MINISTER OF PUBLIC HEALTH, SOCIAL DEVELOPMENT AND LABOR

Minister van Volksgezondheid, Sociaal Ontwikkeling en Arbeid

Philipsburg, SEP 23 2020

To: State Secretary Blokhuis
Ministry of Public Health, Social Development and Sport
Netherlands

Subject: Request for continued assistance combatting COVID-19.

Honorable ~~State Secretary~~, Geachte Raad,

During the first quarter of 2020, St. Maarten was severely impacted with the outbreak of COVID-19. This resulted in the need for additional technical assistance in the medical field. Through VWS, Sint Maarten received support in various forms to secure the continuity of medical care.

Unfortunately, due to the ongoing budgetary constraints and liquidity issues, Sint Maarten continues to encounter major challenges in complying with its financial obligations. As such, St. Maarten is currently unable to guarantee timely payments to the public health lab, when covid-19 tests are requested by CPS. As a consequence of this, SLS is unable to secure the financial investments needed to expand the local testing capacity. This reality negatively impacts the country's ability to execute its testing strategy.

In addition to the financial challenges, the global shortage of medical equipment and material, also places an additional burden on the health care facilities are also experiencing challenges in the logistics of procuring and receiving material and equipment needed to guarantee continuity of quality medical care. Both SMMC and SLS have been challenged with the logistics in procuring covid-19 material and equipment. Based on discussions held, St. Maarten was advised to submit a request to the ministry of Public Health, Social Development and Sport, outlining these challenges.

By means of this writing, your support is hereby requested for the following:

- Support in paying outstanding public health covid-19 diagnostic bills owed to St. Maarten Laboratory Services currently at Naf 128, 608 with an average of Naf 100,000 per month during peaks of the outbreaks.
- Support in realizing the attached proposal submitted by SLS aimed at increasing local rt- PCR testing capacity.
- Increasing capacity for COVID care at the St. Maarten Medical Center, by equipping the Auxiliary Care Facility, which include the Hospitainers received from VWS.

Minister of PHSDL / Minister van VSA

Government Administration Building
Post Office Box 943, Philipsburg / Soualiga road 1, Sint Maarten
(T) +721-[Add general office number] – (E) [redacted]@sintmaartengov.org

With your approval, the ministry of VSA will remain in direct contact with VWS and RIVM to further discuss logistics on how this and other future matters pertaining to COVID-19 resurgence prevention should be approached henceforth.

5.1.2e

5.1.2e

Minister of PHSDL / Minister van VSA

Government Administration Building
Post Office Box 943, Philipsburg / Soualiga road 1, Sint Maarten
(T) +721-[Add general office number] – **(E)** 5.1.2e @sintmaartengov.org

St. Maarten Laboratory Services N.V.
Customer Open Balance

COLLECTIVE PREVENTION SERVICES

Type	Date	Num	Memo	Due Date	Amount	Open Balance
Invoice	05/31/2020	7383	LAB TESTS MAY 2020	06/15/2020	1,386.00	5.1.2b
Invoice	06/30/2020	7427	LAB TESTS JUNE 2020	07/15/2020	3,906.00	
Invoice	07/31/2020	7471	LAB TESTS JULY 2020	08/30/2020	37,044.00	
Invoice	08/31/2020	7521	LAB TESTS AUGUST 2020	09/30/2020	86,272.00	
Total COLLECTIVE PREVENTION SERVICES						
TOTAL						

ST. MAARTEN LABORATORY SERVICES

Expanding Molecular Testing of COVID-19 in St. Maarten Laboratory Service

MEETING DEMAND FOR MOLECULAR DIAGNOSTIC TESTING OF COVID-19 AT SLS

11-09-2020 UPDATE

Contents

Laboratory Capacity for COVID-19 Testing

Introduction

The Sint Maarten Laboratory Services (SLS) performs PCR testing for the Sint Maarten Medical Center (SMMC), the general practitioners, the Collective Prevention Service (CPS) of the public health department and other parties like the penitentiary institution and the morgue. Current services include the islands of Saba, Sint Eustatius and Anguilla. Other parties like airport, harbor, marina, hotels, boat crews and individual travelers have requested testing as well.

