NO	- N/A
-Lipid Profile	- YES	- NO	- N/A
-Tumour Markers			
Microbiology			
-Urinalysis (manual or automated)	- YES (MANUAL)	- NO	- N/A
- Blood Culture (manual or automated)	- NO	- NO	- N/A
-Culture	- YES	- NO	- N/A
-Identification (manual or automated)	- YES (MANUAL)	- NO	- N/A
- AST (manual or automated)	- NO	- NO	- N/A
- AST International Guidelines used	- NO	- NO	- N/A
-Fungal testing	- NO	- NO	- N/A
-Water testing	- NO	- NO	- N/A
-Food Testing	- NO	- NO	- N/A
Molecular testing			
-RT-PCR	- YES	- NO	- N/A
-HPV	- NO	- NO	- N/A
-HBV Viral Load	- NO	- NO	- N/A
Cytopathology			



-Gynae Cytology	- NO	- YES	- PSH
-Non-Gynae Cytology	- NO	- YES	- PSH
Histology			

D. EQA Providers

Institution	Panel name	No.of cycles provided
PACIFIC PARAMEDICAL		- 4
TRAINING CENTRE		

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit

F. Referral and Shipping Information

T. Referrar and Shipping information		
Recommended L2/L3 Referral Lab(s)	Fiji Centre for Disease Control and *CWM Hosp	oital Suva, Fiji
IATA certified Trainers	YesNumber Certified Trainers: 0 Date Training License Expires:N/A	No
IATA certified Shippers	YesNumber Certified Shippers: 1 Date Shipping License Expires:	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Fiji Airways (courier the lab use is DHL)	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	No
	Planned



COUNTRY: VANUATU

LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name PORT VILA CENTRAL HOSPITAL LABORATORY

Lab Contact Name:

Pathologist/Manager Mr.George Pakoa Laboratory Manager

Address Vila Central Hospital

Private Mail Bag 013, Port Vila, Vanuatu

E-mail jgpakoa@vanuatu.gov.vu

Phone (678) 22100 Fax (678) 26721

Sr. Tech/Other Contact Mr. Raymond Seule-Laboratory Officer

E-mail rseule@vanuatu.gov.vu

Laboratory Testing Performed General lab testing, PPHSN disease testing

B: Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	Molecular Probetech	No	N/A
Cholera	Presumptive culture	Yes	Medipole New Caledonia
Dengue	SD Dengue Combo NS1/IgM/IgG	Confirmation	WHO Arbovirus Reference Centre, Brisbane, IPNC
Chikungunya			
Zika			
Gonorrhoea	Gram stain, culture Molecular ProbeTech	NO	
HIV	Determine, Unigold, Insti, Viral Load	NO	
Influenza	Quidel-Rapid Test Fluorescent stain	PCR	WHOCC Melbourne
SARS-CoV-2			
Leptospirosis	Elisa IgM	PCR	Institute Pasteur New Caledonia Queensland, AU
Measles	No	Yes	Fiji CDC
Rubella	No	Yes	Fiji CDC
Syphillis	TPPA, RPR, Titer	No	N/A
Tuberculosis	Direct smear-ZN stain Gene Expert	Limited culture/ID, sensitivity	Qnsld. Mycobact. Ref. Lab Brisbane, AU
Typhoid	Presumptive culture	Yes	Medipole New Caledonia
Мрох			



Test Parameters	Test Performed at Lab	Referred Test	Current Referral La
Haematology			
- Full Blood count & type of			
Analyser			
- Blood Film Analysis			
- Coagulation Profile			
Biochemistry			
-RFTs			
-RBS			
-HbA1c			
-LFTs			
-Cardiac Enzymes			
-Lipid Profile			
-Tumour Markers			
Microbiology			
-Urinalysis (manual or automated)			
- Blood Culture (manual or automated)			
-Culture			
-Identification (manual or automated)			
- AST (manual or automated)			
- AST International Guidelines used			
-Fungal testing			
-Water testing			
-Food Testing			
Molecular testing			
-RT-PCR			
-HPV			
-HBV Viral Load			
Cytopathology			
-Gynae Cytology			
-Non-Gynae Cytology			

D. EQA Providers

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit



Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	Pasteur Institute, New Caledonia; Qnsld. Healtl Queensland, AU; *Qnsld. Mycobact Ref Lab, Br CDC,WHO Arbovirus Reference Centre, Brisban	isbane, AU, Fiji
IATA certified Trainers	YesNumber Certified Trainers:	No
	Date Training License Expires:	
IATA certified Shippers	YesNumber Certified Shippers:	No
	Date Shipping License Expires:	
Airline/Cargo companies the lab uses to ship	Air Carlin, Air Vanuatu	
to L2/L3 lab		

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)
	Yes (LIS to equipment only)
	No
	Planned

COUNTRY: WALLIS & FUTUNA

LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name		SIA HOSPITAL LABORATORY
Lab Contact Name:		
	Pathologist/Manager	Dr. Jean Claude Grignon, Biologiste Laboratoire
	Address	Agence de Santé du Territoire des Iles Wallis et Futuna
		B.P. 4G, 98600 Mata-Utu, Wallis et Futuna
	E-mail	biologiste@adswf.fr
	Phone	(681) 72 07 00
	Fax	(681) 72 11 80
	Sr. Tech/Other Contact	

E-mail

General lab testing, PPHSN disease testing

B: Target Disease Testing Information

Laboratory Testing Performed

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	TDR Biosynex Chlamytop PCR Xpert CT/NG	No	N/A
Cholera	Culture/ID, serotyping	No	N/A
Dengue	Panbio Dengue early rapid Platelia Dengue NS1 Ag Dengue duo cassette IgG, OgM	PCR TYPING	CHT Gaston Bourret New Caledonia
Chikungunya			
Zika			
Gonorrhoea	PCR Xpert CT/NG Culture, ID	No	N/A



HIV	Elecsys HIV COMPT	No	N/A
Influenza	TRD BIOSYNEX Influenzaetop PCR Xpert Xpress FluRSV	PCR	
SARS-CoV-2	RT-PCR Xpress Xpert SARS-2 Panbio COVI-19 Ag RAPID Biosynex COVID-19 Ag BSS		
Leptospirosis	Panbio Leptospira IgM Elisa	Confirmation by MATT	Institut Pasteur New Caledonia
Measles	Vidas MSG		
Rubella	Elecsys Rubella IgG	No	
Syphillis	VDRL Fumouze, Elecsys Syphilis	Confirmation	Institut Pasteur New Caledonia
Tuberculosis	PCR Xpert MTB/RIF ultra	Direct smear, culture, ID, sensi	CHT Gaston Bourret New Caledonia
Typhoid	Culture/ID/Sensitivity	No	N/A
Мрох			

