GOVERNMENT OF ANDHRA PRADESH
HEALTH MEDICAL & FAMILY WELFARE DEPARTMENT

Sub: HMFW – COVID-19 – Protocol to be followed with COVID patient management - Regd;

Date: 28.3.2020

COVID INSTANT ORDER - 10

Government of India and Government of Andhra Pradesh have issued a number of protocols to be followed for management of COVID-19.

- As the number of COVID-19 cases are increasing in the state, it is very important that the protocols are strictly adhered to control the spread of cases and for the patient management in hospitals.
- A brief summary of these protocols is attached with this order.
- District Collectors shall follow these protocols (attached in Annexure) in testing, admitting, treating and discharging the suspect and positive patients.

In this regard, District Collectors shall ensure that:

1. All the suspects who are eligible for testing under the current guidelines are sent for testing
2. All the contact persons under the latest definition are being traced and put under surveillance
3. After the samples are collected from suspects, they are admitted to respective facilities according to their category.
4. If a suspect turns out positive, the patients have to be admitted to the respective designated COVID hospital.
5. Protocol is strictly followed for treatment and discharge of patients
6. Any news of death due to COVID-19 is released to press and public via the collector only
7. Nearest Common Bio Waste Treatment Facility (CBWTF) and SPCB is notified about opening of COVID-19 ward in the district and Bio medical waste from the hospitals, isolation wards and quarantine centre (if any) is treated scientifically

SPECIAL CHIEF SECRETARY TO GOVERNMENT

To
All the Collector & District Magistrates
Copy to:
All the Joint Collector & additional district magistrates
All the DM&HOs / DCHSs in the State
Table of Contents

COVID-19 Comprehensive Patient Management Protocol 1
    Testing Protocol 2
    2. After giving a sample and before the test result is out 2
    3. After a sample is tested Positive 4
    4. Treatment Protocol 5
    5. Discharge Policy 7
    6. Dead body management Protocol 8
COVID-19 Comprehensive Patient Management Protocol

The following is a brief summary of various protocols issued by the Government of India and Andhra Pradesh. The detailed documents are attached in Annexures below.

1. Testing Protocol

<table>
<thead>
<tr>
<th>Current Testing Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who to test ?</td>
</tr>
<tr>
<td>- Symptomatic people with travel history in last 14 days</td>
</tr>
<tr>
<td>- Symptomatic contacts of confirmed cases</td>
</tr>
<tr>
<td>- Symptomatic Healthcare workers</td>
</tr>
<tr>
<td>- Hospitalised ARDS patients</td>
</tr>
<tr>
<td>- Direct and High risk contacts of a confirmed case - between 5-14 days of coming into contact</td>
</tr>
<tr>
<td>- With co-morbid (diabetes, hypertension, cancer, HIV, immunosuppression) condition and elders (&gt; 65 years of age) who manifest symptoms</td>
</tr>
<tr>
<td>Who will collect samples?</td>
</tr>
<tr>
<td>Qualified ENT Surgeon/Pulmonologist/Physician/Trained Clinician</td>
</tr>
<tr>
<td>Staff required</td>
</tr>
<tr>
<td>Staff Nurse, Epidemiologist</td>
</tr>
<tr>
<td>Where</td>
</tr>
<tr>
<td>District wise list where sample collection is permitted</td>
</tr>
<tr>
<td>Sample Movement</td>
</tr>
<tr>
<td>District wise special officer</td>
</tr>
<tr>
<td>- For Transport to lab</td>
</tr>
<tr>
<td>MIS is getting ready to get real time updates.</td>
</tr>
</tbody>
</table>

- Latest definition of contact person:
  1. People providing direct care without proper personal protective equipment (PPEs) for COVID-19 patients.
  2. People staying in the same close environment (including workplace, classroom, household, gatherings).
  3. People traveling together in close proximity (1 m) with a symptomatic person who later tested positive for COVID-19.

