



**nCorona Virus Outbreak Control and Prevention State Cell**

**Health & Family Welfare Department**

**Government of Kerala**

**REVISED GUIDELINES FOR TESTING, QUARANTINE, HOSPITAL ADMISSION AND DISCHARGE**  
**FOR COVID-19 BASED ON CURRENT RISK ASSESSMENT**

**12.03.2020**

Superseding all the previous Guidelines for testing, quarantine, hospital admission and discharge for COVID-19 the following revised Guidelines are issued for follow up.

**PART-I**

**CASE DEFINITION**

**Suspect Case:**

A patient with acute respiratory illness {fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath or diarrhoea), **AND** a history of travel to or residence in a country/area or territory reporting local transmission (See NCDC/WHO website for updated list) of COVID-19 disease during the 14 days prior to symptom onset;

**OR**

A patient/Health care worker with any acute respiratory illness **AND** having been in *contact* with a confirmed COVID-19 case in the last 14 days prior to onset of symptoms;

**OR**

A patient with severe acute respiratory infection {fever and at least one sign/symptom of respiratory disease (e.g. cough, shortness breath)} **AND** requiring hospitalization **AND** with no other etiology that fully explains the clinical presentation;

**OR**

A case for whom testing for COVID-19 is inconclusive.

**Laboratory Confirmed case:**

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

**DEFINITION OF CONTACT**

A contact is a person that is involved in any of the following:

- Providing direct care without proper personal protective equipment (PPE) for COVID-19 patients
- Staying in the same close environment of a COVID-19 patient (including workplace, classroom, household, gatherings)
- Travelling together in close proximity (within 1 m) with a symptomatic person who later tested positive for COVID-19.

**High Risk (HR) Contact:**

1. Contact with a confirmed case of COVID-19.
2. Travelers who visited a hospital where COVID-19 cases are being treated
3. Travel to a province where COVID-19 LOCAL TRANSMISSION is being reported as per WHO daily situation report.
4. Touched body fluids of patients (respiratory tract secretions, blood, vomitus, saliva, urine, faeces).
5. Had direct physical contact with the body of the patient including physical examination without PPE.
6. Touched or cleaned the linens, clothes or dishes of the patient
7. Close contact, within 3 feet (1 metre) of the confirmed case
8. Co-passengers in an airplane /vehicle seated in the same row, 3 rows in front and behind of a confirmed COVID19 case

**Low Risk (LR) Contact:**

1. Shared the same space (same classroom/same room for work or similar activity and not having high risk exposure to the confirmed/suspected case)
2. Travel in the same environment (bus/train) but not having high risk exposure as cited above.
3. Any traveler from abroad not satisfying high risk criteria

## PART-II

### COVID-19 TESTING AND MANAGEMENT STRATEGY BASED ON RISK ASSESMENT

#### BACKGROUND

The epidemiology of COVID-19 shows that 75 to 80% of the affected will develop only mild symptoms which do not require hospitalization. Severe infection and mortality are seen only in high risk groups like elderly and those with chronic lung disease, heart disease, liver disease, renal disease, malignancies, immunocompromised, pregnancy, post-transplant, hematological disorders, HIV and in those on chemotherapy and long term steroids. In majority of patients with mild symptoms, there is no need for hospitalization or symptomatic management.

Just like any viral infection, COVID 19 also will resolve by itself in majority of the patients. Epidemiology of COVID-19, SARS and MERS clearly demonstrate that hospitals act as amplifying centres for the epidemic. This happens due to the mixing of patients with different risk categorization in the busy outpatient areas of designated COVID-19 centres.

**So patients with mild symptoms are advised not to come to hospitals for testing and treatment. Testing is not going to change either the clinical course or management of the patient with mild symptoms.**

#### CLINICAL CATEGORIZATION

**CATEGORY- A: Low grade fever/mild sore throat / cough / rhinitis /diarrhoea.**

**CATEGORY-B: High grade fever and/or severe sore throat / cough**

**OR**

**Category-A plus one or more of the following**

- Lung/ heart / liver/ kidney / neurological disease, blood disorders/ uncontrolled diabetes/ cancer /HIV- AIDS
- On long term steroids
- Pregnant lady
- Age –more than 60 years.

