COVID-19:
MASTER CIRCULAR ON MANAGEMENT OF HEALTHCARE FACILITIES AND QUARANTINE, ISOLATION & TREATMENT

Contents

1. Additional Guidelines for Management of Temporary Medical Camps | HFW (09-May-2020) 3
2. Guidelines for Quarantine | SRC (08-May-2020) ................................................................. 7
3. Registration of unregistered returnees in Temporary Medical Camps (TMCs) | SRC (06-May-2020) ......................................................................................................................... 12
5. Approval of unit cost for running of Temporary Medical Camps (TMCs) for the people stranded outside the State who intend to come back to Odisha after the lockdown period (27-Apr-2020) ................................................................................................................................. 23
6. Temporary Medical Camps (TMCs) to accommodate and quarantine people coming from outside the state (22-Apr-2020) ........................................................................................................ 30
7. Protocol for using Rapid Antibody Test in Bhubaneswar (18-Apr-2020) ................................ 35
8. Declaration of Fever Clinics (09-Apr-2020) ............................................................................. 40
11. Preparedness and management of quarantine centres identified by the District Administration (30-Mar-2020) ......................................................................................................................... 73
17. Instructions for People coming from abroad (16-Mar-2020) ............................................. 147
1. Additional Guidelines for Management of Temporary Medical Camps | HFW (09-May-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Health &amp; Family Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Issue</td>
<td>09-May-2020</td>
</tr>
</tbody>
</table>
GOVERNMENT OF ODISHA

HEALTH & FAMILY WELFARE DEPARTMENT

Shubaneswar Dated the 9/5/2020

No. 10919 /H.
(MWP 0041-001-2020)

From:

Pradip Kumar Mohapatra, IAS
Additional Chief Secretary to Government

To:

All Collectors & District Magistrates,
All Municipal Commissioners,
All Executive Officers of Urban Local Bodies

Sub—Additional Guidelines for Management of Temporary Medical Camps.

Sir,

To ensure infection control at Temporary Medical Camps/Quarantine Centres across the State, the districts are to ensure the following actions:

(i) The Dos and Don’ts (IN Odia) for occupants at TMCs as annexed herewith is to be displayed at all TMCS and to be followed strictly therein.

(ii) After initial screening all the Symptomatic Cases are to be isolated from the rest of the inhabitants and should be segregated and shifted to Covid Care Centres (CCC). Some of the un-occupied quarantine centres may be converted into CCC if adequate CCCs are not available. Collectors shall ensure that this is strictly implemented.

(iii) All vulnerable groups like Pregnant and Lactating mothers, Under 5 Children, Physically and Mentally Challenged persons, Trans Genders and persons with age above 60 years and co-morbid conditions (diabetes, asthma, kidney disease or hypertension) are to be tested on priority for Covid-19. They are then to be discharged for home quarantine, if found negative.

(iv) Where possible, TMCS are to be kept under CC TV Surveillance, to ensure compliance to social distancing norms.

These may please be followed meticulously.

Yours Faithfully

Additional Chief Secretary to Government

Scanned with CamScanner
Memo No. 10920 /H.

Copy forwarded to the OSD to Chief Secretary, Odisha for kind information of Chief Secretary.

Memo No. 10921 /H.

Copy forwarded to the A.C.S.-cum-S.R.C., Odisha / Principal Secretary to Government, P.R.&D.W. Department for kind information and necessary action.

Memo No. 10922 /H.

Copy forwarded to all CDM&PHO for favour of information and necessary action.

Special Secretary to Government

Dt. 9/5/2020

Special Secretary to Government

Dt. 9/5/2020

Special Secretary to Government

Dt. 9/5/2020

Scanned with CamScanner
ତେଳାର ତେଳାର ଚିଠିରକୁ ଏକ କାର୍ଯ୍ୟ, ଦହାରେ ଦିକ୍ତିର କାର୍ଯ୍ୟ କୁଟୁବ୍ବ କରୁ ନାହିଁ

cେତୁରେ:

କେଳ୍ଟଳାର ତେଳାର କାର୍ଯ୍ୟ କରାଲେ ଏହି ହୁଐବା ଲାଗବା。

ଦ) ଯୁବା ଯୁବା ଗାଲ ହୋଇବା。

ପାଇବା ଗାଢ଼ିର ଲାଗରେ ସମ୍ବନ୍ଧରେ ପୂଢ଼ିବା。

ଫା) ମମ, ପାମ, ପାମ, ପାବନ, ଦେବ ହେବ ଦେବ ଦେବ ଦେବ ଦେବ ଦେବ ଦେବ ଦେବ ଦେବ

ବ୍ୟକ୍ତି ବିଭାଗର ମନାଣା ବିଭାଗ ବିଭାଗ ବିଭାଗ ବିଭାଗ ବିଭାଗ ବିଭାଗ ବିଭାଗ ବିଭାଗ ବିଭାଗ ବିଭାଗ

କଲଣ୍ଡଣ୍ଡା:

ଧର୍ମକୁ, ଧର୍ମକୁ ଧର୍ମକୁ ଧର୍ମକୁ ଧର୍ମକୁ ଧର୍ମକୁ

ତେଳାଦାର ମିତ୍ର(ବେଡ) ଭାଗ୍ରେ, ଭାଗ୍ରେ, ଭାଗ୍ରେ, ଭାଗ୍ରେ, ଭାଗ୍ରେ ଭାଗ୍ରେ ଭାଗ୍ରେ ଭାଗ୍ରେ ଭାଗ୍ରେ

ପ୍ରକାଶ ଭାଗ୍ରେ, ଭାଗ୍ରେ, ଭାଗ୍ରେ, ଭାଗ୍ରେ ଭାଗ୍ରେ ଭାଗ୍ରେ ଭାଗ୍ରେ ଭାଗ୍ରେ

ପାଇଁ ବାଣାଦୁ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ

୧) କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା

୪) କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା

ପାଇଁ ବାଣାଦୁ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ ଜାହେ

କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା

୨) କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା କର୍ତ୍ତର କୂଖ୍ୟା ରଖାବା

ସମୀତି "ଓଡ଼ିଶା" ଗାଲ ହୋଇବା ତେଳାର ସମୀତି "ଓଡ଼ିଶା" ଗାଲ ହୋଇବା ତେଳାର ସମୀତି "ଓଡ଼ିଶା" ଗାଲ ହୋଇବା ତେଳାର ସମୀତି "ଓଡ଼ିଶା" ଗାଲ ହୋଇବା

---

Scanned with CamScanner
2. Guidelines for Quarantine | SRC (08-May-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Office of Special Relief Commissioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>2582/R&amp;DM(DM)</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>08-May-2020</td>
</tr>
</tbody>
</table>
WHEREAS, the Government Odisha in Revenue & DM (Disaster Management) Department vde Notification No.2232/R&DM(OM) dated 19th April 2020, has directed that every person on return from outside Odisha shall have to compulsorily stay in Quarantine for 14 days observing the guidelines issued by the Health & Family Welfare Department and task of managing the Panchayat level Quarantine Facilities (Temporary Medical Centres) has been assigned to the Sarpanch of the concerned Gram Panchayat and they have been empowered to enforce the provisions of quarantine and social distancing;

AND WHEREAS, it has been found in many cases that persons under quarantine are testing COVID-19 positive after the quarantine period of 14 days and therefore, it is felt necessary to extend the period of quarantine against COVID-19;

AND WHEREAS, due to influx of large number of people from other States, it may not be possible to accommodate them in the Temporary Medical Centres/ Quarantine Facilities of their native Gram Panchayats;

AND WHEREAS, in some cases, the Temporary Medical Centres/ Quarantine Facilities created at Gram Panchayat level may not have sufficient capacity to accommodate all the people of that Gram Panchayat returning from other States;

AND WHEREAS, the Government of India in Ministry of Health & Family Welfare has laid down the guidelines for home quarantine;

NOW THEREFORE, in partial modification of earlier orders, the State Government do hereby give the following directions to effectively deal with the situation:

1. In consultation with health experts and considering various reports about COVID-19 incubation period, as a matter of abundant caution, the State Government has decided that henceforth, the quarantine period for all the
people returning to Odisha will be 28 days at Temporary Medical Camps. However, depending on satisfactory conduct during the institutional quarantine and health after 21 days of mandatory institutional quarantine, the quarantinee may be allowed Home Quarantine for the remaining 7 days. During the period of home quarantine, the concerned person shall strictly observe the prescribed SoP for home quarantine and in case of any violation, stringent penal action will be taken against him/ her. GPNOWHO will verify and ensure that the people in home quarantine follow the prescribed protocols without any violation.

2. TMC in-charge may involve the quarantinees in food preparation, campus cleanliness, sanitation of the facility, development of the campus and its facilities like repair works of the TMC, levelling/ development of nearby playground as well as plantation within and near the TMC campus. In case the quarantinees contribute voluntary service for such activities, incentives of INR 150 per day for up to 10 days (i.e. up to INR 1500 per quarantinee), as honorarium will be paid from CMRF.

3. TMC in-charge will engage the quarantinees in maintaining good physical and mental health by organising yoga, cultural activities, book reading and storytelling, drawing and painting competitions and other such activities with the support of local NGOs, CBOs, teachers, anganwadi workers, health workers and volunteers registered under COVID Sangrami portal. Further, the GPNOWHO will issue certificate for good behaviour, discipline and voluntary contribution for select quarantinees on basis of their behavior, conduct and participation in voluntary works during the quarantine period.