Test Parameters	Test Performed at Lab	Referred Test	Current Referral Lab
Haematology -Full Blood count & type of Analyser - Blood Film Analysis - Coagulation Profile	Sysmex XS-1000i (2) Manual (MGG) STA COMPACT STAGO (2)		
Biochemistry			
-RFTs -RBS -HbA1c -LFTs -Cardiac Enzymes -Lipid Profile -Tumour Markers	VITROS 350 VITROS 350 D-10 BIO RAD (2) VITROS 350 Mini Vidas and VITROS 350 VITROS 350 Mini Vidas and Cobas e411		
Microbiology -Urinalysis (manual or automated) - Blood Culture (manual or automated) -Culture -Identification (manual or automated) - AST (manual or automated) - AST International Guidelines used -Fungal testing -Water testing -Food Testing	Manual Bact/Alert Manual Vitech 2 Vitech 2 Vitech 2, manual No		
Molecular testing -RT-PCR -HPV -HBV Viral Load	Xpert Xpress SARS-COV-2 Xpert HPV Xpert HBV viral load		



Cytopathology -Gynae Cytology -Non-Gynae Cytology	No No	
Histology	No	

D. EQA Providers

Institution	Panel name	No.of cycles provided
EQAS BIO-RAD	Biochimie Clinique Mensuel	Cycle 21
	Programme mensuel d'immunoessais	Cycle 19
PPTC	Blood Bank	Cycle 2022 1 and 2
Pacific Pathology Training Centre	Haematology	Cycle 2022 1 and 2
	Microbiology	Cycle 2022 1 and 2
	Covid-19	Cycle 2022 1 and 2

E. Laboratory External Audit/Assessment

Year last Audit conducted	Type of Assessment Tool (WHO Minimum Std/SLIPTA/ISO/Others)	Assessor/Agency conducting the Audit

Referral and Shipping Information

Recommended L2/L3 Referral Lab(s)	Pasteur Institute, New Caledonia	
IATA certified Trainers	YesNumber Certified Trainers: Date Training License Expires:	No
IATA certified Shippers	YesNumber Certified Shippers: Date Shipping License Expires:	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	hip Air Caledonie International (airline) TTI-SDV Noumea (Shipper Company)	

G: Laboratory Information System

Laboratory Information System (LIS)	Yes (LIS interphase with equipment & directly into HIS)	
	Yes (LIS to equipment only)	
	No	
	Planned	



SECTION 2

L2 LABORATORY SITES:

No.	Country/Territory
1	Fiji Centre for Disease Control
2	Institute Louis Malarde, French Polynesia
3	Guam Public Health Laboratory, Guam
4	Institute Pasteur New Caledonia

Note:

In this section, * indicates a commercial or government laboratory, not in the PPHSN-LabNet list. These laboratories have been contracted by the country or jurisdiction and it is important to include them in the catalog for a complete understanding of all testing provisions available in the region.



COUNTRY: FIJI LABNET DESIGNATION: L2



A: Contact/General Information

FIJI CENTRE FOR DISEASE CONTROL	
Dr Aalisha Sahukhan (Head of Health Protection)	
Fiji Centre for Disease Control, Mataika House Building 30,	
Tamavua Hospital	
P.O. Box 1634, Suva, Fiji_	
aalisha@gmail.com (679)	
3 320 -066	
(679) 3 322-714	
Talica Cabemaiwai (FCDC)/Ravendra Prasad (CWMH)	
tcabe25@gmail.com ravendra.prasad@health.gov.fj	
(679) 3 320 066 679 3215571	
(679) 3 320 344	

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	No	No	Testing done at Divisional Labs
Cholera	No	No	N/A
Chikungunya	ELISA SD-IgM	No	N/A
Dengue	PanBio-IgG/IgM RT- PCR - Serotype	Confirmation	Qnsld. Health Scientific Serv. Queensland, AU
Gonorrhoea	No	No	Testing done at Divisional Labs
HIV	Gene X-pert- Early Infant diagnosis, Viral Load	No	N/A
Influenza	RT-PCR	Genotyping, vaccine studies	WHO-CC- Melbourne, AU
SARS-CoV-2			
Leptospirosis	PanBio IgM, RT-PCR	Confirmation	Qnsld. Health Scientific Serv. Queensland, AU; Institut Pasteur of New Caledonia
Measles	ELISA Euroimmun Measles IgM,RT- PCR	Genotyping	VIDRL, AU
Rubella	ELISA Euroimmun Rubella IgM,RT- PCR	Genotyping	VIDRL, AU
Syphillis	No	No	Syphilis testing done at Fiji divisional hospitals
Tuberculosis	No	No	All Fiji TB testing performed at Tamavua Hospital, Fiji
Typhoid	No	No	N/A

C. Shipping Information

Recommended L2/L3 Referral Lab(s)	Pasteur Institute, New Caledonia; Qsld. Health Sci Serv. Qsld, AU; *Qnsld. Mycobact Ref Lab, Brisbane, AU; VIDRL, AU; WHO-CC Melbourne, AU; CWM Hospital Suva, Fiji
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	TNT and Williams & Goslings Ltd- Ms Hanisi Taito Fiji Airways



COUNTRY: FRENCH POLYNESIA

LABNET DESIGNATION: L2





A: Contact/General Information

Laboratory Name INSTITUTE LOUIS MALARDE

Lab Contact Name(s):

Lab Main Contact Dr. Elsa DUMAS CHASTANG, Pharmacien Biologiste

Address B. P. 30

98713 Papeete, Tahiti, Polynésie française

E-mail edumaschastang@ilm.pf

Phone (689) 40 41 64 70

Fax (689) 40 43 15 90

Sr. Tech/Other Contact Dr Cédric MOU CHI SAN; Dr Raphaëlle BOS

E-mail cmouchisan@ilm.pf; rbos@ilm.pf **Phone** (689) 40 41 64 22; (689) 40 41 64 32

Fax (689) 40 41 64 94

Laboratory Testing Performed Full service lab testing-routine lab testing, full

microbiology and TB, molecular testing, all PPHSN

disease testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab – L2/L3 Location
Chlamydia	PCR	No	N/A
Cholera	No	No	N/A
Dengue	PanBio-IgM, PCR (serotyping)		N/A
Chikungunya	PCR	No	N/A
Zika	PCR	No	N/A
Gonorrhoea	Culture/ID	No	N/A
HIV	EIA, PCR viral load	No	N/A
Influenza	PCR (subtyping)	Genotyping	WHO-CC Melbourne, AU
SARs-CoV-2			
Leptospirosis	PanBio-IgM, PCR	Typing	Cerba laboratory-France
Measles	WHO-IgM	IgG, IgM	Cerba laboratory-France
Rubella	IgG/IgM Cobas	No	N/A
Syphillis	TPHA, VDRL	No	N/A
Tuberculosis	Direct smear-ZN stain, culture/ID, sensitivity	Genotyping	Cerba laboratory-France
Typhoid	Culture/ID	No	N/A

