



PPHSN LabNet catalog

November 2020 Edition



Compiled by SPC's Surveillance Preparedness and Response Programme,
for PPHSN







PPHSN LabNet catalog - 2020 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-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 centres), 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 Body (The LTWB is composed of eight members from regional laboratory partners (PIHOA, NRL, PPTC, SPC, FNU, WHO, CDC and IPNC) 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 so as 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	5
2	Cook Islands	6
3	Federated States of Micronesia – Chuuk	7
4	Federated States of Micronesia – Kosrae	8
5	Federated States of Micronesia – Pohnpei	9
6	Federated States of Micronesia – Yap	10
7	Kiribati	11
8	Republic of the Marshall Islands	12
9	Nauru	13
10	Northern Mariana Islands	14
11	Niue	15
12	Republic of Palau	16
13	Papua New Guinea	17
14	Samoa	18
15	Solomon Islands	19
16	Tokelau	20
17	Tonga	21
18	Tuvalu	22
19	Vanuatu	23
20	Wallis and Futuna	24

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, BAHCM Lab Manager
Address	BJ Laboratory, Pago Pago USA
E-mail	lamanda.ioane@lbj.as
Phone	(684) 633 2001/1222, ext : 636
Fax	(684) 633 1200
Sr. Tech/Other Contact	Ms Seini Biukoto, MLT(ASCP) ^{CM} Microbiology Supervisor
E-mail	Seine.biukoto@lbj.as Dr Amor Gonzales, MD, AMT, Laboratory Director/Pathologist
Laboratory Testing Performed	General lab testing, PPHSN disease testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	QUIDEL QUICKVIEW	Chlamydial Conjunctivitis	Diagnostic Lab Services, Hawaii, USA
Cholera	NO	Culture ID & AST	Diagnostic Lab Services Hawaii, USA
Dengue	NS1 AG, IGM/IGG DENGUE DUO	PCR	Am.Samoa DOH via Hawaii State Lab
Gonorrhoea	Culture ID & AST	No	N/A
HIV	AG & ANB RAPID COMBO	DIFFERENTIATION TEST	Primax Lab, CA, USA
Influenza	OSOM RAPID DIAGNOSTICS	PCR	Am.Samoa DOH via Hawaii State Lab
Leptospirosis	ELIZA KIT	MAT	Am.Samoa DOH via Hawaii State Lab,
Measles	NO	EIA	Primax Lab, USA
Rubella	NO	ANTIBODY IGM/IGG	Primax Lab, USA
Syphilis	RPR, TPPA, Titer	No	N/A
Tuberculosis	Direct smear-ZN stain	Culture ID & AST	Diagnostic Lab Services Hawaii, USA via PIHOA/CDC
Typhoid	Culture ID & AST	No	N/A

C: 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 shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Hawaiian Airlines



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 Performed	General lab testing, PPHSN disease testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	GeneXpert DNA Probe	No	LabPlus Auckland, NZ
Cholera	Culture/ID	Serotyping	LabPlus Auckland, NZ
Dengue	SD Deng NS1 Ag+Ab Comb Rapid Device 25T	Serotype, PCR	ESR NZ /NCBID Wellington / Institute Louis Malardé, FP
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	Rapid Test InFlu	PCR	ESR/NCBID Wellington
Leptospirosis	Not done	Yes	LabPlus Auckland, NZ
Measles	Not done	Yes	LabPlus, Auckland, NZ
Rubella	Not done	Yes	LabPlus Auckland, NZ
Syphilis	RPR ,Bioline Syphilis 30, SD Duo HIV/Syphilis	RPR, Titer	LabPlus Auckland, NZ
Tuberculosis	Direct smear-ZN stain/ GeneXpert – DNAprobe	Yes	LabPlus, Auckland, NZ
Typhoid	Culture/ID	Yes	LabPlus, Auckland, NZ

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	AU; WHO-CC- Melbourne, AU;; *LabPlus-Auckland, NZ ESR NZ /NCBID,
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air New Zealand



COUNTRY: FEDERATED STATES OF
MICRONESIA - CHUUK
LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	CHUUK STATE HOSPITAL LABORATORY
Lab Contact Name(s):	
Lab Main Contact Address	Mr. Kasian Otoko - Lab Supervisor Chuuk State Hospital P.O.Box 400, Weno, Chuuk, FSM 96942
E-mail	kotoko@fsmhealth.fm (691) 330 2220/2216(17)
Phone	(691) 330 2320
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

B: PPHSN Target Disease Testing Information

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/IgM/IgG	Serology/PCR	QUT, Australia ,GPHL
Gonorrhoea	Microscopy, culture, Genexpert	No	N/A
HIV	Determine, confirmatory algorithm, Genexpert, Viral load	CD4+ count	Pohnpei state Hospital
Influenza	Antigen testing A/B	PCR	HPHL/GPHL
Leptospirosis	SD IgM/IgG	Serology/PCR	QHFSS
Measles	No	yes	Hawaii Public Health Lab /GPHL(to be confirmed)
Rubella	No	No	N/A
Syphilis	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)

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	*Diagnostic Lab Services; *University of Hawaii-Trop. Medicine Department; State Lab of Hawaii, Hawaii, GPHL, USA
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines



COUNTRY: FEDERATED STATES OF
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) 370 3073
Fax	None
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

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	Yes	No	N/A
Cholera	No	Yes	Hawaii Public Health Lab
Dengue	SD NS1/IgM/IgG	Serology/PCR	Hawaii State Lab
Gonorrhoea	Microscopy	No	N/A
HIV	Determine, confirmatory algorithm, CD4+	Viral load	Diagnostic Lab Services Hawaii, USA
Influenza	Yes	PCR	HPHL
Leptospirosis	SD IgM/IgG	Serology/PCR	HSL
Measles	No	yes	Hawaii Public Health Lab
Rubella	No	Yes	Hawaii Public Health Lab
Syphilis	RPR, titre, Determine syph TP	No	N/A
Tuberculosis	Direct smear-ZN stain <i>GeneX-pert</i>	Culture, ID	Diagnostic Lab Services Honolulu-Hawaii, USA
Typhoid	No	Yes	Hawaii Public Health Lab (to be confirmed)

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	*Diagnostic Lab Services; *University of Hawaii-Trop. Med. Department; State Lab of Hawaii; All in Hawaii, USA
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines



COUNTRY: FEDERATED STATES OF
MICRONESIA - POHNPEI
LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	POHNPEI STATE HOSPITAL LABORATORY
Lab Contact Name(s):	
Lab Main Contact Address	Ms Maopa Raikabula - Lab Supervisor Pohnpei State Hospital Kolonja, Pohnpei FSM 96941
E-mail	mraikabula@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

B: PPHSN Target Disease Testing Information

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/IgM/IgG	Serology/PCR	Hawaii Public Health Laboratory, GPHL
Gonorrhoea	Microscopy, culture PCR (GeneXpert)	No	N/A
HIV	Determine, confirmatory algorithm, Viral load	No	N/A
Influenza	PCR- Biofire,	PCR	GPHL, HPHL (sentinel surveillance referred)
Leptospirosis	SD IgM/IgG	Serology/PCR	HPHL
Measles	No	yes	Hawaii Public Health Lab
Rubella	No	No	HPHL
Syphilis	RPR, titre, Determinesyph TP	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

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Diagnostic Lab Services; Hawaii Public Health Laboratory, Guam Public Health Laboratory
IATA certified shippers, and trainers	Yes, yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines



COUNTRY: FEDERATED STATES OF
MICRONESIA --YAP

LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	YAP MEMORIAL HOSPITAL LABORATORY
Lab Contact Name(s):	
Lab Main Contact	Ms. Maria Marfel – Lab Manager
Address	Yap Memorial Hospital P. O. Box 148 Colonia, Yap FSM 96943_
E-mail	mmarfel@fsmhealth.fm
Ph	(691) 350 2110/3446
Fax	N/A
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

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	GeneXpert	No	N/A
Cholera	Microscopy, culture and sensitivity	Yes/ subtyping	GPHL (to be confirmed)
Dengue	SD NS1/IgM/IgG	Serology/PCR Dry Spot	Hawaii State Laboratory, GPHL (to be confirm and subtype) ILM in French Polynesia
Gonorrhoea	Microscopy, culture, GeneXpert	No	N/A
HIV	Determine, confirmatory algorithm	Viral load & CD4 count	Diagnostic Lab Services Hawaii, USA
Influenza	Alere BinaxNOW Influenza A & B Card	Yes	GPHL
Leptospirosis	SD BioLine Leptospira IgM	No	N/A
Measles	No	Yes	GPHL (to be confirmed)
Rubella	No	Yes	GPHL (to be confirmed)
Syphilis	RPR,titre, Determine syph TP	No	N/A
Tuberculosis	Direct smear-ZN stain GeneXpert MRTB	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)

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	*Diagnostic Lab Services; State Lab of Hawaii; All in Hawaii, USA; GPHL in Guam, USA; WHO Arbovirus Reference Centre, Brisbane, AU.
IATA certified shippers	Yes (6)(2)
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Asia Pacific Airlines/United Airlines



COUNTRY: KIRIBATI
LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	KIRIBATI HEALTH LABORATORY
Lab Contact Name(s):	
Lab Main Contact Address	Ms. Rosemary Tekoaia –Chief of Laboratory Services, Ministry of Health & Medical Services P. O. Box 268, Bikenibeu, Tarawa, Kiribati
E-mail	rosemarytek@gmail.com
Phone	(686) 74028100 Ext 236
Fax	(686) 28568 / 28152
Sr. Tech/Other Contact	Mr Touakai Kambati - Acting Deputy Chief of Laboratory Services Touakai.kambati@gmail.com
E-mail	(686) 74028100 Ext 237
Phone	
Laboratory Testing Performed	All general lab testing, PPHSN disease testing

B: PPHSN Target Disease Testing Information

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
Gonorrhoea	Culture-ID	No	N/A
HIV	Determine, Unigold, Insti CD4 count Viral Load GeneXpert	No	N/A
Influenza	Fluorescent Stain	PCR	Fiji Centre for Disease Control
Leptospirosis	No	Yes	Suva Private Hospital Fiji
Measles	No	Yes	VIDRL Melbourne, AU
Rubella	No	Yes	VIDRL Melbourne, AU
Syphilis	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

C. Shipping Information

Recommended L2/L3 Referral Lab(s)	Fiji Centre for Disease Control; Qnsld. Health Scientific Serv.- Qnsland, AU; WHO-CC- Melbourne, AU; *IMVS Adelaide, AU
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Fiji Airways, Air Nauru, Solomon Airlines



COUNTRY: MARSHALL ISLANDS
LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	Majuro Hospital Laboratory
Lab Contact Name(s):	
Lab Main Contact Address	Mr. Paul Lalita Laboratory Manager Majuro Hospital P. O. Box 16, Majuro, Republic of Marshall Islands 96960 paul.lalita01@gmail.com
E-mail	(692) 625-3399/ 3355 Ext. 2376
Phone	NONE
Fax	Ms. Kiteiauea Reiher
Sr. Tech/Other Contact	kitzryer@yahoo.com
E-mail	(692)625-3399/3355 Ext. 2376
Phone	
Laboratory Testing Performed	General lab testing, PPHSN disease testing

B: PPHSN Target Disease Testing Information

Target Disease	Test Performed at Lab	Referred Test	Current Referral Lab Location
Chlamydia	Molecular (Cepheid GeneXpert)	No	N/A
Cholera	Presumptive culture Serotyping	Confirmatory Culture and Serotype	Hawaii State Laboratory Division, HI, USA
Dengue	EIA (SD Dengue DUO)	PCR Confirmatory and Serotyping	Hawaii State Laboratories Division, HI, USA
Gonorrhoea	Culture/ID Molecular (Cepheid GeneXpert)	No	N/A
HIV	EIA (Determine, Unigold & Insti); HIV-1 viral load (GeneXpert)	HIV-1 RNA, Quantitative	Diagnostic Laboratory Services, HI, USA
Influenza	Rapid Flu A+B Test	PCR Detection and Sub-typing	Hawaii State Laboratories Division, HI, USA
Leptospirosis	No	Serology	Diagnostic Laboratory Services, HI, USA
Measles	No	PCR Detection	Diagnostic Laboratory Services, HI, USA
Rubella	No	PCR Detection	Diagnostic Laboratory Services, HI, USA
Syphilis	RPR (Wampole); TP Antibody (SD Bioline Syphilis)	No	N/A
Tuberculosis	Direct AFB smear (ZN method)	AFB smear (concentrated) Culture, ID, AST	Diagnostic Laboratory Services, HI, USA
Typhoid	Culture/ID	Serology	Diagnostic Laboratory Services, HI, USA