By order of the Governor

[Signature]

Chief Secretary, Odisha
Memo No. 2583/R&DM(DM)  Date: 08-05-2020
Copy forwarded to the Private Secretary to Hon’ble Chief Minister/ Private Secretary to all Ministers/ Chief Secretary/ Development Commissioner/ Agriculture Production Commissioner for kind information.

Special Relief Commissioner & Additional Chief Secretary to Govt. (Disaster Management)

Memo No. 2584/R&DM(DM)  Date: 08-05-2020
Copy forwarded to the Addl. Chief Secretary/ Principal Secretary/ Commissioner-cum-Secretary of all Departments/ Director General of Police/ Director General of Police Fire Services/ Police Commissioner, Bhubaneswar-Cuttack/ All RDCs/ All Collectors/ All Superintendents of Police/ All Municipal Commissioners for kind information and immediate necessary action.

Special Relief Commissioner & Additional Chief Secretary to Govt. (Disaster Management)

Memo No. 2586/R&DM(DM)  Date: 08-05-2020
Copy forwarded to the Member Secretary, National Disaster Management Authority/ Joint Secretary (Disaster Management) Ministry of Home Affairs (Disaster Management Division), Government of India for kind information.

Special Relief Commissioner & Additional Chief Secretary to Govt. (Disaster Management)
3. Registration of unregistered returnees in Temporary Medical Camps (TMCs) | SRC (06-May-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Office of Special Relief Commissioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>2509/R&amp;DM(DM)</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>06-May-2020</td>
</tr>
</tbody>
</table>
Government of Odisha
Office of Special Relief Commissioner

Letter No. 2500/R&DM(DM), Date: 06.05.2020

To:
All Collectors
All Municipal Commissioners

Sub: Registration of unregistered returnees in Temporary Medical Camps (TMCs)

Upon arrival of returnees at the TMCs, GPNO/WNO shall check the registration status of each returnee on the state portal. Those who have not registered on the state portal https://covid19.odisha.gov.in have to be spot-registered on the portal at the TMC level by GPNO/WNO.

The returnees already under quarantine before 07.05.2020, if not already registered, shall also be similarly registered on the portal.

The GPNO/WNO shall check-in (and check-out when they complete the quarantine period) all returnees on the system.

[Signature]
Special Relief Commissioner &
Additional Chief Secretary to Govt.
(Disaster Management)

Scanned with CamScanner
Memo No. 2510/R&D(MM) Date: 06-05-2020

Copy forwarded to the Private Secretary to Hon'ble Chief Minister/ Private Secretary to all Ministers/ Chief Secretary/ Development Commissioner/ Agriculture Production Commissioner for kind information.

Special Relief Commissioner &
Additional Chief Secretary to Govt.
(Disaster Management)

Memo No. 2511/R&D(MM) Date: 06-05-2020

Copy forwarded to the Addl. Chief Secretary/ Principal Secretary/ Commissioner-cum-Secretary of all Departments/ Director General of Police/ Shri Amitabh Thakur, IPS, Special Secretary, Home Dept./ Transport Commissioner/ All Revenue Divisional Commissioners for kind information and necessary action.

Special Relief Commissioner &
Additional Chief Secretary to Govt.
(Disaster Management)

Scanned with CamScanner

<table>
<thead>
<tr>
<th>Department</th>
<th>Health &amp; Family Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>-</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>03-May-2020</td>
</tr>
</tbody>
</table>
Government of Odisha

Date: 09.08.2020

Subject: Odisha Prisons Department

The Director

The administrative department of prisons (Odisha) has decided to transfer the following senior officers of the Odisha Prisons Department to the following posts:

- Prisons Officer
- Assistant Commissioner

- Prisons Officer

This transfer is effective from 10.08.2020.

Date: 09.08.2020

Signature

Gomia, 09.08.2020
Government of Odisha

নদন মনোরং।

মন্ত্রণালয়

নিযুক্তি চিঠি

নরেন্দ্র মোদি

নিযুক্তি চিঠি

নরেন্দ্র মোদি

নিযুক্তি চিঠি

নরেন্দ্র মোদি
Government of Odisha

(ଆଜକା ଦିନରେ ରାଜ୍ୟ ର ପ୍ରାରଂଭିତ କ୍ରମର ବିଶେ ଲେଖନ ପ୍ରକାଶ କରନାମ ୨୦୨୦ ଜନ୍ମ ବୃତ୍ତି ପରିଶ୍୰ ଆବଶ୍ୟକ କରିଛନ୍ତି) ଜାନନାମ ପ୍ରିଁୟକୁ ଆରାମ କରିବା ପାଇଁ ନାମ କରିବନ୍ତି। ଆଜକା ଦିନ ରାଜ୍ୟ କୁ ଆରୋପ କରିବା ପାଇଁ ନାମ କରିବନ୍ତି।

2) ସମାଜ ରହିବାନା ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।
3) ଆରାଧନା କରାଲେ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।

ଫ୍ରେଂଡ୍ସ ଏବଂ ପ୍ରକାଶ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି। ଆରାଧନା କରାଲେ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।

4) ସମାଜ ରହିବାନା ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।
5) ଆରାଧନା କରାଲେ ପରିଶ୍୰ୁ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।

କପାଲ ବାଣିଜ୍ୟ ସଂଦେଶ ପରିଶ୍୰ ଭୋଜ୍ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।

6) ଆରାଧନା କରାଲେ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।
7) ଆରାଧନା କରାଲେ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।

8) ଆରାଧନା କରାଲେ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।

9) ଆରାଧନା କରାଲେ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।
10) ଆରାଧନା କରାଲେ ପରିଶ୍୰ ଭୋଜ୍ ଗୁଣରେ କରନ ପାଇଁ ନାମ କରିବନ୍ତି।

ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନାମ ପାଇଁ ନାମରେ କରିବନ୍ତି:

• କୁଟୁଭ କରିବାରୁ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନାମ ପାଇଁ ନାମ କରିବନ୍ତି।
• କୁଟୁଭ କରିବାରୁ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନାମ ପାଇଁ ନାମ କରିବନ୍ତି।
• ପ୍ରିଁ କରିବାରୁ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନାମ ପାଇଁ ନାମ କରିବନ୍ତି।
• ପ୍ରିଁ କରିବାରୁ ପରିଶ୍୰ ଭୋଜ ଗୁଣରେ କରନାମ ପାଇଁ ନାମ କରିବନ୍ତି।
• ଏଡ଼ିଯା ରହିଥାବା ଛନ୍ଦ ଲିଖନ୍ତା。
• ରାଜାର ଓ ରାଜେଶ୍ୱ ମାତ୍ର ଏହି ତଣ୍ଡରକ ଗୃହ ରମନ୍ତ ସକଲା ଦରଶାବାଁ କେଉଁ କରଣା ଲିଖିତ କରନ୍ତୁ କେଉଁ କର୍କେ ବିଶ୍ୱାସ ରଖିବାକୁ କାରପାନ୍ନା କରନ୍ତୁ।
• ନୃତ୍ୟ କରିବା ଲିଖନ୍ତା。
• ମାନିକ୍ଯାର ଯାଗତ ଚଖା, ବାଲ ବାଲୀବାଳୀବାଳି ତେବେ ଏହି ତଣ୍ଡରକ ଗୃହ ରମନ୍ତ ସକଲା ଦରଶାବାଁ କେଉଁ କରନ୍ତୁ କେଉଁ କର୍କେ ଉଭାଜନ୍ତୁ କରନ୍ତୁ।
• ତାକୁ ଏହି ତଣ୍ଡରକ ଗୃହ ରମନ୍ତ ସକଲା ଦରଶାବାଁ କେଉଁ କରନ୍ତୁ କେଉଁ କର୍କେ ତେବେ ବିଶ୍ୱାସ ରଖିବାକୁ କାରପାନ୍ନା କରନ୍ତୁ।
• ତାକୁ ଏହି ତଣ୍ଡରକ ଗୃହ ରମନ୍ତ ସକଲା ଦରଶାବାଁ କେଉ�퍬 କରନ୍ତୁ କେଉ�퍬 କର୍କେ ଉଭାଜନ୍ତୁ କରନ୍ତୁ।
• ନୃତ୍ୟ କରିବା ଲିଖନ୍ତା।
• ସାତକାକ୍ତା ମାନ୍ଯତା ବେଠା କରିବା ଲିଖନ୍ତା।
• ତାକୁ ଏହି ତଣ୍ଡରକ ଗୃହ ରମନ୍ତ ସକଲା ଦରଶାବାଁ କେଉ�퍬 କରନ୍ତୁ କେଉ�퍬 କର୍କେ ଉଭାଜନ୍ତୁ କରନ୍ତୁ।
• ନୃତ୍ୟ କରିବା ଲିଖନ୍ତା।

ସେତୁତ୍ତେ ଯେଉଁ ପ୍ରତ୍ୟେକ ପ୍ରକାଶରେ ଏହି ତଣ୍ଡରକ ଗୃହ ରମନ୍ତ ସକଲା ଦରଶାବାଁ କେଉ�퍬 କରନ୍ତୁ କେଉ�퍬 କର୍କେ ଉଭାଜନ୍ତୁ କରନ୍ତୁ।
• ସାତକାକ୍ତା ମାନ୍ଯତା ବେଠା କରିବା ଲିଖନ୍ତା।
• ତାକୁ ଏହି ତଣ୍ଡରକ ଗୃହ ରମନ୍ତ ସକଲା ଦରଶାବାଁ କେଉ�퍬 କରନ୍ତୁ କେଉ�퍬 କର୍କେ ଉଭାଜନ୍ତୁ କରନ୍ତୁ।
• ନୃତ୍ୟ କରିବା ଲିଖନ୍ତା।