C. Shipping Information

Recommended L2/L3 Referral Lab(s)	WHO-CC Melbourne, AU; * Institut Pasteur Referral Labs France
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air France, Air Tahiti Nui, Air New Zealand



COUNTRY: GUAM LABNET DESIGNATION: L2



A: Contact/General Information

Laboratory Name GUAM PUBLIC HEALTH LABORATORY

Lab Contact Name(s):

Lab Main Contact Ms. Anne Marie Santos – Laboratory Administrator

Address 123 Chalan Kareta

Mangilao, Guam 96913

E-mail <u>annemarie.santos@dphss.guam.gov</u> (671)

Phone 735-7153

Fax (671) 735-0348

Sr. Tech/Other Contact Mr. Alan John Mallari, Microbiologist II;

Ms. Lea Nisay, Microbiologist I

E-mail alan.mallari@dphss.guam.gov;

lea.nisay@dphss.guam.gov

Phone (671) 735 7141; (671) 735-7170

Ms. Mary Jean Jacar – Laboratory Consultant/Supervisor

E-mail jean.jacar@yahoo.com

Laboratory Testing Performed

General lab testing, PPHSN disease testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab-L2/L3 Location
Chlamydia	Cepheid Xpert CT/NG (PCR)	No	N/A
Cholera	No	Yes	Diagnostic Lab Services Guam
Dengue	Trioplex (Dengue/ Chikungunya/Zika) PCR	Serology	CDC Dengue Reference Lab,Puerto Rico
Gonorrhoea	Cepheid Xpert CT/NG (PCR), GC culture/ID, sensitivity	No	N/A
HIV	Alere Determine HIV ½ Ag/Ab Combo	Confirmation, Viral load, CD4	Diagnostic Lab Services Honolulu-Hawaii, USA
Influenza	Direct Fluorescent Assay stain, BD Veritor Flu A+B, Cepheid Xpert Xpress FLU/RSV, PCR (detection- subtyping)	No	N/A
SARS-CoV-2	7. 5/		
Leptospirosis	Linnodee Leptorapide	Confirmation-serology, PCR	WHO-CC, Melbourne, Australia
Measles	ELISA-Siemens	Confirmation-serology	CDC Atlanta, USA
Rubella	ELISA-Siemens	No	N/A
Syphillis	RPR, TPPA	No	N/A



C. Shipping Information

Recommended L2/L3 Referral Lab(s)	*Diagnostic Lab Services; *Univ of Hawaii-Trop. Med Dept Hawaii, USA; *CDC Atlanta, USA; WHO-CC Melbourne, AU
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines



NOUVELLE-COUNTRY: CALEDONIE LABNET DESIGNATION: L2





A: Contact/General Information

Laboratory Name INSTITUT PASTEUR OF NEW CALEDONIA

Lab Contact Name(s):

Dr Cyrille Goarant – Vet D, PhD Institut **Lab Main Contact**

Pasteur de Nouvelle-Calédonie **Address**

B.P. 61 98845 Noumea Cedex, Nouvelle Caledonie_

cgoarant@pasteur.nc E-mail

(687) 27 75 31 Phone Fax

(687) 27 33 90

Dr Myrielle Dupont-Rouzeyrol, PhD Sr. Tech/Other Contact

mdupont@pasteur.nc E-mail

(687) 27 75 30 Phone

Fax

Laboratory Testing Performed

Arboviruses and Leptospirosis testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Referral Lab – L2/L3 Location
Chlamydia	No	N/A	N/A
Cholera	N/A	N/A	N/A
Dengue	RT-PCR (detection includes dengue, chikungunya, Zika and other arboviruses – dengue typing), Sequencing, Virus isolation, PRNT (dengue, Zika, chikungunya, RRV) for research purpose	No	N/A
Gonorrhoea	N/A	N/A	N/A
HIV	N/A	N/A	N/A
Influenza	N/A	N/A	N/A
SARS-CoV-2			
Leptospirosis	MAT (Microagglutination test), PCR, Sequencing for research purpose	No	N/A
Measles	N/A	N/A	N/A
Rubella	N/A	N/A	N/A
Syphillis	N/A	N/A	N/A
Tuberculosis	N/A	N/A	N/A
Typhoid	N/A	N/A	N/A

C. Shipping Information

Recommended L2/L3 Referral Lab(s)	Institut Pasteur Referral Labs or CIBU, Paris, France
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to handle shipments	Air Calin, Freight forwarder : ACT Nouméa, Adélie Plourdeau, Ph (687) 27 04 38, Fax : (687) 28 61 30, export@act.nc



SECTION 3

L3 LABORATORIES:

No.	Country, City or State	Name Of Laboratory
	Australia, Adelaide	*Institute of Medical and Veterinary Science (IMVS)
2	Australia, Victoria	National Serology Reference Laboratory (NRL)
3	Australia, Queensland	*Queensland Mycobacterium Reference Laboratory (QMRL)
4	Australia, Queensland	*Queensland Medical Laboratories (QML)
5	Australia, Queensland	WHO Arbovirus Reference Centre (QUT)
6	Australia, Melbourne	Victoria Infectious Diseases Reference Laboratory (VIDRL)
7	Australia, Melbourne	WHO-Collaborating Center for Influenza (WHO-CC)
8	France	*Pasteur Institute
9	New Caledonia	Pasteur Institute (IPNC)
10	New Zealand, Porirua	Institute of Environmental Science and Research (ESR)
11	New Zealand, Auckland	*Lab Plus
12	USA, Atlanta	Centers for Disease Control Laboratories (CDC)
13	USA, Hawaii	*Diagnostic Lab Services (DLS)
14	USA, Hawaii	State of Hawaii Public Health Laboratory (HSL)
15	USA, Hawaii	*University of Hawaii-School of Tropical Medicine (UHTM)

^{*} Indicates a commercial or government laboratory, not in the PPHSN-LabNet list. These laboratories have been contracted by the country or jurisdiction and it is important to include them in the catalog for a complete understanding of all testing provisions available in the region.



