Guidelines for Samples Collection and Handling of Human Clinical samples for Laboratory Diagnosis of H1N1 Influenza

If any case fits in the case definition of B-i/B-ii/C category of Swine Flu (H1N1) then samples should be collected according to the sample collection guidelines as per State SOP.

What sample to be collected?

Respiratory specimens including: bronchoalveolar lavage, tracheal aspirates, nasopharyngeal or oropharyngeal aspirates as washes, and nasopharyngeal or oropharyngeal swabs. Swab specimens should be collected only on swabs with a synthetic tip (such as polyester or Dacron) and aluminium or plastic shaft. Swabs with cotton and wooden shafts are not recommended. Specimens collected with swabs made of calcium alginate are acceptable.

When to Collect Respiratory Specimens?

As soon as possible after symptoms of above mentioned categories begin.
Before antiviral medications are administered
Even if symptoms began more than one week ago

Personal Protective Equipment

• Masks (N-95)
• Gloves
• Protective eye wear (goggles)
• Hair covers (Hood)
• Boot or shoe covers
• Protective clothing (gown or apron)

Methods of Collection

❖ Throat swab
❖ Nasal / Nasopharyngeal swab

Throat Swab

• Easy to do
• Highest yield in detecting H1N1 influenza in suspected cases
• Have the patient open his/her mouth wide open.
• The patient should try to resist gagging and closing the mouth while the swab touches the back of the throat near the tonsils.

Nasal / Nasopharyngeal Swab: Insert dry swab into nostril and back to nasopharynx. Leave in place for a few seconds. Slowly remove swab while slightly rotating it. Use a different swab for the other nostril. Put tip of swab into vial containing VTM, breaking applicator’s stick (the part projecting outside).

Nasal Swab is collected from the anterior turbinate.
Both Nasal and Throat swabs can be collected into the same VTM to increase the viral yield.

How to Label Samples
Label the samples with indelible ink.
Samples must not be sent without identifiable labels.

How to Store Specimens

- Store specimens at 4 °C before and during transportation within 48 hours
- Store specimens at -70 °C beyond 48 hours
- Do not store in standard freezer – keep on ice or in refrigerator
- Avoid freeze-thaw cycles
- Better to keep on ice for a week than to have repeat freeze and thaw

Transportation of specimens

- All samples should be transported after proper packaging using triple packaging system and it should accompany with the clinical details as per S.O.P.
- While transportation cold chain should be maintained

Waste Disposal: should be done as per guidelines of your hospital
Maintain adequately stocked specimen collection kits and store them properly when they are not in use.

General Biosafety Measures

- Clinical samples should be collected by hospital staff and not by the laboratory staff.
- Use PPE & N-95 musk while collecting samples as mentioned above.
- Work surfaces must be decontaminated after any spill of potentially dangerous material and at the end of the working day. Generally, 5% bleach solutions are appropriate for dealing with biohazard us spillage.
- Personnel must wash their hands often – especially after handling infectious materials and, before leaving the laboratory working areas, and before eating.

N.B.- Lab request form necessary to send samples for H1N1 test is annexed.
Laboratory Request Form for lab diagnosis of H1N1

Name of the patient :
Age : Sex :
Name of guardian/husband :
Address (in detail) :

Contact phone no. of the patient :
Name of the institution where admitted :
Hospital Registration No. of the patient :
Ward : Bed no. :
Name of the treating physician :
Date of onset of illness :
Relevant signs & symptoms :

Whether known to be pregnant :
Co-morbidity (if any) :
Category which the patient belongs to : B (i) / B (ii) / C
Type of sample(s) : Nasopharyngeal swab / Throat swab / Others (specify)
Date of sample collection : Sample no. :
Date on which sample sent to the laboratory :
Name of the doctor/ superintendent sending the sample(s) :

Signature & seal

Additional points applicable for private facilities
Detailed address & phone no. of the facility :

Signature & seal :