-6-
3. ରମନ୍ଦରାଙ୍କ ପଶ୍ଚାତି ରମନ୍ଦରାଙ୍କ ପଶ୍ଚାତି ରମନ୍ଦରାଙ୍କ ପଶ୍ଚାତି

4. କୃଷୀନାଗର କୃଷୀନାଗର କୃଷୀନାଗର କୃଷୀନାଗର

5. ସରକାର ସରକାର ସରକାର ସରକାର

6. ପରିନାମ ପରିନାମ ପରିନାମ ପରିନାମ
ତୃତୀୟ ବଣିଝାର ବର୍ଷାର ଅବସାନାପାଇଁ

ଅପ୍ରତ୍ୟେକ

ପ୍ରଭାବନ୍ତି ନୂଆ କାର୍ଯ୍ୟ ଅପ୍ରତ୍ୟେକ ଅବସାନାପାଇଁ ଗ୍ରହଣ କରନ୍ତୁ। କର୍ତ୍ତାରେ ବାକ୍ୟର ବର୍ଷାର ସମୟରେ ଏବଂ
ଘଟନାର ବାତାବ୍ୟ କାର୍ଯ୍ୟ ଭାବନା ରଚତାରେ (ICMR – SRF Form) ଏକ ବିଷୟରେ ଦାଣ୍ଡରେ
କରନ୍ତୁ।

ପ୍ରଭାବନ୍ତି ନୂଆ କାର୍ଯ୍ୟ ଆବର୍ତ୍ତିତ ବାତାବ୍ୟରେ ଚିହ୍ନିତ କରାଇବାକୁ 

• ସମ୍ଭବ ମଧ୍ୟରେ ପ୍ରତ୍ୟେକ ବର୍ଷାରେ କରାଯାଇବାକୁ;

• ନ୍ଯାଯ ଆବାବ୍ୟରେ କରାଯାଇବାକୁ;

• ହିମ୍ମତ;

• ଅନ୍ୟରେ କରାଯାଇବାକୁ;

ଯହାନ୍ତେ କର୍ତ୍ତର ଓଡ଼ିଶା (BWC) 2021 ତେ଱ର ଅନୁମାନରେ ଅଭିଲୈତ ହେବା ପାଇଁ

କାର୍ଯ୍ୟ ଅପ୍ରତ୍ୟେକ ବର୍ଷରେ

• ଆକ୍ଷେପକ ବାତାବ୍ୟ ବାହ୍ଯରେ କରାଯାଇବାକୁ ଭାବନା ଆପାତରେ ଅପ୍ରତ୍ୟେକ ବର୍ଷରେ କରାଯାଇବାକୁ;

• ଆକ୍ଷେପକ ବାତାବ୍ୟ ବାହ୍ଯରେ କରାଯାଇବାକୁ ଭାବନା ଆପାତରେ ଆପାତରେ କରାଯାଇବାକୁ;

କାର୍ଯ୍ୟରେ ଆକ୍ଷେପକ ବାତାବ୍ୟ

• ଆକ୍ଷେପକ ବାତାବ୍ୟ ବାହ୍ଯରେ କରାଯାଇବାକୁ;

• ଆକ୍ଷେପକ ବାତାବ୍ୟ ବାହ୍ଯରେ କରାଯାଇବାକୁ;

• ଆକ୍ଷେପକ ବାତାବ୍ୟ ବାହ୍ଯରେ କରାଯାଇବାକୁ;
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Item 1</td>
<td>100</td>
<td>units</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Item 2</td>
<td>50</td>
<td>units</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>Item 3</td>
<td>20</td>
<td>units</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Item 4</td>
<td>15</td>
<td>units</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Item 5</td>
<td>10</td>
<td>units</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Item 6</td>
<td>5</td>
<td>units</td>
<td>5</td>
</tr>
</tbody>
</table>

Total: 210 units
5. Approval of unit cost for running of Temporary Medical Camps (TMCs) for the people stranded outside the State who intend to come back to Odisha after the lockdown period (27-Apr-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Revenue &amp; Disaster Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>2332/R&amp;DM(DM)</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>27-Apr-2020</td>
</tr>
</tbody>
</table>
From
Pradeep Jena, IAS
Special Relief Commissioner &
Principal Secretary to Government
(Disaster Management)

To
The Principal Secretary to Government,
Panchayati Raj & DW Department/ Housing and UD Department

Sub: Approval of unit cost for running of Temporary Medical Camps (TMCs) for the people stranded outside the State who intend to come back to Odisha after the lockdown period

Ref: PR&DW Department letter No.7767/ dated 24.4.2020

Sir,
The Government has approved the following expenditure for Temporary Medical Camps (TMCs) for the people stranded outside the State who intend to come back to Odisha after the lockdown period:

1. Food expenditure: Rs.120/- per Adult Per day and Rs.100/- per Child below 14 years per day for the period of 14 days from the date of report in the GP/ ULB.

2. Personal Hygiene Kit (for the 14 Day period): Rs.300/- per person (tooth brush, paste, tongue cleaner, soaps, oil, razor, masks, sanitary pad, mug, bottle, bucket, etc.)

3. Two bed sheets and two pillow covers may be procured for each bed (Where not available on hire or not procured out of other fund).

4. Cleaning, Sanitation, Security: Cost as per actual not exceeding Rs.2000/- per day per facility.

Procurement of Beds (cots and mattresses, pillows) may be made through hiring and hiring cost can be charged to SDRF. If these have to be procured, funds under other schemes of the concerned Department may be utilized.

Detailed account of persons kept in the TMC shall be maintained in a register. The data of such people shall be uploaded in the official website of the concerned district.

Details of people engaged for cleaning and maintenance of the facilities shall also be maintained for record.

This norm shall also be applicable to H & UD Dept for all ULBs.

The Guidelines for Management of Temporary Medical Camps / Quarantine Centres is attached, which may be followed in letter and spirit for smooth management of the camps.

Yours faithfully,

Pradeep Jena, IAS
Special Relief Commissioner &
Additional Chief Secretary to Govt.
(Disaster Management)
Memo No. 2333/R&DM(DM) Date: 27-04-2020

Copy along with copy of Guidelines forwarded to the Private Secretary to Hon'ble Chief Minister/ Private Secretary to all Ministers/ Chief Secretary/ Development Commissioner/ Agriculture Production Commissioner for kind information.

Special Relief Commissioner &
Additional Chief Secretary to Govt.
(Disaster Management)

Memo No. 2334/R&DM(DM) Date: 27-04-2020

Copy along with copy of Guidelines forwarded to the Addl. Chief Secretary/ Principal Secretary/ Commissioner-cum-Secretary of all Departments/ Director General of Police/ Director General of Police Fire Services/ Police Commissioner, Bhubaneswar-Cuttack/ All RDCs/ All Collectors/ All Superintendents of Police/ All Municipal Commissioners for kind information and immediate necessary action.

Special Relief Commissioner &
Additional Chief Secretary to Govt.
(Disaster Management)
Guidelines for Management of Temporary Medical Camps / Quarantine Centres

Government has ordered the Panchayati Raj Department and Housing & Urban Development Department to maintain Medical Centres where people from outside the State on their return to their villages or towns shall be quarantined mandatorily for a period of fourteen (14) days before being allowed to go to their homes, if found otherwise fit. The task of managing these centres in turn has been assigned to Gram Panchayats (GPs) & Urban Local Bodies (ULBs), who have also been instructed to register all such people intending to return to the State mandatorily. No one from outside the State shall go to their homes / houses without being subjected to and satisfactorily completing the mandatory quarantine in a place so ordered / allowed by the concerned Gram Panchayat or ULB.

It is, therefore, important that GPs/ ULBs, select and prepare such number and with such bed capacity of Medical / Quarantine facilities with provision for accommodation along with facilities for bath and toilets, etc. While preparing such facilities, it must be kept in mind that people who may be required to be quarantined may comprise of men, women and children and people of all ages - old to children and infants and people with sickness, physically and mentally challenged. Among women, there may be some pregnant and lactating women and adolescent girls. While organizing such facilities, needs of each of these category of people must be taken into consideration. The three sacred principles that must be kept in mind and must be followed are (a) Privacy (b) Safety and (c) Dignity. As far as Privacy is concerned separate rooms, baths and toilets must be arranged for men and women. In case there are people from LGBT community, separate provisions should be made. Special needs of differently abled people must also be addressed. When it comes to Safety, all persons so accommodated should never have a feeling of being under threats of any kind. Safety of women and children and their security concerns need to be addressed specially. Dignity of individuals must be respected by all concerned – those managing the facilities and those who stay there. Respect for individuals – their religion, caste, and faith and beliefs must be respected. No discrimination of any sort shall be practised, promoted or tolerated.

Social distancing and personal hygiene being the only known method to break the chain of spread of COVID-19 infection from person to person, it needs to be meticulously observed especially in camps both by the inmates and service personnel. Camp manager will ensure this in letter and spirit.

The following guidelines shall be followed for smooth management of TMCs and quarantine centres.