L3 Laboratory: Victorian Infectious Diseases Reference Laboratory (VIDRL)

Country: Australia

Polio Testing

Victorian Infectious Diseases Reference Laboratory (VIDRL) at The Peter Doherty Institute for Infection and Immunity (The Doherty) acting through Melbourne Health is the WHO national poliovirus reference laboratory for the Pacific Island countries and territories (PICTs), in addition to its role as a regional poliovirus reference laboratory for the Western Pacific region. VIDRL is also a WHO Western Pacific regional reference laboratory for measles. VIDRL provides a LabNet Level 3 service to PICTs as part of its WHO regional reference laboratory role.

The WHO role of VIDRL includes testing for polioviruses from all patients with acute flaccid paralysis, and testing for measles virus in suspected cases or outbreaks. The differential diagnosis of measles testing includes testing for rubella and human parvovirus. In general, VIDRL will test 10–20 specimens from an outbreak at no cost, but transport to VIDRL needs to be arranged and paid for by the referring laboratory. Results are sent by e-mail or fax whenever possible, with a paper copy to follow.

Contact Information

For specific enquiries about poliovirus testing, contact should be made directly with the laboratory. It is important to contact the laboratory prior to each shipment.

To contact the polio testing laboratory
Bruce Thorley, PhD
National Enterovirus Reference Laboratory
WHO Polio Regional Reference Laboratory
Victorian Infectious Diseases Reference Laboratory

Ph: +61 3 9342 2607 Email: polio@mh.org.au

The Peter Doherty Institute for Infection and Immunity 792 Elizabeth Street, Melbourne, Victoria, Australia 3000

Specimen Instructions

All specimens from AFP cases and enterovirus isolates for testing and identification should be forwarded to the poliovirus reference laboratory at VIDRL. Samples must be safely packaged to ensure that there is no leakage in transit. Sufficient ice bricks should be included to keep the contents chilled in case of delays in delivery. Include a label 'Shipment to be kept at 4°C whenever possible'. Shipments sent by air must adhere to airline safety regulations as specified for:

- diagnostic specimens IATA packing instruction 650; and
- Infectious substance IATA packing instruction 602.

All specimens must be packed strictly in accordance with airline and IATA regulations for shipping biological specimens:

For further details on shipping, refer to the WHO guidelines for safe transport:

https://www.who.int/publications/i/item/9789240019720

Virus isolates and clinical specimens arriving from outside Australia will require an Australian Quarantine Inspection Service (AQIS) import permit, which is available upon request. A copy (fax or photocopy is acceptable) of the import permit MUST BE INCLUDED with the shipping documents and the package.

Please contact the Senior Scientist to obtain a valid import permit, using the appropriate contact information above.



L3 Laboratory: Queensland Health Forensic Scientific Services (QHFSS)

Country: Australia

1. Testing Information

Leptospirosis

- PCR bacterial DNA detection
- MAT serological detection and serotyping
- Serum 0.2mL minimum volume
- Prozen or +4°C (frozen preferred)

Note: This testing is performed by Scott Craig of the WHO/OIE Leptospirosis Collaborating Centre, which is located in an adjoining laboratory.

Virology

- PCR virus DNA/RNA detection (e.g. Rabies/Australian Bat Lyssavirus, Flaviviruses, Alphaviruses, other exotic viral diseases where medically warranted and requested by senior medical officers in the Departments of Health of Pacific Island countries)
- Serology detection of antigen antibody in serum
- Serum 0.5mL minimum volume
- Frozen or +4°C

2. Specimen Instructions

For all samples

Required information: Patient name; date of birth; referring lab identifying number **Preferred information (in addition to above):** Sex, date of onset, date of collection, recent vaccination, recent overseas travel history

3. Contact Information

Frederick Moore – all viral testing, Scott Craig – leptospirosis testing Public

Health Virology

Queensland Health Forensic Scientific Services

39 Kessels Road

COOPERS PLAINS QLD 4109

AUSTRALIA

Ph: +61 7 3096 2899 (Fred Moore), +61 7 3096 2816 (Scott Craig)

Fax: +61 7 3096 2878

E-mail: Frederick.moore@health.qld.gov.au, scott.craig@health.qld.gov.au

Additional information regarding the services provided by QHFSS can be obtained at its website: https://www.health.qld.gov.au/healthsupport/businesses/forensic-and-scientific-services/testing-analysis/diseases.

4. Specimen Shipping Instructions

Guidelines for sending serum samples to QHSS (arboviruses and leptospirosis)

The Department of Agriculture and Water Resources (DAgWR – formerly AQIS) strictly enforces the regulations regarding the transport of all material (including diagnostic specimens) into Australia. Unless all of the documentation has been completed correctly and the samples have been packaged according to IATA guidelines, they will refuse to release the material and it may be destroyed.



These requirements are <u>in addition to</u> what the airline may require. You will need to fulfil all of the requirements of the airline as well as those listed below.

- All documentation must be <u>signed</u> (it is not sufficient to type your name).
- A list of the contents (called a 'Suppliers Declaration') AND a copy of a current import permit must be affixed to the outside of the container (it is a good idea to include a copy on the inside as well). The documents attached on the outside of the package should be in an envelope with the label 'Attention Quarantine'.
- Please include all the information below on the declaration on your company letterhead for Suppliers Declaration (see example below):
 - Air Way Bill number
 - The date
 - Description of the goods being shipped: eg Human serum for Leptospirosis serological testing. Samples taken from persons with no signs and symptoms of the diseases listed in section XXX of the Permit 0000XXXXXXXXX.
 - Origin of the goods eg Human
 - The reason for exporting the material: eg. Laboratory testing
 - The Import Permit Number in this case: eg Permit 0000784593 (valid between 14 June 2017 and 14 June 2019) for Import of Human fluids and Tissues.
 - The Import Permit Condition in this case: Permit condition X which is on page 4 of the permit.

Suppliers Declaration

To: Frederick Moore (or S. Craig for lepto)
Queensland Health Scientific Services 39
Kessels Road
COOPERS PLAINS QLD 4109
AUSTRALIA

Ph: +61 7 3096 2899 (or +61 7 3096 2816 for Scott Craig)

Date:

Air Waybill Number:

DAgWR permit number (contact the laboratory to obtain the current DAgWR permit number to use) Permit Condition and Page number

The package contains a total of 7 vials consisting of: 4 x vials each containing 0.5mL of human serum for diagnostic purposes 3 x vials each containing 1.0mL of human serum for diagnostic purposes

Tests requested: Dengue exclusion (or lepto or other arbovirus) Signature

Joe Bloggs Scientistin-charge A Pacific Island Country Health Facility

Phone number: Fax number:



WHO Measles Regional Reference Laboratory of the Western Pacific Region – Melbourne (WHO-MRRL) Country: Australia

1. General Information

The WHO Measles Regional Reference Laboratory in Melbourne is one of three regional reference laboratories in the Western Pacific Region (WPR). The other regional reference laboratories are located in Hong Kong and Beijing. All three laboratories provide technical support, guidance and hands-on training to the national measles laboratories of the WPR. These laboratories form part of a regional and global network of laboratories involved in the detection of disease and case-based surveillance for achieving elimination of endemic measles and rubella transmission.