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Diagnostic Laboratory Services, HI, USA; Hawaii State Laboratories Division, HI, USA; VIDRL Melbourne, AUS
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines in association with Asia Pacific Airlines (cargo only)



COUNTRY: NAURU
LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	Nauru Public Health Laboratory
Lab Contact Name(s):	
Lab Main Contact Address	Mrs Shanyko Benjamin 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	N/A
Cholera	Culture and sensitivity	No	N/A
Dengue	(SD Dengue DUO)	No	N/A
Gonorrhoea	Culture/ID Molecular (Cepheid GeneXpert)	No	N/A
HIV	Abbott-Determine, Unigold and Insti, Molecular - Viral Load (Cepheid GeneXpert)	CD4 Count	QLD Medical Lab ,AU
Influenza	Alere BinaxNOW Influenza A & B Card,	PCR	WHOC VIDRL Melbourne
Leptospirosis	SD Bioline Leptospirosis, IgM	No	N/A
Measles	No	No	N/A
Rubella	No	No	N/A
Syphilis	Determine-TPHA, RPR Titre	No	N/A
Tuberculosis	Direct smear-ZN stain GeneXpert MTB/RIF	Culture, ID, AST	N/A
Typhoid	Culture/ID/Sensitivity	No	No

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	VIDRL WHOC Melbourne, QLD. Mycobacteria Ref Lab, *QLD Medical Lab, All in Brisbane, AU
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Nauru Airlines/BNE Imports - Pakfresh



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 (670) 234 8950
Phone	(670) 234-8950
Fax	(670) 236-8612
Sr. Tech/Other Contact	Mr John Duenas, Clinical Lab Technician
E-mail	chclab@gmail.com
Phone	(670) 236-8395/96
Fax	(670) 236-8612
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	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
Gonorrhoea	YES – on GeneXpert	N/A	N/A
HIV	No	EIA, Western Blot	Diagnostic Lab Services Hawaii, USA
Influenza	Quidel-Rapid Test	PCR	Diagnostic Lab Services Hawaii, USA
Leptospirosis	No	EIA, confirmation	Diagnostic Lab Services Hawaii, USA
Measles	No	EIA	Diagnostic Lab Services Hawaii, USA
Rubella	No	EIA	Diagnostic Lab Services Hawaii, USA
Syphilis	RPR	FTA	Diagnostic Lab Services Hawaii, USA
Tuberculosis	No	Culture, ID, sensi	Diagnostic Lab Services Hawaii, USA
Typhoid	No	No	Diagnostic Lab Services Hawaii, USA

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	*Diagnostic Lab Services; University of Hawaii-Trop. Med Department Hawaii, USA; *US Mil. Lab, Texas, USA
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COUNTRY: NIUE
LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	Niue Foou Hospital Laboratory
Lab Contact Name:	
Pathologist/Manager	Angelica Hipa – Lab Scientist. Niue Health Department
Address	PO Box 33, Alofi, Niue angelica.hipa@mail.gov.nu
E-mail	(683) 4100
Phone	
Fax	Andy Manu – Lab Technician
Sr. Tech/Other Contact	andy.manu@mail.gov.nu
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-IgG/IgM	Confirmation	No
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
Leptospirosis	No	Screen/Confirmation	Lab Plus Auckland, NZ
Measles	No	EIA	Lab Plus Auckland, NZ
Rubella	No	EIA	Lab Plus, Auckland, NZ
Syphilis	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

C. Shipping Information

Recommended L2/L3 Referral Lab(s)	*Lab Plus, Auckland, NZ
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air New Zealand



COUNTRY: PALAU
LABNET DESIGNATION: L1



A: Contact/General Information

Laboratory Name	Belau National Hospital Laboratory
Lab Contact Name(s):	
Lab Main Contact Address	Mere Cama - Lab Supervisor Medical Laboratory, Belau State Hospital P. O. Box 6027 Koror, Palau 96940
E-mail	mere.cama@palauhealth.org
Phone	(680) 488 2552/4508
Fax	(680) 488 4503
Sr. Tech/Other Contact	Carmin Pipit
E-mail	Carmin.pipit@palauhealtj.org
Phone	(680) 488 2552
Fax	
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
Gonorrhoea	GenXpert	No	N/A
HIV	Determine, Unigold, Insti CD4 & Viral Load	Drug Sensitivity	Diagnostic Lab Services Hawaii, USA
Influenza	Rapid Influenza A&B Biofire respiratory panel	Further Characterization	CDC, Atlanta, USA
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
Syphilis	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

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Diagnostic Lab Services, Hawaii; Hawaii State Laboratory; CDC Atlanta, USA;
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	United Airlines



COUNTRY: PAPUA NEW GUINEA
LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	CENTRAL PUBLIC HEALTH LABORATORY
Lab Contact Name:	
Pathologist/Manager	Dr. Evelyn Lavu, Director
Address	Central Public Health Laboratory Port Moresby General Hospital, Free Mail Bag, Boroko, National Capital District, Papua New Guinea
E-mail	evelynlavu@daltron.com.pg
Phone	(675) 324 8146
Fax	(675) 325 6342
Sr. Tech/Other Contact	Mr Willie Porau-Lab Manager Central Public Health Laboratory
E-mail	porauw@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	N/A
Dengue	PanBio strips – IgM	Serotype, PCR	WHO Arbovirus Reference Centre, Brisbane, Australia.
Gonorrhoea	Culture/ID	No	N/A
HIV	Serodia, Determine, Capilus, Immunocomb, CD4 count	No	N/A
Influenza	Fluorescent stain	PCR	WHO-CC Melbourne, AU
Leptospirosis	No	EIA – confirmation	Qnsld. Health Scientific Serv. Queensland, AU
Measles	EIA-Dade	No	N/A
Rubella	EIA-Dade	No	N/A
Syphilis	VDRL, Murex-TPHA	No	N/A
Tuberculosis	TB Culture, GenXpert & Direct smear-ZN stain	MTB Rif isolates & DST	Qnsld. Mycobact. Ref. Lab Brisbane, AU
Typhoid	Culture/ID	No	N/A