**Category-C:**

- Breathlessness, chest pain, drowsiness, fall in blood pressure, haemoptysis, cyanosis [red flag signs]
- Children with ILI (influenza like illness) with *red flag signs*
- (Somnolence, high/persistent fever, inability to feed well, convulsions, dyspnea /respiratory distress, etc).
- Worsening of underlying chronic conditions.

**\*Categorization should be reassessed every 28-48 hours for Category A & B**

## **TESTING GUIDELINE**

**Catagory- A** : No testing needed.

**Catagory- B and Cat-C:** Testing required.

NB: In patients with Viral pneumonia without an etiology COVID-19 testing may be considered even if the patient is not from a country/area with local transmission of COVID 19. Testing should be restricted to patients with bilateral lung infiltrates, lymphocytopenia with decreased or normal total count. Decision on testing to be taken by the institutional/district Medical Board.

## **MANAGEMENT GUIDELINE**

### **CATEGORY- A**

Patient should inform DISHA helpline. No need to come to designated nodal centres. Patients should remain in strict home isolation. Doctor from nearby PHC will telephonically monitor progress of patient and asses development of red flag signs. JPHN/JHI will assess adequacy of isolation facility using a checklist.

Patients are advised to take:

- Plenty of warm nourishing oral fluids
- Balanced diet
- Adequate sleep and rest
- Saline gargle for sore throat if present

### **CATEGORY- B**

Patient should come to designated COVID-19 treatment centers after informing DISHA. After clinical assessment at the hospital, decision on testing will be taken. Patient will be started on symptomatic treatment including treatment of other respiratory pathogens(like H1N1) wherever applicable and will either be admitted or sent back for home isolation. If the treating hospital decides on home isolation the DSO of the corresponding district should be informed in the prescribed format for ensuring home isolation. If sent back for home isolation, doctor from nearby PHC will telephonically monitor progress of patient and assess development of redflag signs. JPHN/JHI will assess adequacy of isolation facility using a checklist.

### **CATEGORY- C**

Patient will be admitted in designated COVID-19 treatment centers.

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### PART-III

#### Matrix for Testing, Admission, Isolation and Discharge based on current risk assessment.

| RISK CATEGORY | DESCRIPTION  | CLINICAL STATUS | TEST CRITERIA FOR COVID19                                  | ADMISSION/ FOLLOW UP  | ISOLATION CRITERIA   | DISCHARGE CRITERIA IF APPLICABLE  |
|---------------|--|-----------------|--|---|--|---|
| 1.a           | <p>A person who came to Kerala within the last 14 days from any country which is currently reporting <b>local transmission</b> of COVID-19 as updated in the situation report published by WHO.</p> <p><a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/">https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/</a></p> | Symptomatic     | <b>TEST</b> for clinical case <b>Category B and C only</b> | <p><b>CAT-A:</b> Strict Home Isolation and telephonic follow-up</p> <p><b>CAT- B:</b></p> <p>Based on clinical assessment either admit in Corona (COVID-19) Isolation Unit OR send for strict home isolation after collecting samples.</p> <p>Daily telephonic follow-up to be done.</p> <p><b>CAT-C:</b> Admit in designated COVID-19 isolation centre</p> | <p>If positive for COVID 19- <b>Admit /continue in COVID isolation ward</b></p> <hr/> <p>If negative strict home isolation</p> <p><b>HR</b> contact-28d</p> <p><b>LR</b> contact-14d</p> | <p>2 samples, 24 hours apart are negative and clinically stable. Radiology clearance may be considered if x-ray was indicated.</p> <p>Patient has to be in home isolation for 14 days from last negative test result or 28 days from day of admission whichever is later.</p> |
| 1.b           | <p>A person who came to Kerala within the last 14 days from any country which is currently reporting <b>local transmission</b> of COVID19 as updated in the situation report published by WHO.</p>   | Asymptomatic    | Testing Deferred   | NO ADMISSION; Close monitoring for onset of fever/ other symptoms; reclassify   | <p><b>HR</b> contact-28d</p> <p><b>LR</b> contact-14d</p>  |   |
| 2.a           | PRIMARY CONTACTS   | Symptomatic     | <b>TEST</b> for clinical case <b>Category B and C only</b> | <p><b>CAT-A:</b> Strict Home Isolation and telephonic follow-up</p> <p><b>CAT- B:</b></p>   | <p>If positive for COVID 19- Admit /continue in COVID isolation ward</p>   | <p>2 samples, 24 hours apart are negative and clinically stable. Radiology clearance may be</p>   |