For more information, see the website: https://www.who.int/immunization/diseases/measles/en/

As part of its WHO regional reference laboratory role, the WHO-MRRL in Melbourne conducts serologic and molecular investigation of suspected measles and rubella cases. The laboratory also performs extensive molecular investigation of samples to determine measles and rubella genotypes circulating in countries of the WPR. The laboratory's website has details of relevant contact people and location.

For further details, see www.vidrl.org.au

2. Contact Information

Contact persons

Dr Mike Catton

Director

Dr Julian Druce

Section Head, Virus Identification Laboratory

Ms Suellen Nicholson

Section Head, Infectious Diseases Serology Laboratory

Mr Thomas Tran

Deputy Senior Scientist, Virus Identification Laboratory

Ms Vicki Stambos

Scientist, WHO Measles Regional Reference Laboratory (WPR)

Shipping address

Scientist in charge
WHO Regional Measles Reference Laboratory of WPR
Victorian Infectious Diseases Reference Laboratory
The Doherty Institute
792 Elizabeth Street
Melbourne
3000 Victoria
AUSTRALIA

Direct Ph (Infectious Diseases Serology): +61 3 9342 9646 Fax: +61 3 9342 9676 Direct Ph (Virus Identification Laboratory): +61 3 9342 9623 Fax: +61 39342 9629

VIDRL Ph: +61 3 9342 9600



Note: Please contact the Virus Identification Laboratory for molecular testing or Infectious Diseases Laboratory for serologic testing before shipping any specimens.

3. Testing Information

Tests available

Detection of immunoglobulin G (IgG) and immunoglobulin M (IgM) antibodies to measles and rubella using commercial enzyme-immunoassay kits is performed in the Infectious Diseases Serology Laboratory. Real-time RT-PCR for measles and rubella as well as sequencing of wild type strains is conducted in the Virus Identification Laboratory. The laboratory also performs rapid testing using a real-time PCR assay for the identification of vaccines strains.

4. Specimen Requirements

Maximum number of samples and cost of testing

The number of samples referred to WHO-MRRL will be determined by senior personnel at the referring laboratory, WHO-MRRL and the laboratory coordinator of the WPR. WHO-MRRL performs serologic and molecular testing of specimens referred by designated national measles laboratories within the WPR at no cost to the referring laboratory.

Required patient / sample details

- ID: Lab number or reference number or name
- Sample: Date of sample, type of sample (NPA, nose/throat swab, urine, serum, etc)
- Patient details: Date of birth, sex, date of rash onset, immunization status, clinical details A

template for completion of these details can be emailed to the shipping laboratory on request.

Samples and minimum volumes required

The following samples are accepted by WHO-MRRL for the purpose of diagnosis and confirmation of measles or rubella infection:

By serologic methods: IgM and IgG detection

Sample type	Volume required	Suitable collection time	Comments	Suitability (1=most suitable, 3= least suitable)
Serum */ Plasma	300 microlitres*	Between 4 and 28 days post rash onset		1
Dried venous blood	3 (14mm) full blood spot dried on filter paper	Between 4 and 28 days post rash onset	Can be whole blood, finger or heel prick	1

^{*}For specimens deviating from the volume specified, please contact WHO-MRRL: measles@vidrl.org.au



By molecular methods: virus RNA detection and genotyping

These volumes are additional to that required for serology. Samples for RNA detection should not be frozen prior to shipping but should remain cold (4°C).

Sample type	Additional volume required	Suitable collection time	Comments	Suitability (1=most suitable, 3= least suitable)
nose/throat swab or nasopharyngeal swab or nasal aspirate	200 microlitres	Up to 3 weeks post rash onset	Swab placed in sterile Viral Transport Medium or PBS	1
urine	200 microlitres	Up to 4 weeks post rash onset		2
oral fluid collected using device recommended in WHO manual	200 microlitres	Within 14 days of rash onset	Sampling device must not contain serum stabilizer	2
dried venous blood	1 (14mm) full blood spot dried on filter paper	Within 7 days of rash onset	Can be whole blood, finger or heel prick	2
Serum*/Plasma	200 microlitres	Within 7 days of rash onset		2
PBMC (peripheral blood mononuclear cells from EDTA or heparinised blood)	200 microlitres	Up to 3 weeks post rash onset		3

5. Shipping Instructions

Shipping conditions

Samples for serologic testing can be shipped at ambient temperature. Samples for RNA detection should not be frozen prior to shipping but should remain cold (4°C). It is preferable that all shipments be sent at the beginning of the week to enable maximum time for clearance at customs and avoid unnecessary delay. It is recommended that the sender discuss the method of shipping with WHO-MRRL prior to shipping samples by email: measles@vidrl.org.au

Shipping costs

Shipping costs incurred are at the sender's expense.

Administration/customs information

ALL samples sent to WHO-MRRL from outside Australia MUST have:

- 1. a customs declaration of imported goods (description of goods, volume, quantity, statement of value, packed according to IATA guidelines, diagnostic specimens not for commercial use, country of origin) on your own letterhead; and
- 2. the AQIS import permit (applicable if samples other than serum are shipped).

A template for 1 and a pdf copy of 2 can be e-mailed to the laboratory prior to shipping. The forms MUST accompany the package.

All diagnostic specimens (shipped as Biological substance, Category B) must be packaged according to IATA 650 guidelines (or P650).

All infectious substances must be packaged according to IATA 620 guidelines (or P620).



For packing instructions, see the IATA Dangerous goods regulations: http://www.iata.org

Include AQIS customs import permit (if applicable), and label box with appropriate storage conditions.