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Qnsld. Health Scientific Serv.-Queensland, AU; *Qnsld. Mycobact Ref Lab, Brisbane, AU; WHO-CC Melbourne, AU
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air Niugini



COUNTRY: SAMOA
LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	NATIONAL CLINICAL LABORATORY
Lab Contact Name:	
Pathologist/Manager Address	Ms Hinauri Leaupepe – Ngau Chun, Manager Laboratory Service Samoa National Health Service Private Mail Bag, Apia, Samoa
E-mail	hinauril@health.gov.ws
Phone	(685) 66 651
Fax	
Sr. Tech/Other Contact	Perenise Eti
E-mail	perenisee@health.gov.ws
Phone	(685) 66655
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 Expert	No	N/A
Cholera	Presumptive culture	ID, confirmation	LabPlus Auckland, NZ
Dengue	SD Bioline Dengue NS1Ag + Ab Combo	Confirmation	WHO Arbovirus Reference Centre, Brisbane, Australia.ESR/NCBID NZ
Gonorrhoea	Presumptive culture, gram stain	No	N/A
HIV	Determine, Unigold, Insti, HIV Viral load - GeneXpert	No	N/A
Influenza	Standard Q Influenza A&B RDT Veritor	No	N/A
Leptospirosis	SD Bioline Leptospirosis IgM	EIA	LabPlus, Auckland, NZ
Measles	No	EIA	LabPlus Auckland, NZ
Rubella	No	EIA	LabPlus Auckland, NZ
Syphilis	RPR,TPHA and Anti TP	No	LabPlus, Auckland, NZ
Tuberculosis	Direct smear-ZN stain, GeneXpert	Limited culture/ID, sensi	LabPlus, Auckland NZ
Typhoid	Culture/ID	Phage typing	LabPlus and ESR NZ

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Fiji Centre for Disease Control; *LabPlus Auckland, NZ; WHO ARbovirus Reference Centre, Brisbane, AU; *VIDRL, Melbourne, AU
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air New Zealand, Air Pacific



COUNTRY: SOLOMON ISLANDS
LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	NATIONAL REFERRAL HOSPITAL LABORATORY
Lab Contact Name:	
Chief Medical Technologist Address	Mr. Alfred Dofai; Head of Medical Lab National Referral Hospital P. O. Box 349, Honiara, Solomon Islands_
E-mail	ADofai@nrh.gov.sb
PHONE	(677) 44066 ext 309 DL – 677 23761
Fax	(677) 24 243 or 23 761
Sr. Tech/Other Contact	Mr Elliot Puiahi – Lab Manager
E-mail	EPuiahi@nrh.gov.sb
Phone	(677) 25 436
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 confirmationa, serotyping	Qnsld Hlth Sci Serv-Royal Brisbane Brisbane, AU
Dengue	SD Bioline NS1AgIgM/IgG	Serotype, PCR	WHO Arbovirus Reference Centre, Brisbane, Australia
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
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
Syphilis	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

C: 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 shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Solomon Airlines - Mr. Naphatali Ph. (677) 36291



COUNTRY: TOLELAU
LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	HOSPITAL LABORATORY
Lab Contact Name:	
Pathologist/Manager	Dr. Silvia Tavite; Director of Health
Address	c/o Tokelau Apia Liaison Office P. O. Box 865, Apia, Samoa
E-mail	
Phone	stdrtavite@gmail.com
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
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
Leptospirosis	No	No	N/A
Measles	No	No	N/A
Rubella	No	No	N/A
Syphilis	Determine	No	N/A
Tuberculosis		No	N/A
Typhoid	No	Culture	*LabPlus or ESR, NZ Via Samoa National Hospital

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	LabPlus, ESR, New Zealand Via Samoa National Hospital Lab
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	By Sea to Samoa and Air New Zealand (via Samoa National Hospital)



COUNTRY: TONGA
LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	VAIOLA HOSPITAL LABORATORY		
Lab Contact Name:			
Pathologist/Manager Address	Dr. Luke Huni, MO i/c Laboratory Services, Vaiola Hospital, P. O. Box 59 Nukualofa, Tonga		
E-mail	luke.huni18@gmail.com		
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	t.apikotoa@gmail.com		
Phone	(676) 23 200 ext 1323 or (676) 7400162		
Fax	(676) 28 964		
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	No	N/A
Cholera	Presumptive culture	Serotyping	LabPlus Auckland, NZ
Dengue	SD Dengue Duo NS1/IgM/IgG	Serotyping	WHO Arbovirus Reference Centre, Brisbane, AU
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
Leptospirosis	No	EIA	LabPlus Auckland, NZ
Measles	No	EIA	LabPlus, Auckland, NZ
Rubella	No	EIA	LabPlus, Auckland, NZ
Syphilis	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

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	*LabPlus, ESR, New Zealand; Queensland Health Scientific Services Queensland, AU, WHO Abovirus Reference Centre, Brisbane, AU.
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air New Zealand



COUNTRY: TUVALU
LABNET DESIGNATION: L1



A: Personnel/Contact Information

Laboratory Name	PRINCESS MARGARET HOSPITAL LABORATORY
Lab Contact Name:	
Pathologist/Manager	Mr Felix Koakoa Sr.
Address	Lab Technician Ministry of Health-Health Department P. O Box 41, Funafuti, Tuvalu
E-mail	fkseluka@gmail.com
Phone	(688) 20480
Fax	(688) 20481
Sr. Tech/Other Contact	Ms Taupesa Latasi
E-mail	pesalatasi@gmail.com (688)
Phone	20480
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
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
Leptospirosis	RDT	No	N/A
Measles	No	Confirmation	Fiji CDC
Rubella	No	Confirmation	Fiji CDC
Syphilis	VDRL	No	N/A
Tuberculosis	Direct smear-ZN stain Gene Xpert MTB cartridges	No	LabPlus, PPTC
Typhoid	No	ID, confirmation	CWM Hospital Suva, Fiji

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Fiji Centre for Disease Control and *CWM Hospital Suva, Fiji
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Fiji Airways (courier the lab use is DHL)