<table>
<thead>
<tr>
<th>Camp arrangement</th>
<th>1. A register will be maintained in the camp containing details about the people staying including information about pregnant women, infants, elderly, people with existing health condition and persons with disability.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. There will be an information board containing the contact details of Sarpanch, GP Nodal Officer, Local Medical Officer, ASHA, Anganwadi Worker, and ANM.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3.</td>
<td>The beds should be arranged in such a way that at least one meter distance remains between 2 beds.</td>
</tr>
<tr>
<td>4.</td>
<td>Appropriate planning &amp; demarcations shall be made in advance to ensure social distancing in the camp. Required disabled-friendly arrangements shall also be made, wherever required, to the extent possible.</td>
</tr>
<tr>
<td>5.</td>
<td>Separate rooms and separate toilet arrangement to be made for men and women.</td>
</tr>
<tr>
<td>6.</td>
<td>Separate room for LGBT members, if any, may be arranged.</td>
</tr>
<tr>
<td>7.</td>
<td>If possible, separate room for pregnant women/lactating mothers may be arranged.</td>
</tr>
<tr>
<td>8.</td>
<td>Appropriate arrangements for cleaning and drying of clothes by the inmates shall be made.</td>
</tr>
<tr>
<td>9.</td>
<td>Proper light and fan arrangement to be made. Electrical safety must be adhered to.</td>
</tr>
<tr>
<td>10.</td>
<td>Adequate number of plug points may be provided for mobile charging.</td>
</tr>
<tr>
<td>11.</td>
<td>Local police shall be kept informed about the location of the camp and number of people staying in it. Police may be requested to make basic security arrangement or arrange for regular and periodic visit to such camps during day as well as at night.</td>
</tr>
<tr>
<td>12.</td>
<td>Banners/Posters containing information on Do’s and Don’ts for prevention of spread of COVID-19 and social distancing should be displayed in appropriate places in the camp.</td>
</tr>
<tr>
<td>13.</td>
<td>The camp manager may explore possibility of arranging story telling by the local teacher or AW Worker/Health Worker for the children to keep them engaged. Similarly, ‘Puraana Patha’ or any other activity may be organized for others.</td>
</tr>
<tr>
<td>14.</td>
<td>Voluntary support of NGOs, CSOs and other such local organizations/individuals may be taken for organizing yoga session, painting competition for children, Antakshyari, motivational talk, story telling, health care awareness discussions, etc. psycho-social counseling by trained personnel and other activates in the camp.</td>
</tr>
<tr>
<td>15.</td>
<td>The services of trained personnel available with the District Legal Services Authority may also be utilized for above activities.</td>
</tr>
</tbody>
</table>
16. District Administration and camp managers may utilize the volunteers registered in the new COVID SANGRAMI volunteer portal created by OSDMA.

**Items to be provided free of cost to each inmate in the camp**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tooth brush-1</td>
<td>1</td>
</tr>
<tr>
<td>2. Tongue cleaner-1</td>
<td>1</td>
</tr>
<tr>
<td>3. Small tooth paste-1</td>
<td>1</td>
</tr>
<tr>
<td>4. Bathing soap (50-75 gm)-1</td>
<td>1</td>
</tr>
<tr>
<td>5. Washing soap (150-200 gm)-1</td>
<td>1</td>
</tr>
<tr>
<td>6. Bucket-1</td>
<td>1</td>
</tr>
<tr>
<td>7. Plastic mug-1</td>
<td>1</td>
</tr>
<tr>
<td>8. Coconut oil bottle (50 ml)-1</td>
<td>1</td>
</tr>
<tr>
<td>9. Comb-1</td>
<td>1</td>
</tr>
<tr>
<td>10. Water bottle (1 Ltr.-)</td>
<td>1</td>
</tr>
<tr>
<td>11. Razor (disposable) -1 (for men only)</td>
<td>1</td>
</tr>
<tr>
<td>12. Mosquito repellant coil – 1 packet</td>
<td>1</td>
</tr>
<tr>
<td>13. Double layer washable face mask- 2</td>
<td>2</td>
</tr>
</tbody>
</table>

- Sanitary pads for the women and young girls as per requirement may be supplied from ASHA/ local WSHGs/ other local facility, as and when required.

**Sanitation**

1. Proper sanitation shall be maintained in the camp with minimum 3 time cleaning of common spaces.

2. Spitting, smoking and chewing of tobacco are strictly prohibited.

3. As far as possible, disposable plates are to be used for eating.

4. The used plates shall be disposed off in a pit at a safe distance and covered with soil. The place is to be disinfected with bleaching powder from time to time.

5. No one in the camp will be permitted to use personal items of others.

**Food**

1. Food should be cooked hygienically and served preferably as per the following timings:
   - Breakfast: 8.00 am to 9.00am
   - Lunch: 12.30 noon to 2.00 pm
   - Evening tea and snacks: 5.00 pm
   - Dinner: 7.30 pm to 9.00 pm
2. Food should be palatable and meet the need of old, sick, children, pregnant and lactating women.

3. Efforts will be made by the Camp Manager to arrange chhatua and any other foods such as milk, egg and biscuits for children as far as possible.

4. Potable and safe drinking water to be provided, preferably, boiled, filtered and if required, treated with halazone tablets.

<table>
<thead>
<tr>
<th>Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People coming to the camp with fever and cold symptoms shall be immediately segregated from others and it shall be brought to the notice of the local medical officer for required screening and treatment.</td>
</tr>
<tr>
<td>2. Daily monitoring of health condition of all inmates shall be done by the ASHA/AWW/ANM/ health personnel.</td>
</tr>
<tr>
<td>3. Any suspected person with SARI (Severe Acute Respiratory Infection) and ILI (Influenza Like Infection) symptoms shall be immediately shifted to designated health facility.</td>
</tr>
<tr>
<td>4. All inmates will wear their mask during the entire period of stay in the camp.</td>
</tr>
<tr>
<td>5. Keen attention will be given for earliest detection of diseases like measles, diarrhoea, cholera and skin diseases in the camp and immediate steps shall be taken for their treatment.</td>
</tr>
<tr>
<td>6. First Aid box and sufficient ORS packets are to be kept in the camp.</td>
</tr>
<tr>
<td>7. Special care and attention should be given to the elderly, sick and differently abled.</td>
</tr>
<tr>
<td>8. Local ASHA and Anganwadi Worker will pay regular visit to the camp to monitor the health of pregnant and lactating women and children and facilitate their special needs.</td>
</tr>
</tbody>
</table>
6. Temporary Medical Camps (TMCs) to accommodate and quarantine people coming from outside the state (22-Apr-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Panchayati Raj &amp; Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>PR-SFC-MISC-0007-2020-7721/PR&amp;DW</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>22-Apr-2020</td>
</tr>
</tbody>
</table>
| Website Link                       | [https://health.odisha.gov.in/pdf/Arrangement-of-
  Temporary-Medical-Camps-TMCs-to-accommodate-
  and-quarantine.pdf](https://health.odisha.gov.in/pdf/Arrangement-of-
  Temporary-Medical-Camps-TMCs-to-accommodate-
  and-quarantine.pdf) |

From
Shri Deoranjan Kumar Singh, IAS,
Principal Secretary to Government.

To
All Collectors
All Project Directors, DROAs
All Block Development Officers
All District Panchayat Officers

Sub :- Arrangement of Temporary Medical Camps (TMCs) to accommodate and quarantine large number of people such as Student, Professionals, stranded Pilgrims and Workers coming from outside the State.

Ref:- This Deptt.Ltr.No. 6604, dt.d.16.03.2020, No.7076, dt.d.20.03.2020 and No. 7606, dtd.18.04.2020

Madam / Sir,

In invoking a reference to this Deprt. letters as cited above, I am directed to say that, as per instructions communicated vide this Deptt. letter No.5604, dt.d.16.03.2020 and No.6810, dtd.18.03.2020, all the Gram Panchayats have been advised to spend up to Rs.5.00 lakh for setting up of Temporary Medical Camps (TMCs) out of the available funds of 14th CFC and 4th SFC to prevent spread of COVID-19 pandemic. Till now, all the 6798 GPs have set up 7045 nos. of TMCs with capacity of 2,22,963 beds which may not be adequate to accommodate influx of large number of migrant people coming from outside the State to their native place in Odisha immediately after lifting of the lockdown.

Basing on this Deptt. letter No.7606, dtd.18.04.2020, you must have assessed the numbers of migrant people such as Student, Professionals, stranded Pilgrims and Workers who are likely to come from other States to their native place in Odisha in the post lock down period. Accordingly, it must have been planned to make arrangement of more numbers of TMCs (if required after assessing numbers of migrant people likely to return home) in the locations such as in the Buildings of Secondary High Schools, Colleges, Cyclone Shelters, Kalyan Mandaps, Nodal M.E. Schools and Primary Schools preferably at the outskirts of the villages / habitations having Compound Wall. Such additional TMCs identified by the G.P are to be properly coloured/ white washed with provision of water supply, hygienic Community Toilet, hand Wash Basin etc.
and big Vat to store sufficient water with platform for bathing and washing purpose. All these works are to be taken up by the G.P.s immediately out of the fund available under 14th CFC / 4th SFC as per actual with due technical estimate and observing due economy following proper financial procedures. While setting up of the beds in the TMCs, due procedure as issued by Govt. for social distancing shall be strictly observed. Provision of electricity, lighting and Fan should also be taken care of while taking up all these works in the TMCs / additional TMCs (if required).

Further, it is clarified by Ministry of Home Affairs (Disaster Management) vide letter dttd.14.03.2020 that provision of temporary accommodation, food, clothing, medical care, sanitation materials like soap, hand wash, bleaching, Phenyl etc. for the people sheltered in quarantine camps (other than home quarantine) or for cluster containment operations are to be met out of SDRF Grant released by the SRC, Odisha.

Therefore, except the civil construction work in the TMCs, other expenditures as mentioned in the above para are to be claimed by the G.P. from the SDRF fund sanctioned to the District by the SRC.

