

Laboratory Report : Molecular Infection Testing

UPI	PHBL0000339263	Sample Type	Nasopharyngeal And Oropharyngeal Swab
Name	Mr MD RAFIKUL ISLAM	Sample No	MIT0803220187
Age /Gender	40 Year(s) 8 Month(s)/MALE	Location	Laboratory
Contact No	8801915636758	Collected On	08/03/2022 13:30
Address	HOUSE-45/A DILU ROAD, NEW ESKATON, Dhaka, Dhaka Division	Received On	08/03/2022 14:33
Referred By	self (External)	Reported On	08/03/2022 17:14
		Institute Name	DOCTOR REFERRED
Test Requested	COVID-19		

Test Name	Test Method	Result	Unit	Reference Range
Traveler's COVID-19 Test	RT PCR	Negative		-

Test Description :

What a positive result means:

Positive results indicate the presence of SARS-CoV-2 RNA. While the virus may be present, a patient's infection status cannot be determined without additional information on patient history and diagnostic information. Positive results do not rule out bacterial infection or co-infection with other viruses. Positive and negative predictive values of testing are highly dependent on prevalence (proportion of people who have the disease).

What a negative result means:

A Not Detected (Negative) test result for this test means that SARS-CoV-2 RNA was not present in the specimen above the limit of detection. A negative result does not rule out the possibility of COVID-19 and should not be used as the sole basis for treatment or patient management decisions. Laboratory test results should always be considered in the context of clinical observations and epidemiological data when making a final diagnosis and patient management decisions.

Specificity:

False-positive and false-negative:

While we follow leading international standards in testing, unfortunately, like any diagnostic test, there is a chance that someone will have the virus but will test negative (false negative), or does not have the virus and will test positive (false positive). False-positive test results are more likely when prevalence is moderate to low. Up to 2% of all positive tests might be false positives. Being positive does not mean that the patient will have symptoms, as up to 40-50% of patients testing positive are asymptomatic.

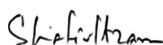
On the other hand, There is up to a 30% chance of a false-negative result. If COVID-19 is still suspected based on exposure history together with other clinical findings, re-testing should be considered in accordance with public health authorities' guidelines.



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Limitations:

Factors for a false-positive result:

Poor specimen quality during sample collection

Timing of specimen collection (Viral load reduces day by day or even over the course of several hours, and the virus may clear out of the body as early as 4 or 5 days. The viral load reduces during recovery and repeat testing – within hours or days – can produce different results.

The specimen was not handled appropriately

Technical reasons inherent in test (virus mutation or PCR inhibition)

Factors for a false-negative result:

Poor specimen quality during sample collection

The test is done too early or too late where the virus load is below the detection limit

Samples being stored too long could also give out false results since samples taken from patients have limited stability over time

False-negative results are common (however the likelihood decreases from 38% on the day of symptom onset to 20% on day 8)

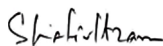
Viral mutations may affect the recognition of variants



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