|     |                   |              |  |   |   |   |
|-----|-------------------|--------------|--|---|---|---|
|     |                   |              |  | <p>Based on clinical assessment either admit in Corona (COVID-19) Isolation Unit OR send for strict home isolation after collecting samples.</p> <p>Daily telephonic follow-up to be done.</p> <p><b>CAT-C:</b> Admit in designated COVID-19 isolation centre</p>   | <p>If negative strict home isolation</p> <p><b>HR</b> contact-28d</p> <p><b>LR-</b> contact 14d</p>   | <p>considered if x-ray was indicated.</p> <p>Patient has to be in home isolation for 14 days from last negative test result or 28 days from day of admission whichever is later.</p>  |
| 2.b | PRIMARY CONTACTS  | Asymptomatic | Testing Deferred   | <p>NO ADMISSION</p> <p>Close monitoring for onset of fever/ other symptoms; reclassify</p>  | <p><b>HR</b> contact-28d</p> <p><b>LR</b> contact-14d</p>   |   |
| 3.a | SECONDARY CONTACT | Symptomatic  | <b>TEST</b> for clinical case <b>Category B and C only</b> | <p><b>CAT-A:</b> Strict Home Isolation and telephonic follow-up</p> <p><b>CAT- B:</b></p> <p>Based on clinical assessment either admit in Corona (COVID19) Isolation Unit OR send for strict home isolation after collecting samples.</p> <p>Daily telephonic follow-up to be done.</p> <p><b>CAT-C:</b> Admit in designated COVID19 isolation centre</p> | <p>If positive for COVID 19- Admit /continue in COVID isolation ward</p> <p>If negative strict home isolation</p> <p><b>HR</b> contact-28d</p> <p><b>LR</b> contact-14d</p> | <p>2 samples, 24 hours apart are negative and clinically stable. Radiology clearance may be considered if x-ray was indicated.</p> <p>Patient has to be in home isolation for 14 days from last negative test result or 28 days from day of admission whichever is later.</p> |
| 3.b | SECONDARY CONTACT | Asymptomatic | Testing Deferred   | <p>NO ADMISSION</p> <p>Close monitoring for 14 days for onset of fever/ other symptoms; reclassify</p>  | <p><b>HR</b> contact-28d</p> <p><b>LR</b> contact-Avoid non-essential travel and community/s</p>  |   |

|     |   |              |  |  |   |  |
|-----|---|--------------|--|--|---|--|
|     |   |              |  |  | social contact for 14 days.   | -  |
| 4.a | A person who came to Kerala within the last 14 days from any country which has <b>reported</b> COVID 19 in the last 14 days but <b>no local transmission</b> , as updated in the daily situation report published by WHO. | Symptomatic  | <b>TEST</b> for clinical case <b>Category B and C only</b>   | <p><b>CAT-A:</b> Strict Home Isolation and telephonic follow-up</p> <p><b>CAT- B:</b></p> <p>Based on clinical assessment either admit in COVID19 Isolation Unit OR send for strict home isolation after collecting samples.</p> <p>Daily telephonic follow-up to be done.</p> <p><b>CAT-C:</b> Admit in designated COVID19 isolation centre</p> | <p>If positive for COVID 19- Admit /continue in COVID isolation ward</p> <p>If negative strict home isolation</p> <p><b>HR</b> contact-28d</p> <p><b>LR</b> contact-14d</p> | <p>2 samples, 24 hours apart are negative and clinically stable. Radiology clearance may be considered if x-ray was indicated.</p> <p>Patient has to be in home isolation for 14 days from last negative test result or 28 days from day of admission whichever is later.</p>                            |
| 4.b | A person who came to Kerala within the last 14 days from any country which has <b>reported</b> COVID 19 in the last 14 days but <b>no local transmission</b> , as updated in the daily situation report published by WHO  | Asymptomatic | Testing Deferred   | <p>NO ADMISSION</p> <p>Close monitoring for 14 days for onset of fever/ other symptoms; reclassify.</p>  | <p><b>HR</b> contact-28d</p> <p><b>LR</b> contact-Avoid non - essential travel and social/community contact.</p>  | -  |
| 5.a | A person who came to Kerala within the last 14 days from any country which has <b>NOT reported</b> COVID19 in the last 14 days, as updated in the daily situation report published by WHO                                 | Symptomatic  | Testing to be considered in a hospitalized patient with viral pneumonia without etiology* in consultation with institutional/district medical board. | <p>Admission location to be decided by institutional /district medical board.</p> <p>Close monitoring for onset of symptoms for 14 days.</p>   | <p><b>HR</b> contact-28d</p> <p><b>LR</b> Avoid non-essential travel and community/social contact for 14 days from last exposure.</p>                                       | <p>If positive discharge when 2 samples, 24 hours apart are negative and clinically stable. Radiology clearance may be considered if x-ray was indicated.</p> <p>Patient has to be in home isolation for 14 days from last negative test result or 28 days from day of admission whichever is later.</p> |