In no case, persons coming from outside the state, even if without being registered, shall be allowed to go to his home without being kept in quarantine in the TMC of the Gram Panchayat for 14 days

The GPs have already been assigned with the power to handle the influx of large number of migrant people from outside the State to prevent spread of COVID-19 pandemic. In this regard, the recent Office Order issued by R & DM (Disaster Management) Department vide No. 2232, dttd. 19.04.2020 have elaborated the followings, which shall be strictly adhered to.

➤ The Sarpanch(es) of all Gram Panchayats shall put necessary arrangement to check and ensure that any person arriving in their respective jurisdictions from outside the State has been registered.

➤ Every person on return from outside Odisha shall have to compulsorily stay in the Panchayat level Quarantine Facility (TMC) for 14 days observing the guidelines issued by the Health & Family Welfare Department.

➤ The Gram Panchayat shall make necessary provisions of temporary accommodation, food, water and sanitation for the quarantined persons at the identified quarantine centres (TMCs) during the quarantine period.

[Signature]

[Stamp - Govt. of Odisha]
Health checkup of the quarantined persons including screening for COVID-19 and testing of the suspected / random cases shall be conducted in coordination with the health officials. In case any person is tested COVID-19 positive, he / she will be immediately shifted to the designated hospital for treatment.

The Sarpanch(es) of all Gram panchayats are authorised to administer gratuitous relief as per the direction of the Government under the overall supervision of the District Disaster Management Authority (DDMA).

Anyone found violating the instructions of the Sarpanch of the Gram Panchayat regarding quarantine protocols and guidelines shall be penalised under the relevant provisions of the Disaster Management Act, 2005, the Epidemic Disease Act, 1897 read with the Odisha COVID-19 Regulation, 2020 and provisions of any other relevant Act.

The Sarpanch(es) of all Gram Panchayats are hereby authorised under sections 59 and 60 of the Disaster Management Act, 2005 to file complaint / prosecution before the appropriate forum against the violators.

As advised vide this Deptt. letter No.7076, dt.20.03.2020, the nomination of designated officer for every G.P. for management of the TMCs in the GPs shall be notified and their designation, mobile number shall be shared with the District as well Govt.. At every level, proper coordination must be done with the Medical Officer as well as other Line Deptt. officials for effective management of the TMCs.

You are, therefore, requested to take up the matter immediately and make necessary arrangements for completion of all these TMCs / additional TMCs arrangements on or before 30th April, 2020 and furnish a report in the prescribed format about the nos. of persons likely to arrive and nos. of accommodation in the TMCs / additional TMCs arranged in the GPs to Govt. by e.mail in the e.mail ID: ddmispr@gmail.com for further course of action.

The B.D.Cs are requested to circulate the copies of this Letter to all the sarpanches of the GPs under their respective blocks.

This is extremely urgent and should be immediately acted upon

Yours faithfully,

[Signature]
Principal Secretary

[Stamp]
C.C for information & necessary action to

1. Additional Secretary to Chief Minister for kind information of Hon'ble Chief Minister.
2. P.S to Hon'ble Minister, PR & DW Deptt. for kind information of Hon'ble Minister, PR & DW Deptt.
3. OSD to Chief Secretary for kind information of Chief Secretary
4. PPS to Development Commissioner for kind information of Development Commissioner.
5. P.S to Special Relief Commissioner, Odisha for kind information of SRC.
6. Principal Secretary to Govt., Health & Family Welfare Deptt. for information.
7. Principal Secretary to Govt., School & Mass Education Deptt. for information.
8. Joint Director, MIS, PR & DW Deptt.
7. Protocol for using Rapid Antibody Test in Bhubaneswar (18-Apr-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Health &amp; Family Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HFW-SCH-I-EMER-0001-2020 9931/H</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>18-Apr-2020</td>
</tr>
</tbody>
</table>
To
Mission Director, NHM, Odisha
Municipal Commissioner, Bhubaneswar
Director, Medical Education & Training, Odisha
Director, Public Health, Odisha
Director, Health Services, Odisha
State Surveillance Officer, IDSP, Bhubaneswar

Sub: Protocol for using Rapid Antibody Test in Bhubaneswar


Madam / Sir,

Bhubaneswar has been classified as a COVID-19 hot spot due to multiple clusters and number of positive cases exceeding 15. Though in terms of number of tests conducted per lakh population, Bhubaneswar is well ahead of other cities classified as hot spots a decision has been taken to further increase the number of tests in the city.

Earlier it was decided to conduct about 5000 tests over a period of 7 days starting from 17.04.2020. In the meantime, about 6000 Rapid Test Kits were received from ICMR, New Delhi on 17.04.2020, ICMR has issued protocol for conducting Rapid Antibody Test in hotspot areas (copy enclosed). These guidelines are very much applicable to Bhubaneswar city. The same should be followed meticulously. However, considering the local circumstances, the following additional guidelines are issued.

It has also been decided to conduct Rapid Test for following categories of people.

1. Asymptomatic persons in the containment area who volunteer to test.
2. People on active duty, such as, healthcare workers, Police, sanitary workers, delivery boys, taxi drivers, street vendors, OMFED / OPOLFED workers, etc.

https://health.odisha.gov.in
3. Persons living in slums, labour camps, hostels etc.

4. Elderly persons above 60 years with co-morbidities like hypertension, diabetes, asthma etc.

For the people of category 2, 3 & 4 only those who are selected at random and volunteer shall be tested. If the result is positive, their swabs are to be taken for RT PCR testing for confirmation and they will be advised home quarantine for minimum 14 days / isolation in health care facilities depending on clinical assessment.

In addition to the guidelines issued by the ICMR, all symptomatic individuals irrespective of travel history and contact history are to be tested for COVID-19 using RTPCR and they should be advised home quarantine for minimum 14 days / hospital isolation depending on clinical assessment. It is also reiterated that rapid antibody test is not recommended for high risk cases such as SARI/ ILI cases, contacts of positive cases.

This may be treated as most urgent.

Yours faithfully,

[Signature]
Principal Secretary to Government

Memo No. 9932 /H. Dt. 19-04-2020
Copy submitted to Chief Secretary / Development Commissioner-cum-ACS / Chief Advisor, Chief Minister’s Office for kind information.

[Signature]
Principal Secretary to Government
Addl. Chief Secretary/Secretary/Principal Secretary Health (All States)

Sub: Protocol for using ‘Rapid antibody test’ in Hot area – epidemiological studies and surveillance

I am writing to you with reference to the rapid antibody test kits for COVID-19 testing. It is understood that many States intend to use these kits in affected areas.

2. The National Task Force at ICMR has carefully reviewed the data evolving from various countries on use of such kits. Based on available evidence, the testing strategy for COVID-19 has been revised further. The revised document is enclosed for your reference.

3. It is critical to understand the following key facts while using the rapid antibody tests:
   - Gold standard frontline test for COVID-19 diagnosis is real time PCR based molecular test, which is aimed at early virus detection.
   - The rapid antibody test cannot replace the frontline test.
   - The rapid Antibody test is a supplementary tool to assess the prevalence of the diseases within a specific area / perimeter.
   - The rapid antibody test will only be of utility after a minimum of 7 days of onset of symptoms.
   - Data about these rapid tests is emerging and understanding of their utility for diagnosis is still evolving.
   - The rapid tests are useful for epidemiological studies and surveillance purposes.
   - THE TEST HAS TO BE DONE UNDER STRICT MEDICAL SUPERVISION.

4. The enclosed ICMR advisory is for Hot spots. In case your state does not have a Hot spot, these tests may be used for:
   a) Any hotspot which may emerge in future
   b) As a surveillance tool for epidemiological purposes in such areas where cases have not emerged so far.

5. Before starting the rapid test, it should be registered on covid19cc.nic.in/ICMR and data related to the test should be reported on the same.

With best regards

Yours sincerely

Prof. (Dr.) Balram Bhargava, Padma Shri
MG, DM, FRCP (Edin.), FRCP (Edin.),
FACC, FAMA, FAMS, FNAc, FANZC, FASc
Secretary to the Government of India
Department of Health Research
Ministry of Health & Family Welfare &
Director-General, ICMR

Enclosed: As above

CC: Chief Secretary/Administrators
A. COVID-19 Testing Strategy for India (Recommended for the entire country)

Real-Time PCR (RT-PCR) test and Point-of-Care molecular diagnostic assays are recommended for diagnosis of COVID-19 among individuals belonging to the following categories:

- All symptomatic individuals who have undertaken international travel in the last 14 days
- All symptomatic contacts of laboratory confirmed cases
- All symptomatic health care workers
- All patients with Severe Acute Respiratory Illness (fever AND cough and/or shortness of breath)
- Asymptomatic direct and high-risk contacts of a confirmed case should be tested once between day 5 and day 14 of coming in his/her contact

B. Additional (in addition to A) Testing recommended in hot spots

Additional Testing for Hot spot areas

**Hot spot areas**

(as per MoH&FW)

Symptom (Influenza-Like-Illness)
- Fever AND Cough, Cold

<7 days
- RT-PCR
  - + ve: Confirmed COVID19 case
  - - ve: Susceptible

>7 days
- Rapid Antibody Test
  - + ve: Quarantine for at least 7 days
  - - ve: Advise to continue quarantine for at least 7 days as you are in hotspot

* Refer to Hospital if symptoms appear / worsen
** Follow precautions, social distancing, use masks, frequent hand washing, avoid unnecessary travel

Bhanu BK
8. Declaration of Fever Clinics (09-Apr-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Directorate of Health Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HA-MISS-01-2020 8781</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>09-Apr-2020</td>
</tr>
</tbody>
</table>
DIRECTORATE OF HEALTH SERVICES, ODISHA
Health and Family Welfare Department: Government of Odisha

*

NOTIFICATION
No 8737 / HA-MISC-01/2020, BSSR Date: 9/4/2020

It is observed that many Private Clinical establishments have not established separate Fever Clinics for screening COVID cases, thereby exposing other general patients to infection. General public having Flu like symptoms are advised to visit only the following Private Clinics, not others to avoid the risk of cross contamination.