2. After giving a sample and before the test result is out
<table>
<thead>
<tr>
<th>Category</th>
<th>Who - Case of suspect</th>
<th>Where will the suspect stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A</td>
<td>Symptomatic - Fever, Cough, Cold Respiratory Insufficiency Mild, Moderate, Severe Pneumonia Mild, Moderate, Severe ARDS With co-morbidities Age &gt;60 Pre-existing Pulmonary disease Chronic Kidney Disease Diabetes mellitus History of Hypertension History of cardiovascular disease History of transplant or other immunosuppression All Patients with HIV (regardless of CD4 count)</td>
<td>Stay in Isolation in the same location where sample is taken In case the number of suspects swells beyond the capacity of present location, they may be shifted to District level second line hospital.</td>
</tr>
<tr>
<td>Category B</td>
<td>Symptomatic Fever, Cough, Cold No Respiratory Insufficiency No co-morbidities Asymptomatic and with International travel history to high risk countries (European Union Countries, China, Iran, Gulf, USA, UK, South Korea)</td>
<td>Stay in Quarantine Center</td>
</tr>
<tr>
<td>Category C</td>
<td>Asymptomatic with International Travel History Contact History of COVID-19 positive patient</td>
<td>Stay in Home Isolation</td>
</tr>
</tbody>
</table>
3. After a sample is tested Positive

<table>
<thead>
<tr>
<th>Category A - mild and moderate cases (1,2A,2B categories in Treatment protocol below)</th>
<th>- To be admitted in District Covid Hospital (DCH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category B - severe and critical cases (3 and 4 categories in Treatment protocol below)</td>
<td>- To be admitted in State Covid Hospitals (SCH)</td>
</tr>
<tr>
<td>- Transportation of such confirmed COVID-19 cases shall happen ONLY thorough designated ambulances</td>
<td>- Designated Rapid Response Team (RRT) will be responsible for transportation of such confirmed cases as per protocol.</td>
</tr>
<tr>
<td>- Containment strategy to be adopted as per containment protocol.</td>
<td>-</td>
</tr>
</tbody>
</table>
### 4. Treatment Protocol

| Category-1 Treatment | Asymptomatic But Travel History Or Contact History | Vitamin B Complex 1 Bd X 5 Days  
Vitamin C 500mg 1-1-1 X 5 Days |
|----------------------|-------------------------------------------------|--------------------------------------------------|
| Category – 2 A Treatment | Mild-moderate Symptoms: Fever >100 F  
Coryza  
Cough  
Sore Throat  
Myalgia | Same As Above +  
1. Tab. Paracetamol 650 Mg  
2. Cough Syrup 5-10 Ml Tid X 5 Days Or  
3. Tab. Cetirizine X 5 Days |
| Lab Needed: Cbp, Esr, Rbs, Urea, Creatinine, Electrolytes, Ecg, Ecg, Cxr |
| Category - 2B Treatment | Above Symptoms With Comorbidities (Dm, Htn, Chronic Kidney Disease, Chronic Liver Disease, Copd, Hiv, Cancer, Pregnancy, On Immunosuppressive Medication) | Above +  
Tab. Hcq 400 Mg Bd Per Oral After Food X 1st Day  
200 Mg Bd Per Oral After Food X 4 Days  
In Pregnancy (Use Chloroquine)  
Tab. Chloroquine 250 Mg (Base 150 Mg) 4 Tabs And 2 Tab After 12 Hours Then 2 Tablets Twice A Day X 4 Days  
Tab. Oseltamivir 75mg Per Oral Bd 5 Days (Discontinue If Influenza Test Is Negative) |
| Lab: Cbp, Esr, Rbs, Urea, Creatinine, Electrolytes, Ecg, Cxr, 2d Echo, Usg Abdomen, H1n1, Covid Testing |
| Category – 3 Treatment | Severe disease  
RR>30  
Spo2<93  
Pao2/Fi02 <300  
Lung infiltrates > 50% of lung within 24-48 hrs. | Hydroxychloroquine 400 mg BD X Day 1  
Then 200mg BD X 4 Days (monitor QTc interval)  
Consider LOPINAVIR/RITONAVIR 200/50 mg 2 Tablets Twice a day if HCQ is contraindicated X 14 Days |
<p>| | | |
| | | |</p>
<table>
<thead>
<tr>
<th>Category: 4 Treatment</th>
<th>Critical Disease &gt; 1 Following Ards Sepsis Altered Consciousness Multi Organ Failure</th>
<th>Principles Of Management  ● Supportive Care In Icu  ● Mechanical Ventilator  ● Specific Prevention And Treatment Of Ards  ● Track Secondary Bacterial &amp; Opportunistic Infections  ● Prevention Of Subsequent Lung Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Treatment:  Tab . Hydroxychloroquine 400mg Bd X 1 Day  Then 200 Mg Bd X 4 Days  Crush &amp; Administer Through Ngt If Unable To Take Orally   Tab . Lopinavir/Ritonavir 200 Mg/50 Mg 2 Tab Per Oral Twice A Day X 14 Days  Syrup Through Nasogastric Tube If Unable To Take Orally</td>
</tr>
</tbody>
</table>
5. Discharge Policy