|     |   |              |  |  |  |   |
|-----|---|--------------|--|--|--|---|
| 5.b | A person who came to Kerala within the last 14 days from any country which has <b>NOT reported</b> COVID19 in the last 14 days, as updated in the daily situation report published by WHO | Asymptomatic | Testing deferred   | NO ADMISSION<br>Close monitoring for onset of fever/ other symptoms; reclassify.   | <b>HR-</b> 28 days<br><b>LR-</b> Avoid non-essential travel and community/social contact for 14 days from last exposure.   | -   |
| 6.a | Local Contacts of people coming from countries with reported local transmission   | Symptomatic  | <b>TEST</b> for clinical case <b>Category B and C only</b> | <b>CAT-A:</b> Strict Home Isolation and telephonic follow-up<br><b>CAT- B:</b><br>Based on clinical assessment either admit in Corona (COVID19) Isolation Unit OR send for strict home isolation after collecting samples.<br>Daily telephonic follow-up to be done.<br><b>CAT-C:</b> Admit in designated COVID19 isolation centre | If test Positive 28 days isolation<br>If test Negative:<br><b>HR</b> contact- 28d<br><b>LR</b> contact-Avoid non-essential travel and community/social contact for 14 days from last exposure. | 2 samples, 24 hours apart are negative and clinically stable. Radiology clearance may be considered if x-ray was indicated.<br>Patient has to be in home isolation for 14 days from last negative test result or 28 days from day of admission whichever is later |
| 6.b | Local Contacts of people coming from countries with reported local transmission   | Asymptomatic | Testing Deferred   | NO ADMISSION<br>Close monitoring for onset of fever/ other symptoms; reclassify.   | Avoid non-essential travel and community/social contact for 14 days from last exposure.  |   |
| 7.a | Health care provider having contact with a  | Symptomatic  | <b>TEST</b> for clinical case                              | If test positive   | Admit in isolation ward.   | 2 samples, 24 hours apart are negative and  |



|     |   |              |  |   |   |  |
|-----|---|--------------|--|---|---|--|
|     | confirmed case.   |              | <b>Category B and C only</b>                                 |   | 28 days isolation is required   | clinically stable. Radiology clearance may be considered if x-ray was indicated.   |
|     |   |              |  | If test negative  | 14 days of isolation  | Patient has to be in home isolation for 14 days from last negative test result or 28 days from day of admission whichever is later |
| 7.b | Health care provider having contact with a confirmed case.      | Asymptomatic | No testing   | No Admission  | No isolation  | -  |
| 8   | Any person with Viral Pneumonia irrespective of travel history* | -            | Testing for COVID19- Decision by Institutional Medical Board | Testing to be considered only in case of bilateral lung infiltrates, leucopenia or normal WBC count with lymphocytopenia. | Standard and transmission based precautions to be taken in the institution itself | -For the purpose of testing alone, patient should not be referred to designated centres.   |

**NB:**

\*Testing for COVID 19 to be considered in hospitalized viral pneumonia without an alternative diagnosis. This is to be considered in cases with bilateral lung infiltrates, normal or low total count with lymphocytopenia.

Decision of **repeat testing** for symptomatic patients from countries with local transmission to be decided by Institutional Medical Board.