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
Gonorrhoea	Gram stain, culture Molecular ProbeTech	NO	
HIV	Determine, Unigold, Insti, Viral Load	NO	
Influenza	Quidel-Rapid Test Fluorescent stain	PCR	WHOC Melbourne
Leptospirosis	Elisa IgM	PCR	Institute Pasteur New Caledonia Queensland, AU
Measles	No	Yes	Fiji CDC
Rubella	No	Yes	Fiji CDC
Syphilis	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

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Pasteur Institute, New Caledonia; Qnsld. Health Sci Serv. Queensland, AU; *Qnsld. Mycobact Ref Lab, Brisbane, AU, Fiji CDC, WHO Arbovirus Reference Centre, Brisbane, AU
IATA certified shippers	Yes
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air Carlin, Air Vanuatu



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	
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	TRD BIOSYNEX CHLAMYTOP	No	N/A
Cholera	Culture/ID, serotyping	No	N/A
Dengue	Screen BioRad NS1 Antigen EIA & TDR BIOSYNEX DENGUE NS1	PCR TYPING	Institut Pasteur New Caledonia
Gonorrhoea	Culture, ID	No	N/A
HIV	EIA: Elecsys	No	N/A
Influenza	TRD BIOSYNEX INLUENZATOP	PCR	Institut Pasteur New Caledonia
Leptospirosis	Panbio IgM EIA	Confirmation by MATT	Institut Pasteur New Caledonia
Measles	No	EIA	Pasteur CERBA Lab France
Rubella	elecsys-EIA	No	Institut Pasteur New Caledonia
Syphilis	VDRL, TPHA	Confirmation	Institut Pasteur New Caledonia
Tuberculosis	No	Direct smear, culture, ID, sensi	Institut Pasteur New Caledonia
Typhoid	Culture/ID/Sensitivity	No	N/A

C: Shipping Information

Recommended L2/L3 Referral Lab(s)	Pasteur Institute, New Caledonia
IATA certified shippers	No
Airline/Cargo companies the lab uses to ship to L2/L3 lab	Air Caledonie International (airline) TTI-SDV Noumea (Shipper Company)



SECTION 2

L2 LABORATORY SITES:

No.	Country/Territory	
1	Fiji Centre for Disease Control	26
2	Institute Louis Malarde, French Polynesia	27
3	Guam Public Health Laboratory, Guam	28
4	Institut Pasteur New Caledonia	29

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

Laboratory Name	FIJI CENTRE FOR DISEASE CONTROL		
Lab Contact Name(s):			
Lab Main Contact	Dr Aalisha Sahukhan (Head of Health Protection)		
Address	Fiji Centre for Disease Control, Mataika House Building 30, Tamavua Hospital P.O. Box 1634, Suva, Fiji		
E-mail	aalisha@gmail.com (679)		
Phone	3 320 -066		
Fax	(679) 3 322-714		
Lab Manager Contact	Talica Cabemaiwai (FCDC)/Ravendra Prasad (CWMH)		
E-mail	tcabe25@gmail.com	ravendra.prasad@health.gov.fj	
Ph	(679) 3 320 066	679 3215571	
Fax	(679) 3 320 344		
Laboratory Testing Performed	Only PPHSN disease serology testing		

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
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
Syphilis	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 Address	Dr. Elsa DUMAS CHASTANG, Pharmacien Biologiste 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
Leptospirosis	PanBio-IgM, PCR	Typing	Cerba laboratory-France
Measles	WHO-IgM	IgG, IgM	Cerba laboratory-France
Rubella	IgG/IgM Cobas	No	N/A
Syphilis	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 Address	Ms. AnneMarie Santos – Laboratory Administrator 123 Chalan Kareta Mangilao, Guam 96913
E-mail	annemarie.santos@dphss.guam.gov (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
E-mail	Ms. Mary Jean Jacar – Laboratory Consultant/Supervisor 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	Triplex (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
Leptospirosis	Linnodee Leptorapide	Confirmation-serology, PCR	WHO-CC, Melbourne, Australia
Measles	ELISA-Siemens	Confirmation-serology	CDC Atlanta, USA
Rubella	ELISA-Siemens	No	N/A
Syphilis	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



COUNTRY: NEW-CALEDONIA
LABNET DESIGNATION: L2



A: Contact/General Information

Laboratory Name	INSTITUT PASTEUR OF NEW CALEDONIA		
Lab Contact Name(s):			
Lab Main Contact Address	Dr Cyrille Goarant – VetD, PhD Institut Pasteur de Nouvelle-Calédonie B.P. 61 98845 Noumea Cedex, Nouvelle Calédonie		
E-mail	cgoarant@pasteur.nc		
Phone	(687) 27 75 31		
Fax	(687) 27 33 90		
Sr. Tech/Other Contact	Dr Myrielle Dupont-Rouzeyrol, PhD		
E-mail	mdupont@pasteur.nc		
Phone	(687) 27 75 30		
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
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
Syphilis	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	
1	Australia, Adelaide	*Institute of Medical and Veterinary Science (IMVS)	31
2	Australia, Victoria	National Serology Reference Laboratory (NRL)33	
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.



QUEENSLAND HEALTH FORENSIC SCIENTIFIC SERVICES (QHSS)

Country: Australia

1. Testing Information

Leptospirosis

- ☐ PCR – bacterial DNA detection
- ☐ MAT – serological detection and serotyping
- ☐ Serum 0.2mL minimum volume
- ☐ Frozen 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 QHSS 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 in addition to 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 signed (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 0000XXXXXXX.
 - 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 Scientist-
in-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 vaccine 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	
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).