Exempt

Dried blood spots collected for blood screening tests may be transported to the laboratory at ambient temperature. However, the samples must be thoroughly dry before they are packed and transported. Dried blood spots are NOT subject to IATA Dangerous Goods Regulations. For further information refer to http://www.iata.org

COVID-19 REFERENCE LABORATORIES FOR THE PACIFIC

Laboratory and contact	Shipping requirements	Turnaround time for results	Preferred shipping agent	Testing cost (as of 18/2/20)
Victorian Infectious Disease Reference Laboratory (VIDRL) Melbourne Health 792 Elizabeth Street Melbourne, VIC, 3000 Australia Dr Julian Druce	Cat B Box (refer to Table 1 on guide for sample collection and storage)	24 hours from receipt	World Courier Import permit already shared with countries	Free
Institut Louis Malardé (ILM) Pharmacienne Biologiste BP 30 - 98713 Papeete, Tahiti Polynésie Française Raphaëlle Bos rbos@ilm.pf	Cat B Box (refer to Table 1 on guide for sample collection and storage)	24 hours from receipt	No preference	Please consult WHO Pacific2019nCo V@ who.int
Medipole Laboratoire de Microbiologie 110, boulevard Joseph-Wamytan BPJ5, 98849 Noumea New Caledonia Dr Ann-Claire Gourinat Ann-Claire.GOURINAT@cht.nc	Cat B Box (refer to Table 1 on guide for sample collection and storage)	24 hours from receipt	No preference Import permit not required	Not exceeding 15000XPF
ESR NCBID 66 Ward Street Wallaceville Upper Hutt 5018 New Zealand Angela Brounts angela.brounts@esr.cri.nz	Cat B Box (refer to Table 1 on guide for sample collection and storage)	24 hours from receipt	World Courier Import permit not required	Please consult WHO Pacific2019nCo V@ who.int
United States CDC 1600 Clifton Road NE Atlanta GA 30329, USA Sixiang Tong sot1@cdc.gov Stephen Lindstrom sql5@cdc.gov	Follow CDC shipping guidelines from USAPI to CDC	24 hours from receipt	Follow USCDC shipping guidelines from USAPI to CDC	Reference lab for U.S. Affiliated Pacific Islands (USAPI) ⁶



Hawaii State Laboratory 2725 Waimano Home Road Pearl City, Hawaii, 96782, USA Dr. Sarah Park sara.park@doh.hawaii.gov Ed Desmon Edward.desmond@doh.hawaii.gov	Follow USCDC shipping guidelines from USAPI to Hawaii	24 hours from receipt	Follow USCDC shipping guidelines from USAPI to CDC	Reference lab for U.S. Affiliated Pacific Islands (USAPI)
Guam Public Health Laboratory RAN-CARE Commercial Building Centam 3rd Floor, Suite A-3 761 South Marine Corps Drive Tamuning, GUAM 96913 Anne-Marie Santos annemarie.santos@dphss.guam.gov	Cat B Box (refer to Table 1 on guide for sample collection and storage)	24 hours from receipt	United Airlines/Air Pacific Airlines/Pacific Cargo	Reference lab for U.S. Affiliated Pacific Islands (USAPI)

L3 LABORATORIES (WHO COLLABORATING LABORATORIES)

1.	Australia	WHOCC for Influenza	Dr Patrick Reading	Ph: +613 9342 9300
		Melbourne (VIDRL)	preading@unimelb.edu.au	Fax: +613 9342 9329
2.	Australia	WHOCC for Measles	Dr Mike Catton	Ph: 613 9342 9600
		Melbourne (VIDRL)	mike.catton@mh.org.au	Fax: 613 9342 9696
3.	Australia	WHOCC for Arbovirus	Dr John Aaskov j.aaskov@qut.edu.au	Ph: 617 3138 6193
		Queensland (QUT)		
4.	Australia	WHOCC for	Dr Lee Smythe	Ph: +617 3274 9151
		Leptospirosis	lee.smythe@health.qld.gov.au	Fax: +617 3000 916
		Queensland (QHFSS)		

L3 LABNET LABORATORIES

5.	New	Institute for	Dr Virginia Hope	Ph:64 4 27 65 35
	Zealand	Environment Science &	Virginia.hope@esr.cri.nz	681
		Research/National		Fax: 64 4 529 0601
		Centre for Biosecurtiy for		
		Infectious Disease		
		Wellington		
		(ESR/NCBID)		
6.	Australia	National Reference	Dr Kim Wilson kim@nrlquality.org.au	Ph:61 3 94181156
		Laboratory (NRL)		
		Melbourne		
7.	Australia	Queensland Health &	Dr Alyssa Pyke	Ph: +617 3274 9151
		Forensic Science	Alyssa pyke@health.qld.gov.au	Fax: +617 3000 916
		(QHFSS)		
8.	Hawaii	Hawaii State	Dr A C Whelen	Ph: (808) 453 5993
		Laboratory, Honolulu	chris.whelen@doh.hawaii.gov	Fax: (808) 251-4014
9.	Australia	New South Wales State	Philip Cunningham	Ph: +61 2 8382 4900
		Reference Laboratory for	p.cunningham@amr.org.au	Fax: +61 2 8382
		HIV		4901



COVID-19

COVID-19 disease caused by SARS-CoV 2, a novel coronavirus first detected in Wuhan City, Hubei Province, China in December 2019. SARS-CoV 2 is a zoonotic virus¹, bats appear to be the reservoir of the virus, but the intermediate host(s) has not yet been identified. COVID-19 disease is a fast- moving infection that rapidly spread to countries outside of China fuelled by air and sea travel (cruise ships) that by 30 January 2020, COVID-19 disease was declared a Public Health Emergency of international Concern (PHEIC) under the International Health Regulation 2005. By 11 March 2020, more than 113 countries were affected with about 120,000 cases recorded and COVID-19 disease was declared a pandemic. The epicenter of the pandemic has shifted from China, to Europe then to USA and now to Brazil and the Americas. As of 11 June 2020, a total of 7,302,445 cases and 413,439 deaths recorded in 188 countries² according to the COVID-19 Dashboard by the Center for Systems, Science and Engineering (CSSE) at the Johns Hopkins University (JHU). Further updated information on COVID-19 disease can be found in the WHO Situational Report No. 142³ on 10 June 2020.

Laboratory Diagnosis:

Currently all PICT are using Xpert Xpress SARS-CoV-2 test, a real-time RT-PCR test (closed system) intended for the qualitative detection of nucleic acid from the SARS-CoV-2 in upper respiratory specimens (such as nasopharyngeal, oropharyngeal, nasal, or mid-turbinate swab and/or nasal wash/ aspirate) collected from individuals suspected of COVID-19 by their healthcare provider.

Results are for the detection of SARS-CoV-2 RNA. The SARS-CoV-2 RNA is generally detectable in upper respiratory specimens during the acute phase of infection. Positive results are indicative of active infection with SARS-CoV-2; clinical correlation with patient history and other diagnostic information is necessary to determine patient infection status. Positive results do not rule out bacterial infection or co-infection with other viruses. The agent detected may not be the definite cause of disease.

Negative results do not preclude SARS-CoV-2 infection and should not be used as the sole basis for treatment or other patient management decisions. Negative results must be combined with clinical observations, patient history, and epidemiological information.