Current capacity resides with two microbiology/molecular laboratory technicians and an 8-slot GeneXpert machine. The GeneXpert machine is required to run not only the COVID-19 assay but is also used for routine diagnostics. Manufacturer Cepheid is limited in the amount of tests it can make available proving itself to be a crucial limiting factor on SXM test capacity.

Sint Maarten is currently experiencing a second wave of the COVID-19 pandemic. Positive results are generated daily in increasing numbers. Current demand for testing from the SMMC and CPS is managed by working 7 days/week and many extra hours. Current maximum capacity approaches 80 tests per day. Non-urgent requests are being sent out to laboratory partners on and off island.

In order to meet current and future demand for testing, SLS plans to expand test capacity for COVID-19 based on additional PCR platforms that can run any brand of assay. The foreign hire of a micro/molecular laboratory technician has been initiated and the acquisition of additional hardware is planned. The detailed plans are outlined in this proposal.

Support request

SLS is asking support to obtain hardware, consumables, and reagents for the initial approx.. 2000 PCR tests for public health in SXM and surrounding islands as well as temporary staffing to help setting up the procedures during the initial phase of the expansion.

Laboratory Space in SLS

Spatial Planning

SLS main building is the place of the microbiology and parasitology laboratories. By sacrificing part of the conference room and repurposing of the parasitology lab and the multipurpose room, the required space for the dedicated molecular laboratory rooms can be allocated. PCR 1 and 2 are projected in a newly created areas separated off the SLS conference room. Sample preparation and handling of amplicon rich standards is projected in the current parasitology lab and PCR 3 is projected in the repurposed multipurpose room. Contamination risks are reduced by the use of the sample preparation room and a closed extractor + PCR setup robot with biosafety features in PCR 2.

PCR 1

PCR 1 requires a clean air PCR cabinet. A fridge and freezer to store reagents. All reagents are vortexed and spun down before pipetting. PCR 1 requires dedication and entry discipline to avoid contamination. Reagents are handled in cool blocks or kept on ice when being processed.

Sample preparation

Sample preparation takes place in the repurposed parasitology lab. The biosafety cabinet and pipetting equipment allow a safe start of processing potentially dangerous samples. Inactivation and mucolysis can all be handled in a biosafe setting.

PCR 2

The PCR 2 room is extraction. Extraction robot MGI-100 is used to combine extraction and PCR setup. The closed MGI-100 can extract without biosafety risks and uses UV-C light for self-decontamination. The closed format of the MGI-100 allows its proximity to either PCR-1 or PCR-3 without raising the risk of contamination of the test routine.

PCR 3

The PCR 3 is where the prepared plates are analyzed with the rt-PCR reaction in the rt-thermocycler. At minimum, the room is fitted with an operating computer and a cycler. A plate centrifuge or spinner is a useful addition. Working in PCR 3 traditionally means no entry in other PCR rooms until the next day (after shower and change of clothes).

SLS actions

SLS will partition the current conference room to create PCR 1 and PCR 2 rooms. All rooms will be fitted with 110v power and UPS, network connections, adequate ventilation and temperature control.

Staffing

Molecular Diagnostic Laboratory Technicians

Molecular testing on Cepheid and Biofire platforms is primarily done by the two microbiology labtechnicians. The part-time allocation of the general lab technician from media preparation into molecular and microbiology lab makes a first move to increase support in Micro/Molecular work.

The foreign hire of a microbiological molecular laboratory technician is a second move for structural increased staff competent in the field of molecular diagnostics. The foreign hire comes with a significant lead time due to administrative processes for immigration and work permit.

