

Wellcome Genome Campus | OC4_1-17_Logistics_sample_transport

Hello, everyone. This video has been prepared to educate doctors, paramedics and laboratory technicians for proper technique of sample collection, packaging, and transportation of samples for COVID-19 testing. This is an initiative by Department of Microbiology and ENT, Parul Institute of Medical Sciences and Research, Parul University, Waghodia, Gujarat.

So there is a look at all the steps, along with the discussion in phase management. The first step is collection of sample. For collection of the sample, the person who is taking the sample needs to wear a proper personal protective gear. And in the front mask there should be head light or proper illuminated room, safety goggles, and a face shield.

We also need viral transport medium, two deco swabs, and tongue depressor. The first we will proceed for collection of nasopharyngeal swab. For collecting a nasopharyngeal swab, patients' head must be tilted back to about 70 degrees. Then the swab shall be inserted into the nostril, into the floor of nasal cavity, reaching a depth of up to around 5 to 6 centimetres to reach the nasopharynx.

Alternatively, you can take the swab from inferior turbinate. Leave the swab for a few seconds to absorb the secretions. Slowly remove the swab while you're getting it, taking care not to do it too vigorously, and should be done under proper vision. Then place the tip of the swab into sterile viral transport media, directly without spilling the secretion, and cut off the applicator stick.

Second part is for collection of oropharyngeal swab. For collecting oropharyngeal swab, ask patient to open the mouth. Apply the tongue depressor to the depress the tongue. Then by using the deco swab, collect the specimen by swabbing the patient's irritated and congested pharynx and tonsil area. If there is no congestant present, then take the swab from posterior pharynx. Please avoid the tongue.

Apply the tongue depressor to pressure to the tongue, and then with the swab, collect the specimen by swabbing the patient's irritated and congestive pharynx and tonsillar area. Congestion is not present, take the swab from posterior pharynx. Please take care to avoid the tongue. Insert the swab into the viral transport media and cut off the applicator stick.

Close the viral transport media. It should be properly labelled, along with the name of patient, hospital name, date and time of collection. In case of asymptomatic patient and contacts, there is a possibility that secretions are minimal and sample is insufficient. In such circumstances, we may induce oropharyngeal secretion by making patient chew a gum for a few minutes prior to sample collection.

Now the third part is packaging. For packaging, we need water transport media with the specimen, paraffin wax strip. For the packaging, we need viral transport media with the specimen collected inside it. We need paraffin fill or strip, or surgical tape, or micropore tape; cotton swab; Ziploc bag; ice pack container or vaccine carrier; or thermal cool box.

For packaging, viral transport media with the specimen should be sealed with paraffin wax strip or with the surgical tape. After that, it is covered with the absorbable material-- either cotton, cotton swab, or tissue paper. Then keep this into a Ziploc bag. Seal the Ziploc bag. Then this full Ziploc bag, along with the viral transport media, should be inserted into another Ziploc bag. Seal that second Ziploc bag. Then re-seal it with suitable sealing material, either surgical tape or any adhesive cellophane tape.

Keep this triple layer package into a suitable container-- ice box, or thermo cool box, or any other cardboard box containing ice pack. Close it. Close this icebox. Label the icebox along with the COVID-19 label and biohazard label. And along with the requisition form, it should be signed to a respected COVID-19 testing facility.

In case the sample has been collected and the transport is delayed, you can keep this triple layered pack specimen directly into the freezer compartment of the refrigerator.

I hope this video will be useful for you in proper sample collection, packaging, and transport of the sample to designated COVID labs. Thank you.