දූරකථන தொலைபேசி Telephone ) 0112669192 , 0112675011 ) 0112698507 , 0112694033 ) 0112675449 , 0112675280 ) 0112693866

ෆැක්ස් பெக்ஸ் Fax

e-mail

විද්යුත් තැපෑ,, )postmaster@health.gov.lk மின்னஞ்சல் முகவரி )

0112693869

)0112692913

වෙබ්අඩවිය இணையத்தளம் website

) www.health.gov.lk )



# සුවසිරිපාය சுவசிரிபாய SUWASIRIPAYA

මගේඅංකය எனது இல My No. ) NPTCCD/NTRL/TB-Covid19/2020 )

ඔබේඅංකය உமது இல Your No. :

දිනය

Date

திகதி

29-04-2020

## சுகூவு லா எச்கே வைச்சு எய்பா அமைச்சு சுகாதார மற்றும் சுதேசவைத்தியச் சேவைகள் அமைச்சு Ministry of Healthcare and Indigenous Medical Services

DDG-NHSL, DDG-NH Kandy,

All Provincial Directors of Health Service,

All Regional Directors of Health Service,

Hospital Directors/ Medical Superintendents, Heads of Medical Institutions,

Director / National Institute of Health Sciences,

Chief Medical Officer of Health / Colombo Municipal Council

Interim guidance for intermediate TB laboratories, GeneXpert laboratories and microscopy centers for handing patients' samples amid COVID pandemic.

Under prevailing Covid 19 situation, it is highly important to continue TB services while safeguarding the health care workers from undue exposure to Covid 19, especially laboratory personals who are handling samples for TB diagnosis.

Please refer the attached interim guide for necessary instructions on respiratory and contact precautions to all health care workers handling samples in above mentioned institutions.

This is in addition to the NPTCCD guide, NPTCD/TB-Covid19/2020 on "Diagnosis and management of TB patients at District level during current Covid-19 pandemic situation", issued on 25.03.2020.

Director General of Health Services Ministry of Health & Indigenous Medicine Services "Suwasiripaya" 385, Rev. Baddegama Wimalawansa Thero Mawatha, Colombo 10,

> 385, සුවසිරිපාය, පූජා බද්දේගම විමලවංශ හිමි මාවත, කොළඹ 10, ශී ලංකාව. 385,வணக்கத்துக்குரியபத்தேகமவிமலவங்சதேரோமாவத்தை,கொழும்பு 10. 385, Rev. BaddegamaWimalawansaTheroMawatha, Colombo 10, Sri Lanka.

දූරකථන බනු෦ානංගය Telephone	) 0112669192 , 0112675011 ) 0112698507 , 0112694033 ) 0112675449 , 0112675280		ല്യേദ്ദംത്രാ ഒങ്ങള്വ இல My No.	) NPTCCD/NTRL/TB-Covid19/2020 ) )
ருகுக்கு பெக்ஸ் Fax	) 0112693866 ) 0112693869 )0112692913		ඔබේඅංකය உ.மது இல Your No. :	) ) )
විද්යුත් තැපෑ, , மின்னஞ்சல் முகவர e-mail වෙම්අඩවිය இணையத்தளம்	)postmaster@health.gov.lk ) ) www.health.gov.lk	සුවසිරිපාය சுவசிரிபாய SUWASIRIPAYA	දිනය නි <b>க</b> නි Date	) ) )
website	)			

## சுைவை ஸ் எச்வே சைல் என்ற சுல்லை வி சுகாதார மற்றும் சுதேசவைத்தியச் சேவைகள் அமைச்சு Ministry of Healthcare and Indigenous Medical Services

DDG- NHSL, DDG- NH Kandy,

All Provincial Directors of Health Service,

All Regional Directors of Health Service,

Hospital Directors/ Medical Superintendents, Heads of Medical Institutions,

Director / National Institute of Health Sciences,

Chief Medical Officer of Health / Colombo Municipal Council

# Interim guidance for intermediate TB laboratories, GeneXpert laboratories and microscopy centers for handing patients' samples amid COVID pandemic.