Eight of the 23 PICTs (Fiji, French Polynesia, Guam, New Caledonia, Palau, Solomon Islands, Tonga and Papua New Guinea) have COVID-19 testing capabilities through RT PCR (open system) also. Although COVID-19 testing capacity of PICTs had improved, availability of resources (cartridges) are still limited. Thus a testing algorithm (Figure 1) had been developed to maximize use of resources.



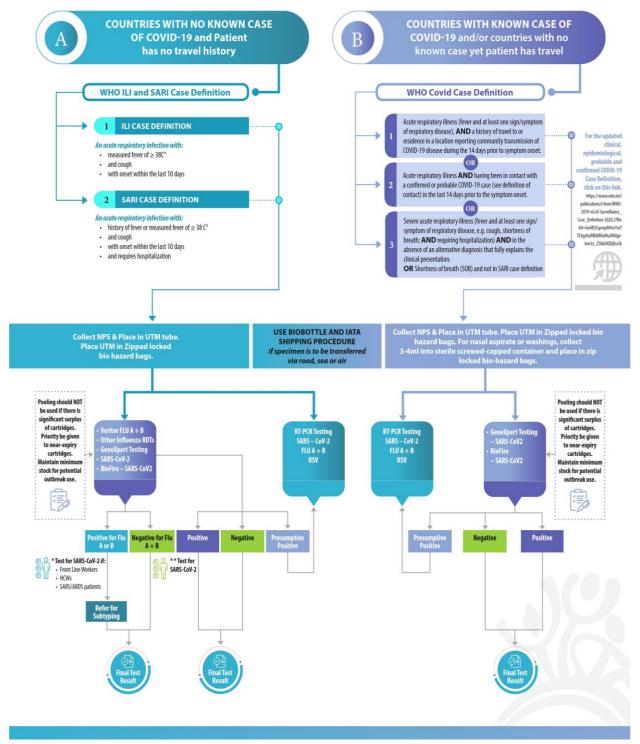
¹ who-china-joint-mission-on-covid-19-final-report, 16-24 February 2020

² https://coronavirus.jhu.edu/map.html, accessed on 11 June 2020

³ https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200610-covid-19-sitrep-142.pdf?sfvrsn=180898cd 2, accessed on 11 June 2020

Figure 1:





IMPORTANT NOTES

COVID-19 TESTING ALGORITHM

GeneXpert Systems

CONSIDERATIONS AROUND GENEXPERT VS RT-PCR

- Consideration around supply reagents for each test
 - GeneXpert cartridges = prioritize when ≤3 months to expiry
 - $\quad \text{RT-PCR} = \text{check extraction supplies, enzyme, primers and probes and plasticware for } > 50 \text{ or } < 50 \text{ samples/day}$
- Small scale testing <50 samples/day:
 - GeneXpert with or without sample pooling (depending on supply and stocks of GeneXpert)
 - RT-PCR with manual or automated extraction
- Large scale testing >50 samples/day:
 - GeneXpert with sample pooling
 - RT-PCR with automated extraction

2 IF SARS-COV-2 NOT DETECTED AND CLINICAL DIAGNOSIS REQUIRED = RUN BIOFIRE (>15 TARGETS IN ONE TEST)

• If real time RT-PCR is available in country for influenza testing, we would recommend this is also performed prior to proceeding to BioFire. If this testing capacity is not available in country, proceed to BioFire if negative for SARSCoV-2 and clinical diagnosis is required.

3 POOL TESTING

- Read and follow Pool Sample testing protocol that has been shared to PICTs Laboratories.
- $\bullet \quad \text{Do pool testing in countries or communities where there is low prevalence of COVID-19 infection}.$
- Maintain a maximum of 4 sample pooling to avoid sensitivity loss of the assay.

4 RESULT OF SARS-COV-2 TESTING PROVIDED WITH INTERPRETATION OF CT VALUES

• Provide SARS-CoV-2 results as "Detected" or "Not Detected" with type of testing platform. Ct values can be provided if required or if it is the in-country reporting protocol. However, if additional information/interpretation is required then advise to consult laboratory.

Note: This is an updated version with additional information based on the availability of different ILI and COVID-19 testing platforms. The previous version of this document can be found here.

This document has been developed in accordance with global guidance and contextualized to the Pacific context by the,
Pacific Island Health Officers Association (PIHOA), Pacific Community (SPC), United Nations Development Programme (UNDP)
and the World Health Organization (WHO) from the COVID-19 Pacific Joint Incident Management Team.











For more information, please contact the **Public Health Division** of the **Pacific Community (SPC)**

www.spc.int



Quality Assurance and Quality Control

Proper specimen collection, storage and transport are critical in the performance of SARS-CoV-2 testing on Genexpert and hence procedures as already highlighted in this document on proper collection, storage and transport of samples to be tested should be strictly adhered to so as to obtain timely, accurate and meaningful test results to guide implementation of effective interventions to control the outbreak and better manage cases affected with SARS-CoV-2.

To monitor the quality performance of laboratories on their SARS-CoV-2 testing, it is crucial that laboratories constantly provide a monthly feedback to SPC/WHO on the monthly data on the outcome of the 9 key performance indicators (KPIs) shown below:

- 1. Total# Xpert SARS-COV-2 run
- 2. Total # successful Xpert tests
- 3. Total # unsuccessful Xpert tests
- 4. Total # Xpert SARS-COV-2 positive
- 5. Total # Xpert SARS-COV-2 Presumptive positive
- 6. Total # Xpert SARS-COV-2 negative
- 7. Total # error results
- 8. Total # invalid results
- 9. Total # no results

These 9 KPIs will be captured on an in-house monitoring tool developed by SPC/WHO which will help identify whether the testing laboratory is encountering errors in its testing processes that will call for immediate action to rectify potential problems so that the quality of the result is not compromised. This is an important monitoring step before conducting further SARS-CoV-2 testing. The monitoring tool also assist testing laboratories to monitor cartridge usage hence ensures that supplies are monitored to avoid unnecessary stock-outs and determine positivity rates and as well as successful run on a monthly basis.

Laboratories performing SARS-CoV- 2 testing are also required to participate in any organised External Quality Assurance Programme (EQAP). The JIMT Lab Cell is working closely with PPTC to organise EQAP with laboratories doing SARS-CoV-2 testing. The programme is supported by WHO.

As proper collection is so critical in the outcome of SARS-CoV-2 test results, recommended procedures for collecting samples for testing are illustrated in Annex A.

Packaging of clinical specimen for shipment to reference laboratory

Proper storage, packing and shipment of specimen should also be observed to ensure integrity of the specimen. Storage and shipping requirements are summarized in a table (see Annex B).