Send clinical samples for testing of COVID-19

Sample result negative  Sample result positive

The discharge will be guided by clinical condition of the case. He/she shall be monitored for 14 days from their date of arrival to India/last exposure whichever is latest.

Confirmed case management protocol

After symptoms have subsided,
First Sample: 14 days after collection of COVID-19 positive confirmation. If it is tested negative, a second sample is collected 24 hours after the first.
Second Sample: If this also comes out negative, the patient is discharged. After discharging, person should be under home isolation for 14 days. If second sample is tested positive, third sample has to be taken on 24th day.

Note: Discharge after clinical clearance and chest radiograph cleared and two specimens turn negative.
6. Dead body management Protocol

The communication about a death in the hospital to follow the following protocol and Collector is to reveal to the press the news about any death.

<table>
<thead>
<tr>
<th>Hospital Superintendent</th>
<th>Designated special officer for COVID19</th>
<th>District Collector</th>
</tr>
</thead>
</table>

**Hospital Staff**
- Health worker with PPE to remove the dead body from the ward
- Plug oral, nasal orifices and place the dead body in a leak-proof plastic body bag.
- Body Bag to be wrapped with mortuary sheet or sheet provided by family members
- Embalming of dead bodies should not be allowed.
- Autopsies to be avoided

**Family Members**
- Dead body can be handed over after the body bag wrapping
- Vehicle after transfer of body to cremation/burial staff will be disinfected with 1% sodium hypochlorite
- Bathing, kissing, hugging, etc. of the dead body should not be allowed.
- Large gatherings at the crematorium/burial grounds should be avoided as a social distancing measure as it is possible that close family contacts may be symptomatic and/or shedding the virus.
- Ash can be handed over and can be taken for ritual purpose
- Special counselling for burial ground staff

**IMP**:

1. Report opening or operation of COVID-19 ward and COVID ICU ward to SPCBs and respective CBWTF located in the area.
   a. Sanitation staff to be given PPE
2. Persons operating Quarantine camps/centers should call the CBWTF operator to collect biomedical waste as and when it gets generated.
   a. Once the quarantine centers are converted to isolation wards, then sanitation staff needs to be trained and contractor needs to be engaged

| Isolation Wards and all Hospitals | • All the waste/dedicated trolleys/dedicated collections bins should be labelled as “Covid-19 Waste”
|                                 | • Color coding as per general BMWM Rules, 2016
|                                 | • Double layered bags (using 2 bags) should be used for collection of waste from COVID-19 isolation wards so as to ensure adequate strength and no-leaks;
|                                 | • Maintain separate record of waste generated from COVID-19 isolation wards
|                                 | • The (inner and outer) surface of containers/bins/trolleys used for storage of COVID-19 waste should be disinfected with 1% sodium hypochlorite solution daily. |
| Quarantine Camps/Homes or Home-Care facilities | • Biomedical waste if any generated from quarantine centers/camps should be collected separately in yellow colored bags (suitable for biomedical waste collection) provided by ULBs.
|                                 | • These bags can be placed in separate and dedicated dust-bins of appropriate size.
|                                 | • General waste from Quarantine Camps / Quarantine-Home / Home-care shall be disposed as Solid waste as per provisions under SWM Rules, 2016. |

- Overall medical management - by treating Physician
  - Block wise, a Special Professor will be appointed by DME for overall coordination