This document is intended to guide the laboratory staff working in the National TB laboratory network on practices (in addition to the instruction given in the TB laboratory manual) to be implemented temporary in TB laboratories during the SARS-CoV-2 pandemic

### Background

**COVID-19** is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease was first identified in December 2019 from China, and has spread globally, resulting in the ongoing 2019–20 coronavirus pandemic.

The majority of cases result in mild symptoms such as fever, tiredness, dry cough and/or sore throat, aches and pains while some progress to viral pneumonia and multi-organ failure. The time from exposure to onset of symptoms may range from two to fourteen days.

Transmission occurs primarily via respiratory droplets from coughs and sneezes within a range of about 1.8 metres (6ft). The droplets thus expelled are deposited on the surfaces and objects following coughing and sneezing or from infected patients' hand and may remain viable on plastic and steel for few days. Ppeople can also get infected with COVID-19 by touching surfaces and objects contaminated from droplets expelled during sneezing, coughing, speaking and then touching their eyes, nose or mouth.

#### COVID 19 and TB

People ill with COVID-19 show symptoms such as cough, fever and difficulty breathing. Which are similar to TB. However, the incubation period from exposure to disease in TB is longer, often with a slow onset while COVID is more acute and becomes apparent within a week or two.

In addition, COVID patient may present with sore throat, nasal congestion and runny nose, which are not

However, all the TB laboratories including intermediate TB culture laboratories (ITLs), GeneXpert laboratories, district chest clinic laboratories and other microscopy centers that diagnose TB may receive samples from patients with COVID-19, some of whom may be undiagnosed.

Therefore, additional measures may be needed to avoid that staff in these centers getting exposed to COVID-19 infection while usual precautions to protect from TB must continue

Handwashing, in addition to respiratory precautions, are thus important and is a simple yet effective way to prevent the infection. Therefore, laboratory staff should always practice hand hygiene before, after and during laboratory testing procedures if needed.

## **Country situation of COVID-19**

As at 21<sup>st</sup> of April, 310 COVID 19 cases have been reported in the Country and the majority is from Colombo, Kalutara, Puttalam, Gampaha, and Jaffna. Similarly, there are 10 districts which did not report even a single case of COVID-19 and could be assumed as the districts with minimum risk of transmission.

## **TB** laboratory testing

The COVID-19 pandemic has made social stigma and discriminatory behaviours against people as well as anyone perceived to have been in contact with the virus. Thus, regardless of TB or COVID, patients with respiratory symptoms are not present to hospitals, DCC and microscopy centers unless they are really

Therefore, it is essential to offer TB diagnostic testing to those patients who are present with respiratory symptoms suggestive of TB to prevent increase transmission of TB during this pandemic situation.

# Specimen collection and transport

Special precautions are needed when collecting and transporting sputum samples, bronchoalveolar lavage fluid, as well as reception and unpacking in the laboratory, to avoid exposure of staff, patients and other individuals to both COVID-19 and TB.

## **Specimen collection**

Sputum samples should be collected in an open, well-ventilated space - preferably outside of the health facility (coughing booth)- and staff should not stand near the patient during collection. If facilities are available, coughing booths can be decontaminated with 1% hypochlorite spray after the

patient has collected the sample.

If a coughing booth is not available, as a temporary measure, sputum collection for TB at home should be encouraged during the pandemic period. Patient should be advised to collect the samples in open area outside the home and away from others. Relevant laboratory personal should obtain the patient contact details to make sure that the patient will be handing over the sputum samples next day.

If the patient has a refrigerator at home, samples should be refrigerated until the samples collected are handed over to the laboratory.

Due to prevailing situation in the country, it is better to advise the patients to collect two samples of sputum one hour apart on the same day to avoid patients missing for a second visit to give sputum samples.