Support request

At the initiation of open PCR testing, SLS would seek the temporary help of experienced molecular staff sourced from the Netherlands or from parties like AMI. Setting up routines, optimizing PCR results, and troubleshooting any start-up malfunctions would be made easy this way and would lead to additional knowledge transfer of the current SLS staff.

Operations in SLS

Continuity of operations in SLS

Current volume of testing in SLS has decreased in quantity compared to pre-pandemic figures. As this negatively impacts the financial situation, SLS is cutting cost to stay positively balanced. Since SLS is a government owned company and the laboratory with 24-hour services to the SMMC, a scenario where SLS would interrupt services is not anticipated. SLS has approval to pursue revenue generating operations for tourism-related stakeholders.

Current monthly balance is an estimated ANG 5.1.2b After cost-cutting interventions this would improve to ANG 5.1.2b Note: non-monthly costs are not reflected in these balances.

Molecular Diagnostic Equipment

Table of items and prices for 1782 reactions:

Item Code	Description	No	Price	Cost
MGI-2020-900-000286-00	MGISP-100BRS Automated Nucleic Acid Extraction and Purification System	2	[redacted]	
MGI-2020-1000000723250	L automated filter tips, 10 boxes per bag	13		
MGI-2020-1000004644	1.3ml U shape deep well plate, 2 plates per bag	32		
MGI-2020-1000002039	Strips of 8 flat optical caps	44		
MGI-2020-1000020261	MGIEasy Nucleic Acid Extraction Kit 1782 preps	1		
MGI-2020-1000004341	Break-Away 96-Wells, clear tubes, purple frame	5		
GLO-2020-3344-100	Pipette, Diamond Advance, 8 channel	2		
GLO-2020-3917	RV-Pette PRO repeat volume pipette	2		
GLO-2020-3922S	RV-Pette PRO dispenser tip 0.2ml Bioclean box 100	2		
GLO-2020-3311-Combo	Combo 4 Pipette Kit + Stand	2		
GLO-2020-GVM-AS	Globe variable speed vortex mixer 120 V	2	5.1.2b	
GLO-2020-GCM-B	Mini Centrifuge, 8 place, 120 V with rotor	2		
R-BIO-2020-PG6815	RIDAGENE SARS-CoV-2 CE marked qPCR kit	20		
MGI-2020-1000022440	Twist Synthetic SARS-CoV-2 RNA Control (MN908947.3)	1		
LL-2020-3450-00	96 well PCR plates, semi skirt, flat top, optically clean 10/pack	2		
LL-2020-A-3150-0	Sealing film, optically clear for PCR Rnase 100	1		
EXC-2020-RL-PLT-01	Film-Sealing 4" Rubber Roller	1		
ANA-2020-844-00564-4	Analytik Jena qTower 115 V 1 color module	2		
ANA-2020-844-00521-0	Color module 2 for qTOWER	2		
ANA-2020-844-00523-0	Color module 4 for qTOWER	2		
ANA-2020-844-00524-0	Color module 5 for qTOWER	2		

Timeline considerations

Molecular Diagnostic Laboratory Rooms

Partitioning, technical installations and finish will take two weeks.

Molecular Diagnostic Equipment

After receipt of payment, transportation requires about two weeks. Recent delivery to Curacao was accomplished in 3 weeks (without delay in payment, it would have made the two weeks)

Laboratory Technicians

Additional workforce was added to the molecular-microbiology team already. Foreign hire will take some months due to visa and workpermit requirements. Any temporary staff from AMI or sourced from the Netherlands can bridge the first months of operations. One-two additional staff on temporary basis will allow smooth operations during set-up and PCR optimization.

Overall timeline

Considering 1 week, planning and payment, 2-3 weeks for receiving ordered goods, 1 week for verification of the PCR performance, additional PCR capacity can become operational at 4-5 weeks from project start.

~~~~~~~~~~~
~~~~~~~~~~~