**Treatment protocol** for proven cases of COVID 19 to be decided by Institutional Medical Board.

Decision with regard to patients coming from areas where local transmission has been reported **within the country** has to be decided by the institutional medical board

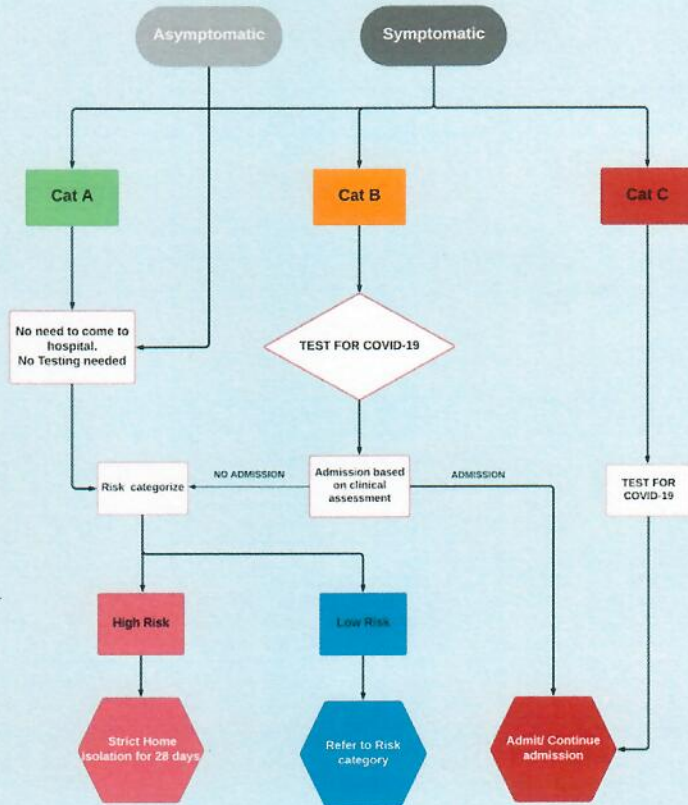
PART- IV

**SIMPLIFIED MATRIX FOR PERIOD OF ISOLATION/QUARANTINE AND TESTING**

|          |  |   |
|----------|--|---|
| <b>1</b> | Laboratory confirmed case of COVID 19  | 28 days of isolation/14 days from last negative test whichever is later                 |
| <b>2</b> | <b>HIGH RISK CONTACT</b>   | 28 days of isolation  |
| <b>3</b> | 1.LOW RISK CONTACT from a country/area with local transmission<br>2. Primary contact with LOW RISK<br>3.Symptomatic secondary contact with LOW RISK.<br>4. LOW RISK - symptomatic from a country without local transmission but with reported cases in last 14 days.<br>5.Symptomatic health care worker with contact with a proven case | 14 days of isolation  |
| <b>4</b> | 1.LOW RISK CONTACT from a country/area without local transmission<br>2. Asymptomatic Secondary contact with LOW RISK<br>3. LOW RISK- asymptomatic from a country without local transmission but with reported cases in last 14 days.<br>4.Local contacts of people coming from country/area with local transmission                      | Avoid non-essential travel and community/social contact for 14 days from last exposure. |
| <b>E</b> | For all symptomatic patients from COVID 19 affected countries with or without local transmission, symptomatic primary and secondary contacts, symptomatic high risk contacts.  | Testing to be done for Category B & C   |
| <b>F</b> | For symptomatic patients from COVID 19 unaffected country/area with evidence of viral pneumonia without etiological diagnosis.   | Decision on testing to be taken by Institutional/district medical board                 |
| <b>G</b> | Asymptomatic persons   | Testing deferred.   |

**CLINICAL DECISION MAKING ALGORITHM FOR PERSONS FROM COUNTRIES / AREAS WITH REPORTED TRANSMISSION OF COVID-19. PRIMARY CONTACTS, SECONDARY CONTACTS.**

1. A person within 14 days of return from a country / area with reported local  
2. Primary contacts  
3. Secondary contacts



Testing for COVID-19 to be considered in hospitalised viral pneumonia without an alternative diagnosis. This is to be considered in cases with bilateral lung infiltrates, normal or low total count with lymphocytopenia. Decision of repeat testing for symptomatic patients from countries with ongoing transmission to be decided by institutional medical board

All Symptomatics in home isolation will be telephonically followed up daily by the nearby Govt health facility. Adequacy of home isolation will be assessed by a checklist

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