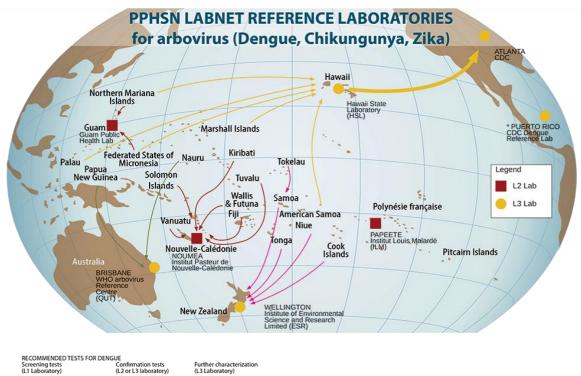
Below are additional reminders for shipping clinical specimen.

- Trained and certified shippers with a valid certificate should pack clinical specimens for airline transfer to the national or international reference laboratory.
- Follow WHO Guidance on regulations for the transport of infectious substances 2019–2020 on the use of triple packaging system (Category B – UN3373)
- Ensure packaging, marking and labelling, and documentation meets all requirements for Category B Shipments.

If the specimen is taken in an outer health facility, notify the national laboratory in advance to expedite specimen handling and referral, and ensure safe specimen handling and transfer to the local laboratory before it is sent to the reference laboratory



MAPPING PPHSN LABNET LABORATORIES FOR TESTING OF DENGUE FEVER, CHIKUNGUNYA, ZIKA, INFLUENZA, LEPTOSPIROSIS AND COVID-19

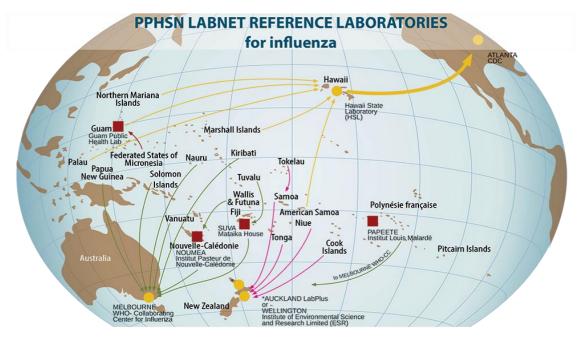


RECOMMERCED 15315 FOR DERIGOR
Confirmation tests
(L1 Laboratory)

RVS1. Ag Rapid strips
NS1 Ag ELIZA
NS1 Combo NS1 / IgG & IgM

 $\ensuremath{^{\star}}$ Indicates a commercial or government laboratory, not in the PPHSN LabNet list.

Poulin Reference Laboratory mapping and shipping of biological Community specimens in the Pacific - July 2019 (community)

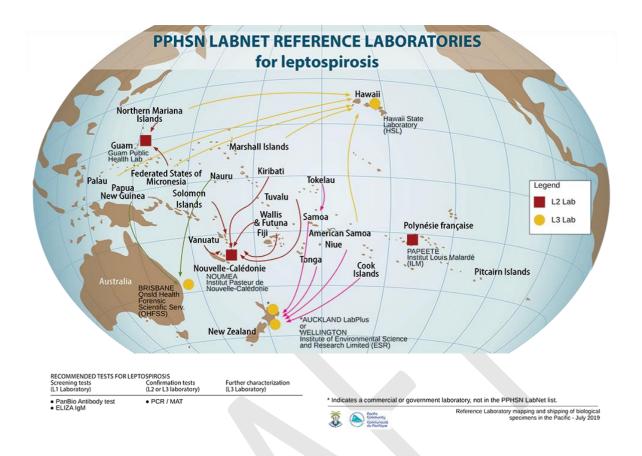


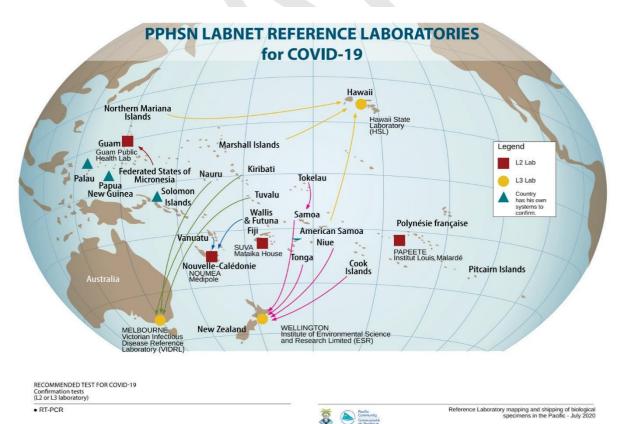


* Indicates a commercial or government laboratory, not in the PPHSN LabNet list.

Reference Laboratory mapping and shipping of biological specimens in the Pacific - July 2019









SECTION 4

KEY LABNET CONTACTS:

The Pacific Community (SPC)

Dr Eka Buadromo Senior Laboratory Advisor ekab@spc.int

The Pacific Community (SPC)

Mr Tebuka Toatu
PPHSN Lab Net Coordinator
tebukat@spc.int

The Pacific Community (SPC)

Mrs Talica Cabemaiwai Monitoring & Evaluation Officer talicaC@spc.int

Pacific Island Health Officers Association (PIHOA)

Ms. Vasiti Uluiviti Regional Laboratory Coordinator - for US Pacific Islands vasitiu@pihoa.org

Pacific Paramedical Training Centre (PPTC) Mr Phil

Wakem
Director PPTC Wellington
pptc@pptc.org.nz

World Health Organization (WHO)

Dr Mahmoud Nuha Team Coordinator, Pacific Health Security & Communicable Diseases (PSC) hamidn@who.int

World Health Organization (WHO)

Raikabakaba Asaeli Babiau Technical officer, Essential Medicines & Health Technologies raikabakabaa@who.int



ACRONYMS:

CDC Centers for Disease Control and Prevention

FNU Fiji National University

IPNC Institut Pasteur in New Caledonia

NRL National Reference Serology Laboratory PPHSN

Pacific Public Health Surveillance Network PIHOA

Pacific Island Health Officers' Association

PPTC Pacific Pathology Training Centre

QHFSS Queensland Health Forensic Scientific Services SPC

The Pacific Community

WHO World Health Organization

WHO-MRRL WHO Measles Regional Reference Laboratory of the Western Pacific Region – Melbourne







Laboratory Strengthening Programme

Public Health Division
Pacific Community (SPC)
Focal Point of the PPHSN Coordinating Body

Email: FocalPointPPHSN-CB@spc.int

Website: www.pphsn.net