GUIDELINES FOR SAMPLE COLLECTION, TRANSPORT, ANALYSIS AND WASTE DISPOSAL OF SUSPECTED/PROVEN COVID-19PATIENTS –NSACP

When performing routine diagnostic tests of a patient suspected/confirmed COVID 19 below guidelines are to be followed.

Laboratory work arrangements:

Staff is present on daily basis and on rotation.

A doctor along with 1-2 MLTs ,one PHLT & one orderly/labourer is reporting for duty in order to minimize the risk of exposure as per the circular of MoH .

Laboratory operation times:

On working days Monday to Saturday — from 9.00 am- 12.00 noon

Samples are received up to 11.30 a.m.

The laboratory should be alerted with a telephone call to either ext 301 or 304 to inform about the samples.(The staff is in Syphilis & HIV sections of the laboratory)

Outside this time samples should be kept in the refrigerator placed in the ground floor for sample storage. The samples will be collected the next day morning by the laboratory staff.

Laboratory is closed on public holidays

Specimen Collection in bleeding rooms

- Recommended PPE for collection of specimens should be worn.
- Ensure discarding needles to sharp bin.
- Ensure discarding other infectious waste such as cotton swab, gloves etc. to yellow bags

- Use disposable plastic containers for collection of specimens
- Alert laboratory prior to sending samples of COVID- 19 suspected/ confirmed patients
- Label the specimen container appropriately with required details and send in triple package.
- The request form should be duly filled and should not be contaminated with samle material.

Transport of specimens

- Decontaminate the outer surface of the primary container with 70% alcohol
- Place the sample in a sealable sample container (zip lock bag /secondary container) before handing over to transporting personnel
- Always keep the sample in upright position
- Transport to laboratory in the sample transport box.
- Sample transport personnel should be made aware of the specimen and should wear recommended PPE.

Sample acceptance:

- Samples are accepted by a MLT in the sample receiving counter
- Wear recommended PPE (Gloves, surgical masks & laboratory gown)
- When a COVID 19 suspected sample is received check the container (should have a secondary container),
- Make a note in the sample collection register for COVID-19 samples

Sample processing

- The laboratory personnel should adhere to good laboratory practices (GLP).
- The personnel who are handling COVID 19 suspected/confirmed samples, should wear recommended PPE (surgical mask/N 95 mask depending on the availability, preferably a face shield/goggles, gloves, lab coat & a polythene apron).
- When serum/plasma is separated with centrifugation, ideally centrifuges with sealed buckets (with bio containment lids or rotors)should be used. Ideally buckets should be

loaded and unloaded in a class II biosafety cabinet (*if not wait for 30 minutes after stopping the centrifugation until the aerosols are settled*).

- Other possible aerosol generating procedures (vortexing, aliquoting, pipetting) should be done taking lot of care not to generate aerosols. In the absence of a bio safety cabinet other physical barriers should be used to minimize the risk of exposure to laboratory staff
- Liquid waste drainage should be connected to a closed system. The jar should contain a final concentration of 1% hypochlorite. The liquid waste containers should be autoclaved before disposal. Manual liquid waste disposal systems are not recommended.
- All samples should be made non infectious by autoclaving before disposal.

Decontamination & Biomedical Waste Disposal

- After specimens are processed, decontaminate work surfaces with 0.1% hypochlorite Contact time is at least 10 minutes. Alcohol (e.g. isopropyl 70%, ethyl alcohol 60%) can be used to wipe down surfaces where the use of bleach is not suitable, e.g. metal.
- Equipment should be disinfected according to manufactures instructions with appropriate disinfectants. 70% alcohol can also be used for equipment surfaces.
- For spillages use 1% hypochlorite. Contact time is at least 10 minutes.

All disposable waste should be autoclaved and incinerated. If incinerator is available within the premises waste could be directly sent for incineration.

Clinical waste	Glass waste	
Sharps waste	Paper waste (Uncontaminated)	
General waste (Contaminated paper/plastic and polyethene)	Plastic bottles waste	

Segregation of waste according to the national colour code.

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Bio-degradable waste Food		

Good Laboratory Practices:

- 1. Hand hygiene after handling specimens. Use of alcohol hand rub or hand washing. When hands are visibly dirty, hand washing should be done.
- 2. Wearing laboratory coats
- 3. Wearing clean gloves
- 4. Eating and drinking in the laboratory area are prohibited
- 5. Additional personal protective equipment are required depending on the type of procedure after a risk assessment
- 6. Wearing face masks goggles, face shields, respirator (N95 or similar) when doing procedures where splashes or aerosol generation are expected
- 7. Remove the PPE after the procedure and perform hand hygiene
- 8. Clean the work surfaces with 70% alcohol or 0.1% sodium hypochlorite at the end of the session
- 9. Equipment should be disinfected according to manufactures instructions with appropriate disinfectants. 70% alcohol can also be used for equipment surfaces.
- 10. Follow standard spill management protocol
- 11. Follow laboratory waste management protocol
- 12. Report all blood and body fluid exposures. These should be managed as per the institutional guideline

Note:

1. The CMLT need to maintain adequte supply of different types of PPE in the laboratory in collaboration with infection control unit.

2. If any of the staff is not willing to carry out testing of samples of COVID 19 suspected /confirmed samples due to any reason please inform the concerns and suggestions in writing for further evaluation, as we need to continue uninterupted service even with some deficiencies.

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