3. 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 Julian.Druce@mh.org.au	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 Pacific2019nCoV@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 NCBI 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 Pacific2019nCoV@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 Melbourne (VIDRL)	Dr Patrick Reading preading@unimelb.edu.au	Ph: +613 9342 9300 Fax: +613 9342 9329
2.	Australia	WHOCC for Measles Melbourne (VIDRL)	Dr Mike Catton mike.catton@mh.org.au	Ph: 613 9342 9600 Fax: 613 9342 9696
3.	Australia	WHOCC for Arbovirus Queensland (QUT)	Dr John Aaskov j.aaskov@qut.edu.au	Ph: 617 3138 6193
4.	Australia	WHOCC for Leptospirosis Queensland (QHFSS)	Dr Lee Smythe lee.smythe@health.qld.gov.au	Ph: +617 3274 9151 Fax: +617 3000 916

L3 LABNET LABORATORIES

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

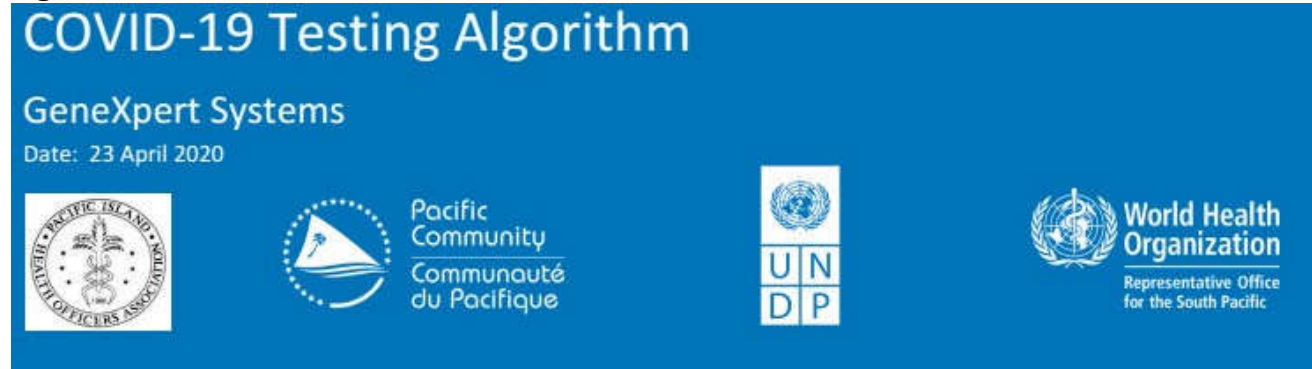
Eight of the 23 PICTs (Fiji, French Polynesia, Guam, New Caledonia, Palau, Solomon Islands, Tonga and Papua New Guinea) have COVID-19 testing capabilities through RT PCR (open system) also. Although COVID-19 testing capacity of PICTs had improved, availability of resources (cartridges) are still limited.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



COUNTRIES WITH NO KNOWN CASE OF COVID-19 and patient has no travel history

COUNTRIES WITH KNOWN CASES OF COVID-19 and/or countries with no known case yet patient has travel

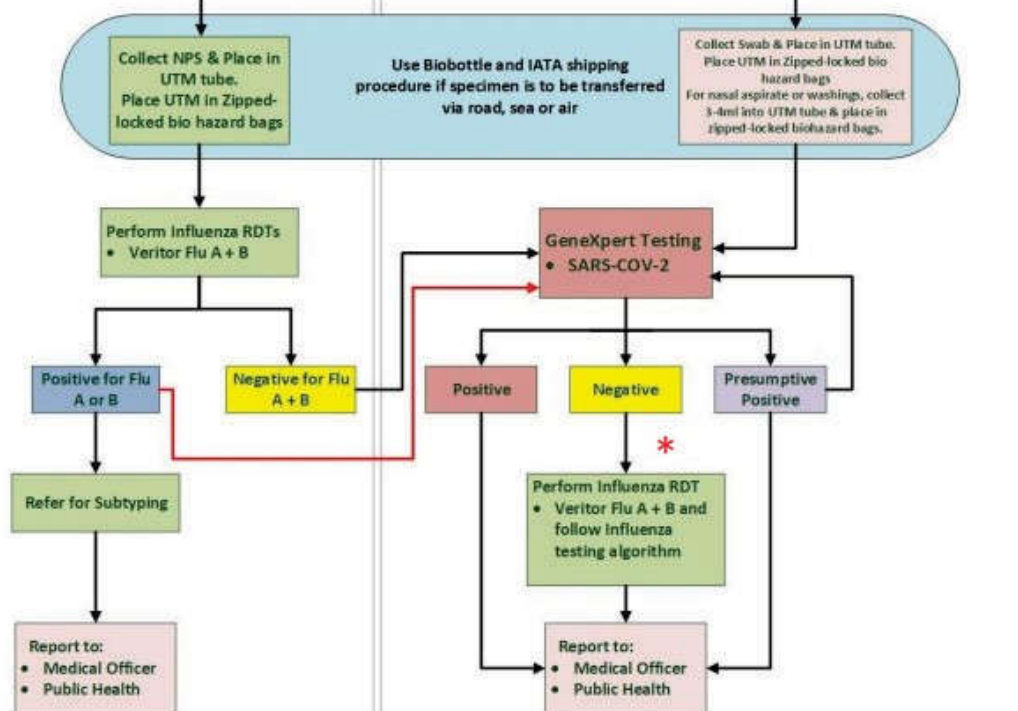
WHO ILI and SARI Case

ILI case definition
An acute respiratory infection with:
• measured fever of $\geq 38^{\circ}\text{C}$
• and cough;
• with onset within the last 10 days.

SARI case definition
An acute respiratory infection with:
• history of fever or measured fever of $\geq 38^{\circ}\text{C}$
• and cough;
• with onset within the last 10 days;
• and requires hospitalization

WHO COVID-19 Case

1. Acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath), AND a history of travel to or residence in a location reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset.
OR
2. Acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to symptom onset;
OR
3. Severe acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation
OR
Shortness of breath (SOB) and not in SARI case definition



Important Key:



For **POSITIVE INFLUENZA** test results, proceed with SARS-COV-2 testing **ONLY** if samples are from **Health Care Workers (HCWs)** and Severe Acute Respiratory Infection (**SARI**) or **Acute Respiratory Distress Syndrome (ARDS)** patients.



To **confirm Influenza Outbreak** test first few cases; then sampling to monitor trend and to confirm **end of Outbreak**. There is **no need to test all NEGATIVE SARS-COV-2** samples for Influenza.

Note:

- Proper specimen collection is critical to achieve **accurate** and **reliable** test result.
- For **PRESUMPTIVE POSTIVE** results, retest with new cartridge. If result is still **PRESUMPTIVE POSTIVE** then refer sample for further confirmation at L2/L3 Reference Laboratory.
- **Specimen types that can be used on GeneXpert for SARS-COV-2 testing:**
 1. Nasopharyngeal swab
 2. Nasal swab
 3. Mid-turbinate swab
 4. Oropharyngeal swab
 5. Nasal wash
 6. Nasal aspirate

Influenza tests

- Use other Influenza tests that are available in your lab in the absence of Veritor influenza test kits.

