Instructions to Hospitals/Facilities for the Referral of Covid-19 Specimens to the San Lazaro Hospital-Subnational Laboratory (SLH-SNL)

A. Preparation of required documents for referral
1. Download the SLH-SNL Laboratory Referral Request Form (LRRF) for COVID-19, Case Investigation Form (CIF) and Summary List of Referred Specimen Form (SLRSF) for COVID-19 Testing Form from the SLH Website: www.slh.doh.gov.ph and click the tab Services, then click the tab Sub-National Laboratory.
2. Fill-out all forms completely, legibly and accurately. No items should be left blank.
3. Separately pack the filled-out forms in a sealed clean plastic bag/case and attach it firmly to the outside portion of the 3rd outer container to avoid soaking the documents.

B. Preparation of materials for specimen collection

1. Assemble all materials and make sure they are complete before proceeding to specimen collection.

Supplies/Materials Needed:
- Laboratory Referral Request Form (LRRF)
- Case Investigation Form (CIF)
- Summary List of Referred Specimen Form (SLRSF)
- Universal Transport Medium (UTM) or Virus Transport Media (VTM)
- Nasopharyngeal swab, sterile polyester or rayon swab with pliable/flexible shaft
- Oropharyngeal swab, sterile polyester or rayon swab with pliable/flexible shaft
- Sterile tongue depressor
- Thermo box with 4 or more frozen ice packs
- Test Tube rack
- Re-sealable plastic bags
- Parafilm
- Masking tape
- Permanent tube marker
- Complete PPE (gloves, N-95 mask, goggles/face shield and back-closure disposable lab gown and shoe cover)
2. Inspect specimen collection materials prior to use.

2.1 Take out the VTM from the freezer (-20°C) or UTM (room temperature) where they are stored. Frozen VTMs should be thawed just before use. If the collection site is far from a refrigerator, have a thermo box with 4 or more frozen ice packs ready to maintain a refrigerated temperature during specimen collection.

2.2 Check VTM/UTM for sign of turbidity. The medium should be clear and pinkish with no visible sign of contamination. Gently tap the tube to mix contents. Do not use expired or discolored UTM/VTM.

2.3 Check the integrity of the NP/OP swab as well as the tongue depressor pouch to ensure sterility. Do not use previously-opened and exposed swabs and tongue depressors.

NOTE: DO NOT USE CALCIUM ALGINATE SWABS, COTTON SWABS, OR SWABS WITH WOODEN SHAFTS. THEY CONTAIN SUBSTANCES THAT INACTIVATE VIRUSES AND MAY INHIBIT MOLECULAR ASSAYS.

Fig. 1 A: Universal Transport Medium (UTM); Viral Transport Medium (VTM) may also be used. B: Oropharyngeal Swab (OPS) and C: Nasopharyngeal Swab (NPS). Note the difference in the thickness of the swab tips. (Reference: Copan, USA)
3. Perform correct patient identification at all times. Explain to the patient the procedure and the possible discomfort/pain that may be felt during specimen collection.

C. Specimen Collection Proper (NPS and OPS)

**COLLECTION OF RESPIRATORY TRACT SPECIMENS**

When collecting respiratory tract specimens, the Health Care Worker (HCW) should wear complete PPE: goggles or face shield, N-95 mask, head cap, double gloves, a disposable, impermeable, long sleeved laboratory gown fastened at the back and shoe cover. Only trained health worker/personnel should collect the specimen.

**Nasopharyngeal swab (NPS)**

1. Patient must be seated upright, with the head in a straight position (not extended upwards/ not looking up because the pledget will be directed superiorly towards the anterior cranial base which can be dangerous).
2. Using a flexible polyester or rayon tip swab, measure from the base of the nostril towards the auditory pit. Divide the length into half in order to know into what extent will be inserted into the nostril to ensure that it reaches the posterior pharynx:

![Approximate positioning of the posterior pharynx](image)

3. With gloved hand, have the patient seated, tilt the head slightly backwards. Remove visual obstructions such as excess mucus or loose nose hair. Then, insert the swab into the nostril parallel to the palate. Stop when slight resistance is met.
4. Rotate swab applying a little force to take large quantities of mucus. Repeat procedure in the other nostril using the same swab:

5. Place the nasopharyngeal swab immediately in the UTM/VTM tube to avoid drying of the swab. Break/cut with scissors the end of the swab that sticks out of the tube and close the tube tightly.
Oropharyngeal swab (OPS)

1. With gloved hands hold down the tongue with a sterile tongue depressor.
2. Have the patient say "aahh", to elevate the uvula. Ensure that the swab is held correctly to avoid injury to the patient:

- **CORRECT**
  - Correctly held swab can slide out of the way:

- **INCORRECT**
  - Incorrectly held swab can injure patient:

Fig. 5 Correct and Incorrect holding of swabs

Fig. 6 Applying the tongue depressor to expose the uvula
3. Use a sweeping motion to swab the posterior pharyngeal wall and tonsilar pillars. Apply a little force, taking large quantities of mucus. Avoid swabbing the soft palate and do not touch the tongue with the swab tip (Caution: This procedure can induce the gag reflex). Do not swab the soft palate.