Therefore in exercise of power conferred under Epidemic Diseases Act, 1897 (the Act), I do hereby notify the following hospitals under Bhubaneswar Municipal Corporation (BMC) area as Fever Clinics in reference to Health & Family Welfare Notification No.9570/H/03.04.2020. Further concerned Municipal Commissioner / Collectors / CDM&PHO will notify different Clinical Establishment under their jurisdiction as Fever Clinics.

The following Hospitals are declared as Fever Clinics at Bhubaneswar.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Name of the Hospital</th>
<th>Contact No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AMRI Hospital</td>
<td>0674-6165656</td>
</tr>
<tr>
<td>2</td>
<td>Kalinga Hospital</td>
<td>+91 674 6665200</td>
</tr>
<tr>
<td>3</td>
<td>Nilachal Hospital</td>
<td>2536590 - 92 / 2536594</td>
</tr>
<tr>
<td>4</td>
<td>Sunshine Hospital</td>
<td>9338 108 108/06743911111</td>
</tr>
<tr>
<td>5</td>
<td>Sparsh Hospital</td>
<td>+91 674 6626666, 2540183/188/189</td>
</tr>
<tr>
<td>6</td>
<td>Bluewheel Hospital</td>
<td>0674 719 6600</td>
</tr>
<tr>
<td>8</td>
<td>Care Hospital</td>
<td>0674-6165656</td>
</tr>
<tr>
<td>9</td>
<td>Aswini Aditya Hospital</td>
<td>9238008808</td>
</tr>
<tr>
<td>10</td>
<td>Bhubaneswar Hospital</td>
<td>0674-2741427</td>
</tr>
<tr>
<td>11</td>
<td>BMRI Institute &amp; Nursing Home</td>
<td>06742740541</td>
</tr>
<tr>
<td>12</td>
<td>Padma Hospital</td>
<td>9437071386</td>
</tr>
<tr>
<td>13</td>
<td>Panda Nursing Home</td>
<td>0674-2380550</td>
</tr>
<tr>
<td>14</td>
<td>Maa Shakti Hospital</td>
<td>9937276290</td>
</tr>
<tr>
<td>15</td>
<td>Gastro Kidney Care</td>
<td>06742553335</td>
</tr>
<tr>
<td>16</td>
<td>Vivekananda Hospital</td>
<td>9090960353</td>
</tr>
<tr>
<td>17</td>
<td>Usthi Hospital</td>
<td>6742550312</td>
</tr>
</tbody>
</table>

That apart they may also visit Capital Hospital Bhubaneswar, RGH Rourkela and any other DHH where separate fever Clinics & triage facilities have been established. Further the Superintendent of the above private facilities are requested to visit the website
https://health.odisha.gov.in/ for detail guideline as notified by MoHFW, GoI / State
Government from time to time.

Director of Health Services, Odisha.

Memo No. 8782 BBSR Date: 9/4/20
Copy to PS to Principal Secretary, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha.

Memo No. 8783 BBSR Date: 9/4/20
Copy to Mission Director, NHM, Bhubaneswar for information.

Director of Health Services, Odisha.

Memo No. 8784 BBSR Date: 9/4/20
Copy to DMET/DPH, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha.

Memo No. 8785 BBSR Date: 9/4/20
Copy to all Collector Cum DM for information.

Director of Health Services, Odisha.

Memo No. 8786 BBSR Date: 9/4/20
Copy to all Director Capital Hospital Bhubaneswar & RGH Rourkela, CDM&PHOs for information.

Director of Health Services, Odisha.

Memo No. 8787 BBSR Date: 9/4/20
Copy to Joint Secretary, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha.

Memo No. 8788 BBSR Date: 9/4/20
Copy to all Superintendent of Private Hospital, Bhubaneswar for information.

Director of Health Services, Odisha.

<table>
<thead>
<tr>
<th>Department</th>
<th>Directorate of Health Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HA-MISS-01-2020 8762</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>08-Apr-2020</td>
</tr>
</tbody>
</table>
DIRECTORATE OF HEALTH SERVICES, ODISHA
Health and Family Welfare Department: Government of Odisha

NOTIFICATION
No B.T.No /HA-MISC-01/2020, BBSR Date: 08.04.2020

Guidance document on appropriate management of suspect/confirmed cases of COVID-19

Introduction & Purpose of this document

COVID-19 is highly infectious disease. Hence it is necessary to isolate all suspect and confirmed cases of COVID-19. However, as the number of cases increases, it would be important to appropriately prepare the health systems and use the existing resources judiciously.

Available data in India suggests that nearly 70% of cases affected with COVID-19 either exhibit mild or very mild symptoms. Such cases may not require admission to COVID-19 blocks/dedicated COVID-19 hospitals.

It is important to put in place mechanisms for triaging and clinical decisions making for identification of the appropriate COVID dedicated facility for providing care to COVID-19 patients. The purpose of this document is to put in place such SOPs to ensure optimal utilization of available resources and thereby providing appropriate care to all the COVID-19 patients, as per their need. This will ensure that available hospital beds capacity can optimally be used only for moderate to severe cases of COVID-19. The SOPs delineated hereafter also specify the different types of facilities to be set up for various categories of Covid-19 cases.

Guiding principles

All the selected facilities must be dedicated for COVID management. No general (suspected/confirmed COVID-19) patients shall be treated there.

Three types of COVID dedicated facilities i.e COVID care Centre (CCC), Dedicated COVID Health Centres (DCHC) and Dedicated COVID Hospitals (DCH) are to be notified. All 3 types of COVID Dedicated facilities will have separate ear marked areas for suspect, negatively tested cases and confirmed cases. Suspect, negatively tested and confirmed cases should not be allowed to mix under any circumstance.

All suspect cases (irrespective of severity of their disease) will be tested for COVID-19. The management of these cases will depend on their (i) clinical status/case definition as per the guidelines issued by Government of India/State Government from time to time and (ii) result of COVID-19 testing.

COVID Care Center (CCC):

- The COVID Care Centers shall offer care only for cases that have been clinically assigned as mild or very mild cases or COVID suspect cases.
- The COVID Care Centers are makeshift facilities. These may be set up in hostels, hotels, schools, lodges etc., both public and private. If need be, existing quarantine facilities could also be converted into COVID Care Centers. Functional hospitals like CHCs, etc., which may be handling regular, non-COVID cases can also be designated as COVID Care Centers as a last resort, when the no cases go up substantially.
• This is important as essential non COVID Medical services like those for pregnant women, newborns, other co-morbid conditions, etc. are to be maintained.

• Wherever a COVID Care Center is designated for admitting both the confirmed and the suspected cases, these facilities must have separate areas for suspect, negatively tested cases and confirmed cases with preferably separate entry and exit. Suspect and confirmed cases must not be allowed to mix under any circumstances.

• As far as possible, wherever suspect cases are admitted in the COVID Care Center, preferably individual rooms with attached toilet facility, should be assigned for such cases, as far as possible. When such facility is not possible, they may be kept in halls/wards maintaining at least 2m. distance between beds. All the patients must use triple layer surgical masks and be counselled for hand-washing and/or use of sanitizer, respiratory etiquettes. They must not be allowed to share utensils, mobile phones, laptop etc.

• Every Dedicated COVID Care Centre must necessarily be mapped to one or more Dedicated COVID Health Centres and at least one Dedicated COVID Hospital for referral purpose (details given below).

• Every Dedicated COVID Care Centre must also have a dedicated Basic Life Support Ambulance (BLSA) equipped with sufficient oxygen support on 24x7 basis, for ensuring safe transport of a case to Dedicated higher facilities if the symptoms progress from mild to moderate or severe. (Such progression may be quite sudden in some cases)

• The human resource to man these Care Centre facilities will be drawn from AYUSH doctors. All staffs must be trained & sensitized, as per the Ministry of AYUSH training protocol/sessions. Their work can be guided by an Allopathic doctor deployed by CD&PHO.

• Each COVID care Centre will have a small dispensary like establishment with Oxygen & other emergency medicine in stock, so that the patients whose condition worsen can be manage there temporarily until ambulance transport to higher facility is arranged.

Dedicated COVID Health Centre (DCHC):

• The Dedicated COVID Health Centres are hospitals that shall offer care for all cases that have been clinically assigned as moderate.

• These should either be a full hospital or a separate block in a hospital with preferably separate entry/exit zoning as notified by Director Health Service / DMET

• Private hospitals may also be designated as COVID Dedicated Health Centres.

• Wherever a Dedicated COVID Health Center is designated for admitting both the confirmed and the suspect cases with moderate symptoms, these hospitals must have separate areas for suspect, negatively tested and confirmed cases. They must not be allowed to mix under any circumstances.

• These hospitals would have beds with assured Oxygen support.

• Every Dedicated COVID Health Centre must necessarily be mapped to one or more Dedicated COVID Hospitals.

• Each DCHC must also have a dedicated Advanced Life Support (ALS)/Basic Ambulance for ensuring safe transport of patients to a Dedicated COVID Hospital if the symptoms progress from moderate to severe.