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



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

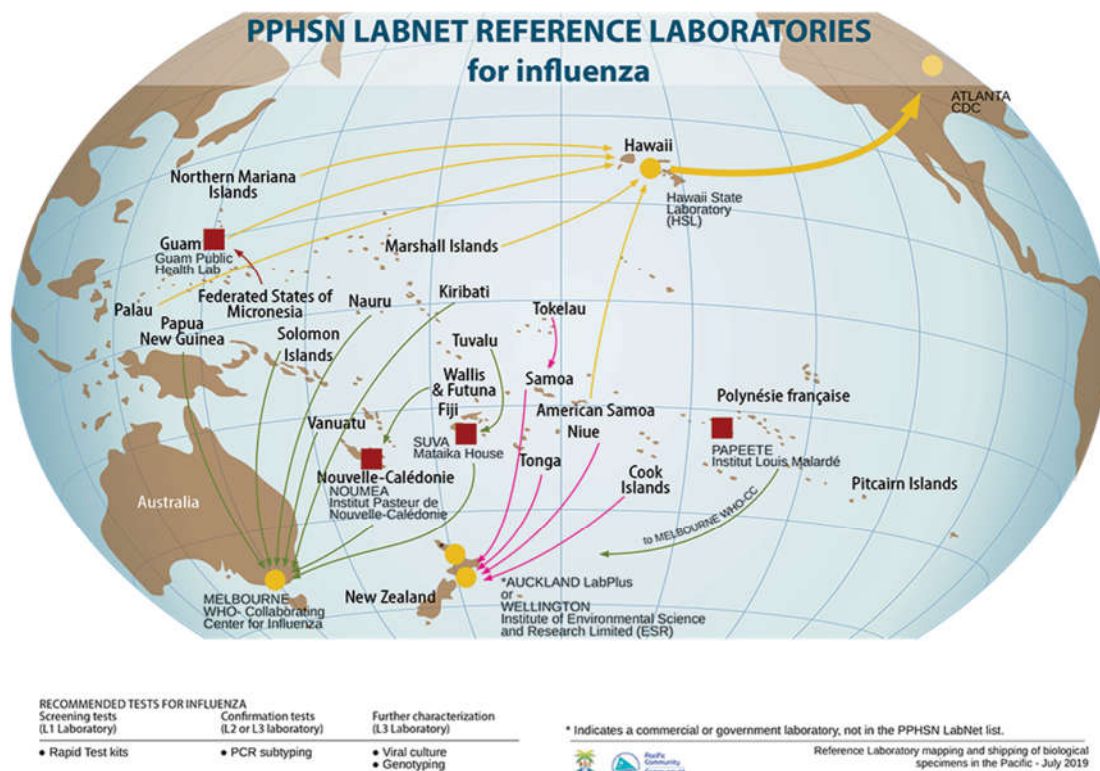
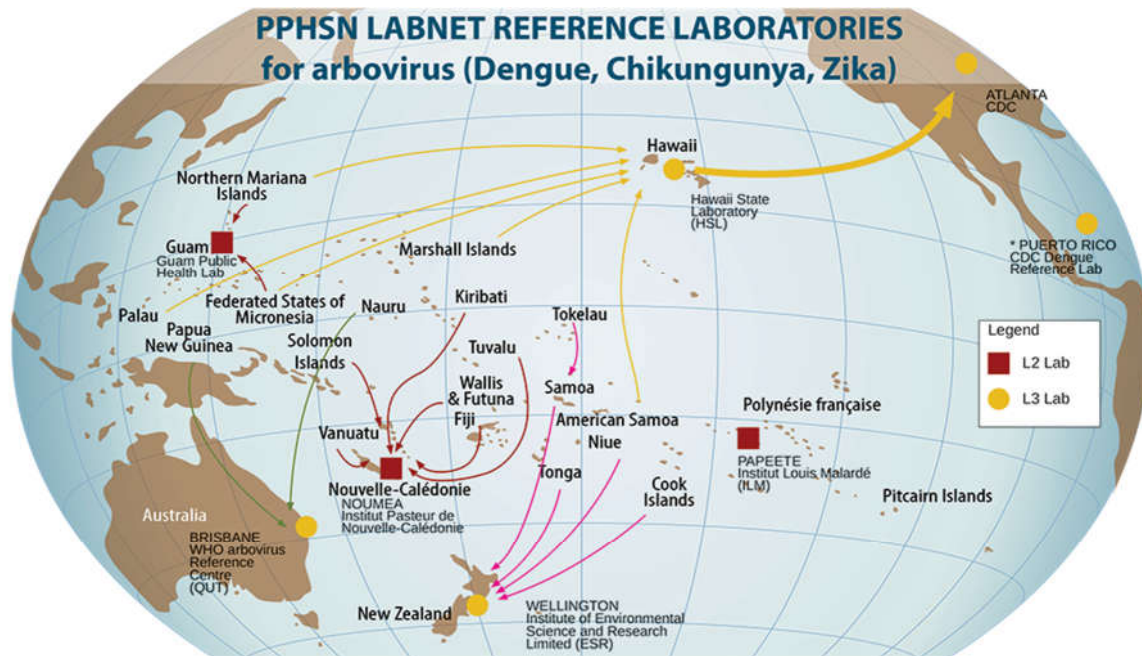
Proper storage, packing and shipment of specimen should also be observed to ensure integrity of the specimen. Storage and shipping requirements are summarized in a table (see Annex B).