![Fig.7 Areas for collection of the oropharyngeal swab specimen](image)

4. Place the oropharyngeal swab immediately in the same UTM/VTM tube with the nasopharyngeal swab.
5. Break/cut with scissors the end of the swab that sticks out of the tube and close the tube tightly. Secure the cap with parafilm to prevent leakage.
6. Label specimens with permanent tube marker with Patient’s Name, Date and Time of Collection. Ensure that the specimen labels match the information provided in the LRRF, CIF and SLRSF.
7. Place collected specimens into the rack inside the transport box.

D. Specimen storage and transport
1. Transport collected specimens to the SLH-SNL within 48 hours after collection and be kept at cold temperature (4°C – 8°C Celsius).
2. Specimens that will not be transported within 48 hours must be stored at freezer temperature (-70°C to -80°C Celsius) and should be transported at 4°C - 8°C Celsius once feasible.
E. Specimen Packaging

Properly pack the collected specimens using triple packaging system:

Materials Needed:
- Transport box
- Frozen icepacks (minimum of 4)
- Re-sealable plastic bag (e.g. Ziplock™)
- Completely-filled out forms (LRRF, CIF, SLRSF)

Fig. 8 Triple Packaging System (IATA guidelines)

Fig. 9 Sample transport box/cooler, cold pack and re-sealable bag
1. Wrap UTM/VTM tubes containing the specimens in absorbent material or tissue paper and place upright in a separate leak/puncture proof container. Place it inside in a re-sealable plastic bag.

2. Place ice packs and evenly distribute them within the secondary container to provide a cold environment (4° – 8° Celsius) during transport.

3. Do not overfill the secondary container to avoid damage or leak from the specimen containers. Loose spaces between the specimen tubes and container may be filled with absorbent material to keep the specimens in an upright position during transport.

4. Place the packed specimens inside transport box containing a minimum of 4 frozen icepacks to maintain the quality of the specimens.

5. Keep the tube with specimen in upright position in between the icepacks or tape the re-sealable plastic bag on the side of the box/container.

6. Separately pack the filled-out forms in a sealed clean plastic bag/case and attach it firmly to the outside portion of the 3rd outer container to avoid soaking the documents.

7. Perform proper doffing of PPE and dispose waste materials properly.

8. Address the shipment package to:

   SUB-NATIONAL LABORATORY FOR COVID-19
   DEPARTMENT OF LABORATORIES
   c/o Ms. Barbara Santiago, RMT/Mr. Ronald Vinluan, RMT
   G/F San Lazaro Hospital, Quiricada St., Santa Cruz, Manila 1003

9. Coordination in the receiving of specimens should be done with the SLH Department of Laboratories prior to transport. For further inquiries, the Laboratory can be reached at:

   Tel. No. (direct landline): (02) 5310-2005
   Cellular No. (Globe): 0977-2440699
   Contact person: Ms. Barbara Santiago, RMT/ Mr. Ronald Vinluan, RMT

10. Specimens being submitted to the SLH Laboratory WITHOUT PROPER COORDINATION will not be accepted.
## ADVISORY

**update as of April 16, 2020**

**Health Facilities** located in the following regions can refer specimens for qRT-PCR Detection of COVID-19 to SAN LAZARO HOSPITAL- SUBNATIONAL LABORATORY (SLH-SNL):

<table>
<thead>
<tr>
<th>REGION/PROVINCE/DISTRICT</th>
<th>AREAS</th>
<th>REGIONAL EPIDEMIOLOGY SURVEILLANCE UNIT (RESU) HEADS AND CONTACT DETAILS</th>
</tr>
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</table>
| National Capital Region (NCR) | Caloocan City  Malabon City  Navotas City  Valenzuela City  (CAMANAVA) | MANUEL MAPUE, MD, PHSAE  
(02)85310015  (02)85310017  (02)85310021  (02)85310026 local 101-102  (02)85310027  (02)85310031  (02)85310032  (02)85310037  e-mail: vpdsmmchd@gmail.com |
| IV-B | Palawan | NOEL OROSCO, RN, PHSAE  
(02)89120195 local 144  (02)89127754 (F)  e-mail: resu4b@gmail.com |

**Note:**
- Specimen collection kits (UTM/VTM, NPS/OPS) will be available at your respective RESU.
- Coordinate the transport and tracking of specimens to:  
  SLH Department of Laboratories  
  Tel no. (02) 5310-2005  
  Cellular phone no. (Globe): 0977-2440699  
  (COVID-19 Medical Technologists -Ms. Barbara Santiago, RMT/Mr. Ronald Vinluan, RMT)
- Results will be available after 48-72 hours from receipt of the specimen.
- Provide the name and contact details (tel. no., mobile no. and e-mail address) of your institution’s point person and e-mail to: slhlab.covid19@yahoo.com.