Dedicated COVID Hospital (DCH):

The Dedicated COVID Hospitals are hospitals that shall offer care for all severe
- The Dedicated COVID Hospitals should preferably be a full standalone hospital. But when need will arise, a separate block in a hospital with preferably separate entry/exit may be designated by either DHS/DMET.
- Private hospitals may also be designated as COVID Dedicated Hospitals.
- These hospitals would have fully equipped ICUs, Ventilators and beds with assured Oxygen support
- These hospitals will have separate areas for suspect, negatively tested and confirmed cases. These patients should not be allowed to mix under any circumstances.
- The Dedicated COVID Hospitals would also be referral centers for the Dedicated COVID Health Centers and the COVID Care Centers.
- All these facilities will follow strict infection prevention and control practices.

**Management of COVID cases**

**Assessment of patients:**

In addition to patients arriving to above categories of COVID dedicated facilities, the supervisory medical officer will also the assess the severity of the case detected and refer to appropriate facility in field settings during containment operations.

**Fever Clinic at Designated Facility**

Exclusive Fever Clinics shall be set up in some Hospitals designated by the CDM&PHOs preferably near the main entrance for triage and referral to appropriate COVID Dedicated Facility. Wherever space allows, a temporary make shift arrangement in close proximity to the facility must be kept ready for management of cases before being transported to the designated COVID care facility. Such facility must be isolated from the main areas of the hospital, so that the patients with ILI (Influenza Like Illness) can be kept away from the general patients.

The medical officer at the fever clinics could identify suspect cases and refer to COVID Care Centre, Dedicated COVID Health Centre or Dedicated COVID Hospital, depending on the clinical severity. The Medical Officer and staffs engaged there must use appropriate protective gear and will not be allowed to work in other areas of the Hospital.

**Group 1:** Suspect and confirmed cases clinically assigned as mild and very mild (COVID Care Centres)

* Clinical criteria: Cases presenting with fever and/or upper respiratory tract illness (Influenza Like Illness, ILI).
* These patients will be accommodated in COVID Care Centers.
* The patients would be tested for COVID-19 and till such time their results are available they will remain in the "suspect cases" section of the COVID Care Center preferably in an individual room.
* Those who test positive, will be moved into the "confirmed cases" section of the COVID Care Center.
* If test results are negative, patient will be given symptomatic treatment and be discharged with advice to follow prescribed medications and preventive health care measures as per prescribed protocols, or else will be shifted to a non-COVID hospital.
* If any patient admitted to the COVID Care Centre qualifies the clinical criteria for moderate or severe case, such patient will be shifted to a Dedicated COVID Health Centre or a Dedicated COVID Hospital.
• Apart from medical care the other essential services like food, toiletry, sanitation, counselling etc. at the COVID Care Centres will be provided by local administration. Guidelines for quarantine facilities issued from time to time may be used for this purpose.

**Group 2:** Suspect and confirmed cases clinically assigned as moderate (Dedicated COVID Health Centres)

* Clinical criteria: Pneumonia with no signs of severe disease (Respiratory Rate 15 to 30/minute, SpO2 90%-94%).
* Such cases will not be referred to COVID Care Centers but instead will be admitted to Dedicated COVID Health centres.

* It will be manned by allopathic doctors and cases will be monitored on above mentioned clinical parameters for assessing severity as per treatment protocol as per the guideline issued from time to time by Government of Odisha.
* They will be kept in “suspect cases” section of Dedicated COVID Health Centres, till such time as their results are not available preferably in an individual room.
* Those testing positive shall be shifted to “confirmed cases” section of Dedicated COVID Health Centre.
* Any patient, for whom the test results are negative, will be shifted to a non-COVID hospital or may be kept in a separate ward of such category, preferably in a separate block and will be managed according to clinical assessment. Discharge as per clinical assessment.
* If any patient admitted to the Dedicated COVID Health Center qualifies the clinical criteria for severe case, such patient will be shifted to a Dedicated COVID Hospital.

**Group 3:** Suspect and confirmed cases clinically assigned as severe (Dedicated COVID Hospital)

* Clinical criteria: Severe Pneumonia (with respiratory rate ≥30/minute and/or SpO2 < 90% in room air) or ARDS or Septic shock.
* Such cases will be directly admitted to a Dedicated COVID Hospital’s ICU for suspected cases till such time as test results are obtained. Distance between ICU beds must be maintained at least 1 m apart.
* If test results are positive, such patient will remain in COVID-19 ICU and receive treatment as per standard treatment protocol.
* Patients testing negative will be shifted to another section of the ICU dealing with only COVID negative cases, until one can be shifted to a non-COVID hospital.

**Reporting:**

It is mandatory to report on such patients (Suspected/Confirmed) on admission or disposal with advice to Director Public Health / IDSP immediately, but not beyond 24 hours of admission or attendance to the hospital or else it will attract actions as deemed proper.

**Training:**

All personnel working in these Fever Clinic, CCC, DCHCR DCH must be trained and sensitized on use of PPEs. Masks, and also on standard precautions like hand-washing, social
**Administrative/Logistic Arrangement**

Authorised Officers:

State Government / DHS/CDM&PHO shall designate an officer for each facilities as Authorised Officer and Authorised Medical Officer.

For Government facilities the Medical Superintended shall act as the Authorised as well as the Authorised Medical Officer.

Store section:

Record Section:

24 X 7 Helpline or control room:

Central Sterilization unit:

Robust infection control and prevention unit including for biomedical waste management.

**Management:**

Day-to-day management will be the responsibility of the hospital administration, in case of Government hospital. The private hospital declared as standalone COVID hospital will be managed by the hospital administration, but under the guidance of Authorised Medical Officer and Authorised Officer.

Administrative arrangement for the duty of the health care personnel: Each batch of health care personnel will work in the hospital for 14 days at a spell and then will be on 14 days quarantine in facilities, created by the administration / COVID Hospitals. During this 4 weeks period, they are not allowed to leave the hospital premises or the quarantine facility as will be applicable.

Algorithm for isolation of suspect/confirmed cases of COVID-19 attached.

Director of Health Services, Odisha.

Memo. No. 8763 BBSR  Date. 08/01/2020 20.20

Copy to PS to Principal Secretary, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha

Memo. No. 8764 BBSR  Date. 08/01/2020 20.20

Copy to Mission Director, NHM, Bhubaneswar for information.

Director of Health Services, Odisha
Memo. No. 8765 BBSR  Date: 08/04/2020
Copy to DMET/DPH, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha

Memo. No. 8766 BBSR  Date: 08/04/2020
Copy to all Collector Cum DM for information.

Director of Health Services, Odisha

Memo. No. 8767 BBSR  Date: 08/04/2020
Copy to all CDM&PHO for information.

Director of Health Services, Odisha

Memo. No. 8768 BBSR  Date: 08/04/2020
Copy to Joint Secretary, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha
Algorithm for isolation of suspect/confirmed cases of COVID-19

- Suspect cases directly reporting to COVID dedicated facility
- Suspect COVID-19 Case
- Screening at Fever Clinic

Mild and very mild
(Fever, URTI)

Admit to "Suspect case" section of COVID CARE CENTER (hotel/hotel/hostel)

Test all for COVID-19

- Negative: Discharge with advice or shift to non-COVID Hospital, if required
- Positive: Shift to non-COVID hospital/block and manage according to clinical assessment

Moderate
(Patients with no signs of severe disease)

Admit to "Suspect case" section of DEDICATED COVID HEALTH CENTRE

Test all for COVID-19

- Negative: Discharge as per clinical assessment
- Positive: Shift to "Confirmed case" section of DEDICATED COVID HEALTH CENTRE

Severe
(Respiratory rate ≥30/min; SpO2 <93% in room air)

Admit to DEDICATED COVID HOSPITAL with ICU facility

Test all for COVID-19

- Negative: Manage according to clinical assessment
- Positive: Patient to remain in COVID-19 ICU

Manage according to clinical assessment
- Observing all infection prevention and control practices
- Shift to non-COVID hospital/block when patient becomes stable

<table>
<thead>
<tr>
<th>Department</th>
<th>Directorate of Health Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HA-MISS-01-2020 8578</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>31-Mar-2020</td>
</tr>
</tbody>
</table>
DIRECTORATE OF HEALTH SERVICES: ODISHA:

*****

No. 8578/HA-MISC-01/2020, BBSR, Date. 31.03.2020

To:
The Superintendent all Medical College & Hospital
The Director, Capital Hospital, Bhubaneswar/RGH, Rourkela.
All CDM & PHOs


Sir/Madam,

With reference to the subject mentioned above, I am directed to endorse here with the Guidelines on Clinical Management of COVID-19 revised on 30.03.2020 by Ministry of Health & FW, Govt. of India for information and necessary action.

Yours faithfully,

Director of Health Services, Odisha.

Memo. No. 8579 BBSR Date 31.03.2020

Copy to PS to Principal Secretary, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha

Memo. No. 8580 BBSR Date 31.03.2020

Copy to DMET/DPH, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha

Memo. No. 8581 BBSR Date 31.03.2020

Copy to Joint Secretary, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha
Guidelines on Clinical Management of COVID – 19

This document is intended for clinicians taking care of hospitalised adult and paediatric patients of COVID – 19. It is not meant to replace clinical judgment or specialist consultation but rather to strengthen clinical management of these patients and provide up-to-date guidance. Best practices for COVID - 19 including IPC and optimized supportive care for severely ill patients as considered essential. This document aims to provide clinicians with updated interim guidance on timely, effective, and safe supportive management of patients with COVID - 19, particularly those with severe acute respiratory illness and critically ill.