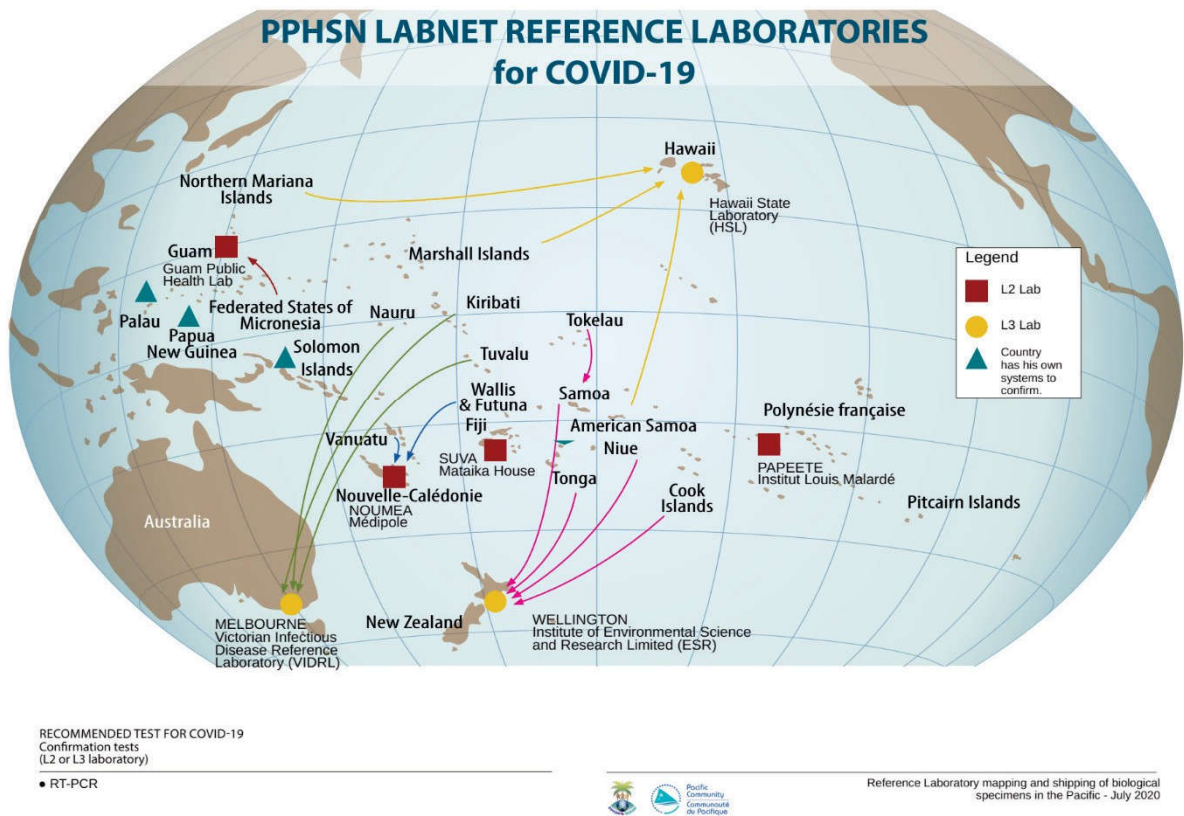
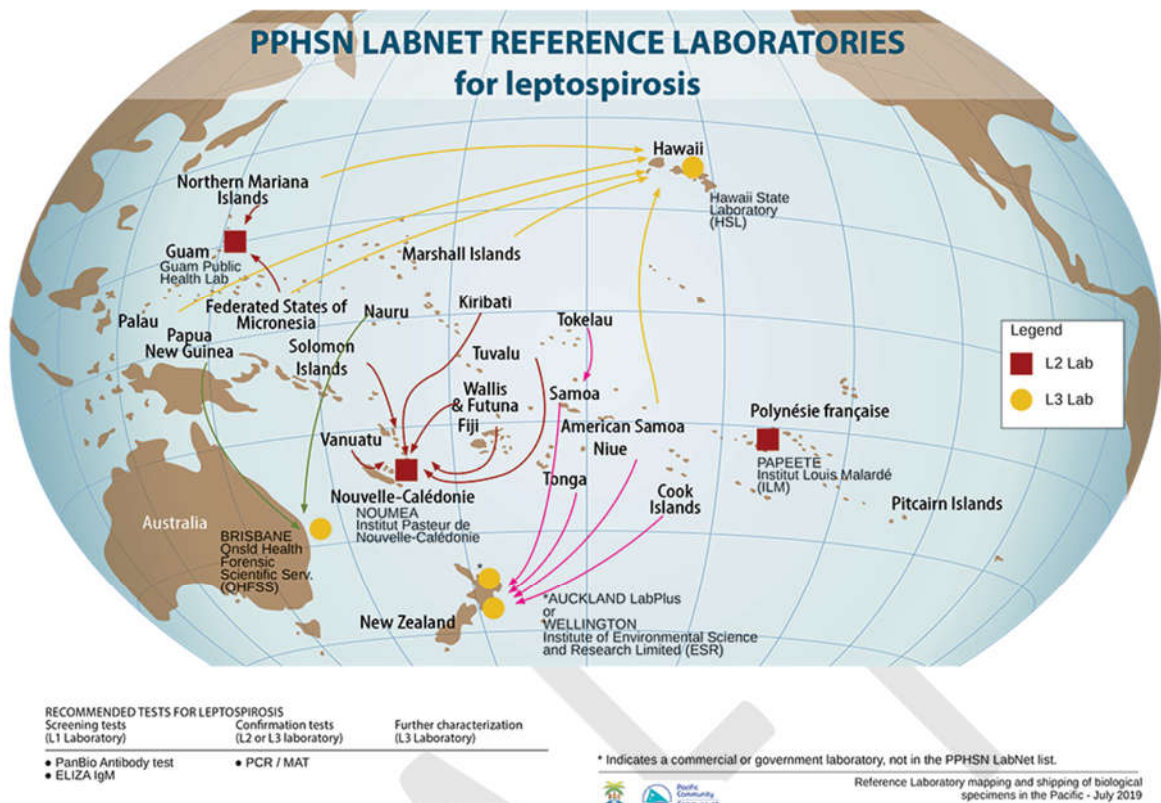
Below are additional reminders for shipping clinical specimen.

- 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





SECTION 4

KEY LABNET CONTACTS:

The Pacific Community (SPC)

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Raikabakaba Asaeli Babiau
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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
QHFS	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



For more information on the PPHSN LabNet Catalog, please contact:



Pacific
Community
Communauté
du Pacifique

Surveillance, Preparedness and Response Programme
Public Health Division
Pacific Community (SPC)
Focal Point of the PPHSN Coordinating Body

Email: FocalPointPPHSN-CB@spc.int

Website: www.pphsn.net