## **Specimen Transport**

The specimens should be sent in a dedicated container (tray/box with a closing devise- lid /other method) from the relevant wards to the TB laboratories.

In case, samples need to be transported to the other TB laboratories e.g sputum for culture (ITLs and NTRL) and GeneXpert sites, laboratory personnel responsible for this should follow the triple package system (Annex 1) before sending the sample to these sites for TB diagnostic testing.

## **Reception of samples**

- All laboratories should have a dedicated place for reception of all samples.
- Receive the specimens to a dedicated container (tray/box with a closing devise- lid /other method)
- Ask the person who brings the samples to wear a glove and keep it inside the dedicated container kept for sputum samples.
- Do not get the request forms contaminated by the samples. (Instruct not to keep the sample on top of request form when it is delivered at laboratory.)
- It is better if the sample container can be cleaned with an alcohol swab (usage of alcohol is based on the availability of it at your microscopy center) at the reception. (If not before you start handling the sample)

## Infection control measures for processing of samples General measures for all laboratories

Work in ventilated workplaces e.g. Exhaust fans.

Practice hand hygiene (hand washing or hand rub) before, after and during procedure if necessary Use PPE before handling samples (face mask, gloves, gowns, face shield, waterproof aprons). Remove PPE (Annexes 2-4) and discard them properly Ensuring staff distancing in the laboratory

## **Other measures**

Use of biosafety cabinets would be preferred when handling sputum and any other infectious specimen during the pandemic.

Where safety cabinets are available, all samples should be unpacked and processed in the Class 11 safety cabinet. Make sure your cabinet is functioning properly. Adhere to safety guidelines on use of the cabinet. If a cabinet is not available as it is the case in most microscopy centres, it is advised to process sputum samples using N95 respirator, gloves, goggles or protection shield, waterproof aprons.

Currently available facilities at each type of the laboratories and recommendation for PPE

	ITL	DCC	Peripheral MC
Exhaust Fans	$\checkmark$	$\checkmark$	$\checkmark$
Safety cabinets	$\checkmark$	$\checkmark$	Not available
Type of PPE	N95 mask Gloves (double), gown and goggles or protection shield, waterproof aprons before processing samples	Surgical masks Gloves (double), gown and goggles or protection shield, waterproof aprons before processing samples	*High risk Districts- N95 Other districts- Surgical mask With Gloves (double), gown and goggles or protection shield, water proof aprons before processing samples

<sup>\*</sup>High risk Districts- The districts which reported at least a single case of confirmed or suspected Covid 19

N95 masks are scarce in the country at the moment. To utilize this effectively and to minimize the risk of exposure, it is important to carry out testing once or twice a week depending on the number of samples received to the laboratory.

## **Special considerations for ITLs**

In the culture laboratories, use disposable wire loops for processing depending on the availability. Discard the wire loops directly to a yellow bag after each use. If the Nichrome loops are used, one has to be very careful not to generate aerosols in abundance when heating the loop. Therefore, remaining amount of sputum when heating should be minimum. (if necessary, a hypochlorite sand bath can be used to minimize the sputum remaining in the loop) If the electric burners are available those should be used instead of open Bunsen burners.

#### Waste management

Clean laboratory floor and the benches with 5% phenol or 0.5% sodium hypochlorite twice a day Once removed, PPE including gloves, masks and waterproof aprons (if single use) should be discarded in to a yellow bag and send for incineration or burning.

All infectious waste generated during processing of samples should be discarded in the bio-safety disposal bin. Infectious waste including patient sputum samples and solid waste-wipes, swabs, plastic, paper towels, gauze pads, gloves, etc., should be placed inside the double autoclave bags and sealed and should be autoclaved before sending for incineration.

Peripheral laboratories may not have autoclaves. Burning can be used as an alternative method.

Director General of Health Services

Copy: College of Microbiologists

**College of Respiratory Physicians** 

DTCOs