30th March 2020
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>No.</th>
<th>Topic</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Case definitions</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Clinical features</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Immediate implementation of IPC measures</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Laboratory diagnosis</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Early supporting therapy and monitoring</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Management of hypoxemic respiratory failure and ARDS</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Management of septic shock</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>Other therapeutic measures</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>Prevention of complications</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>Specific therapy</td>
<td>18</td>
</tr>
</tbody>
</table>
1. Case definition

**When to suspect**

- All asymptomatic individuals who have undertaken international travel in the last 14 days  
  *or*
- All symptomatic contacts of laboratory confirmed cases  
  *or*
- All symptomatic healthcare personnel (HCP)  
  *or*
- All hospitalized patients with severe acute respiratory illness (SARI) (fever AND cough and/or shortness of breath)  
  *or*
- Asymptomatic direct and high risk contacts of a confirmed case (should be tested once between day 5 and day 14 after contact)  

*Symptomatic refers to fever/cough/shortness of breath.*  
*Direct and high-risk contacts include those who live in the same household with a confirmed case and HCP who examined a confirmed case.*

**Confirmed case**

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

COVID-19 may present with mild, moderate, or severe illness; the latter includes severe pneumonia, ARDS, sepsis and septic shock. Early recognition of suspected patients allows for timely initiation of IPC (see Table 1). Early identification of those with severe manifestations (see Table 1) allows for immediate optimized supportive care treatments and safe, rapid admission (or referral) to intensive care unit.

Table 1: Clinical syndromes associated with COVID - 19 infection

<table>
<thead>
<tr>
<th>Uncomplicated illness</th>
<th>Patients with uncomplicated upper respiratory tract viral infection, may have non-specific symptoms such as fever, cough, sore throat, nasal congestion, malaise, headache. The elderly and immunosuppressed may present with atypical symptoms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild pneumonia</td>
<td>Patient with pneumonia and no signs of severe pneumonia. Child with non-severe pneumonia has cough or difficulty in breathing/ fast breathing: (fast breathing - in breaths/min): &lt;2 months, ≥60; 2–11 months, ≥50; 1–5 years, ≥40 and no signs of severe pneumonia</td>
</tr>
<tr>
<td>Severe pneumonia</td>
<td>Adolescent or adult: fever or suspected respiratory infection, plus one of the following: respiratory rate &gt;30 breaths/min, severe respiratory distress, SpO2 &lt;90% on room air. Child with cough or difficulty in breathing, plus at least one of the following: central cyanosis or SpO2 &lt;90%; severe respiratory distress (e.g. grunting, chest indrawing); signs of pneumonia with any of the following danger signs: inability to breastfeed or drink, lethargy or unconsciousness, or convulsions. Other signs of pneumonia may be present: chest indrawing, fast breathing (in breaths/min): &lt;2 months ≥60; 2–11 months ≥50; 1–5 years ≥40. The diagnosis is clinical; chest imaging can exclude complications.</td>
</tr>
<tr>
<td>Acute Respiratory Distress Syndrome</td>
<td>Onset: new or worsening respiratory symptoms within one week of known clinical insult. Chest imaging (radiograph, CT scan, or lung ultrasound): bilateral opacities, not fully explained by effusions, lobar or lung collapse, or nodules.</td>
</tr>
</tbody>
</table>
**Origin of oedema:** respiratory failure not fully explained by cardiac failure or fluid overload. Need objective assessment (e.g., echocardiography) to exclude hydrostatic cause of oedema if no risk factor present.

**Oxygenation (adults):**
- Mild ARDS: \(200 \text{ mmHg} < \text{PaO}_2/\text{FiO}_2 \leq 200 \text{ mmHg} \) (with PEEP or CPAP \( \geq 5 \) cm H\(_2\)O, or non-ventilated)
- Moderate ARDS: \(100 \text{ mmHg} < \text{PaO}_2/\text{FiO}_2 < 200 \text{ mmHg} \) with PEEP \( \geq 5 \) cm H\(_2\)O, or non-ventilated)
- Severe ARDS: \( \text{PaO}_2/\text{FiO}_2 \leq 100 \text{ mmHg} \) with PEEP \( \geq 5 \) cm H\(_2\)O, or non-ventilated
- When \( \text{PaO}_2 \) is not available, \( \text{SpO}_2/\text{FiO}_2 \geq 315 \) suggests ARDS (including non-ventilated patients)

**Oxygenation (children, note OI = Oxygenation Index and OSI = Oxygenation Index using \( \text{SpO}_2 \):**
- Bilevel NIV or CPAP \( \geq 5 \) cm H\(_2\)O via face mask: \( \text{PaO}_2/\text{FiO}_2 \leq 300 \text{ mmHg} \) or \( \text{SpO}_2/\text{FiO}_2 \geq 264 \)
- Mild ARDS (invasively ventilated): \( 4 \leq \text{OI} < 8 \) or \( 5 \leq \text{OSI} < 7.5 \)
- Moderate ARDS (invasively ventilated): \( 8 \leq \text{OI} < 16 \) or \( 7.5 \leq \text{OSI} < 12.3 \)
- Severe ARDS (invasively ventilated): \( \text{OI} \geq 16 \) or \( \text{OSI} \geq 12.3 \)

**Sepsis**
Adults: life-threatening organ dysfunction caused by a dysregulated host response to suspected or proven infection, with organ dysfunction. Signs of organ dysfunction include: altered mental status, difficult or fast breathing, low oxygen saturation, reduced urine output, fast heart rate, weak pulse, cold extremities or low blood pressure, skin mottling, or laboratory evidence of coagulopathy, thrombocytopenia, acidosis, high lactate or hyperbilirubinemia.

Children: suspected or proven infection and ≥2 SIRS criteria, of which one must be abnormal temperature or white blood cell count

**Septic Shock**
Adults: persisting hypotension despite volume resuscitation, requiring vasopressors to maintain MAP ≤65 mmHg and serum lactate level ≤2 mmol/L

Children: any hypotension (SBP <5th centile or >2 SD below normal for age) or 2-3 of the following: altered mental state; bradycardia or tachycardia (HR <90 bpm or >160 bpm in infants and HR <70 bpm or >150 bpm in children); prolonged
3. Immediate implementation of appropriate IPC measures

Infection prevention control (IPC) is a critical and integral part of clinical management of patients and should be initiated at the point of entry of the patient to hospital (typically the Emergency Department). Standard precautions should always be routinely applied in all areas of health care facilities. Standard precautions include hand hygiene; use of PPE to avoid direct contact with patients’ blood, body fluids, secretions (including respiratory secretions) and non-intact skin. Standard precautions also include prevention of needle-stick or sharps injury; safe waste management; cleaning and disinfection of equipment; and cleaning of the environment.

Table 2: How to implement infection prevention and control measures for patients with suspected or confirmed COVID - 19 infection

<table>
<thead>
<tr>
<th>At triage</th>
<th>Apply droplet precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Give suspect patient a triple layer surgical mask and direct patient to separate area, an isolation room if available. Keep at least 1 meter distance between suspected patients and other patients. Instruct all patients to cover nose and mouth during coughing or sneezing with tissue or flexed elbow for others. Perform hand hygiene after contact with respiratory secretions.</td>
<td>● Droplet precautions prevent large droplet transmission of respiratory viruses. Use a triple layer surgical mask if working within 1-2 metres of the patient. Place patients in single rooms, or group together those with the same etiological diagnosis. If an etiological diagnosis is not possible, group patients with similar clinical diagnosis and based on epidemiological risk factors, with a spatial separation. When providing care in close contact with a patient with respiratory symptoms (e.g. coughing or sneezing), use eye protection (face mask or goggles), because sprays of secretions may occur. Limit patient movement within the institution and ensure that patients wear triple layer surgical masks when outside their rooms.</td>
</tr>
</tbody>
</table>
### Apply contact precautions
- Droplet and contact precautions prevent direct or indirect transmission from contact with contaminated surfaces or equipment (i.e., contact with contaminated oxygen tubing/interfaces). Use PPE (triple-layer surgical mask, eye protection, gloves, and gown) when entering room and remove PPE when leaving. If possible, use either disposable or dedicated equipment (e.g., stethoscopes, blood pressure cuffs, and thermometers). If equipment needs to be shared among patients, clean and disinfect between each patient use. Ensure that healthcare workers refrain from touching their eyes, nose, and mouth with potentially contaminated gloved or ungloved hands. Avoid contaminating environmental surfaces that are not directly related to patient care (e.g., door handles and light switches). Ensure adequate room ventilation. Avoid movement of patients or transport. Perform hand hygiene.

### Apply airborne precautions when performing an aerosol generating procedure
- Ensure that healthcare workers performing aerosol-generating procedures (i.e., open suctioning of respiratory tract, intubation, bronchoscopy, cardiopulmonary resuscitation) use PPE, including gloves, long-sleeved gown, eye protection, and fit-tested particulate respirators (N95). (The scheduled fit test should not be confused with user seal check before each use.) Whenever possible, use adequately ventilated single rooms when performing aerosol-generating procedures, meaning negative pressure rooms with a minimum of 12 air changes per hour or at least 160 litres/second/patient in facilities with natural ventilation. Avoid the presence of unnecessary individuals in the room. Care for the patient in the same type of room after mechanical ventilation commences.

Abbreviations: ARl, acute respiratory infection; PPE, personal protective equipment.
4. Laboratory diagnosis

Guidance on specimen collection, processing, transportation, including related biosafety procedures, is available on https://mohfw.gov.in/media/disease-alerts.

As per directive from MoHFW, Government of India, all suspected cases are to be reported to district and state surveillance officers.

![Helpline for COVID-19 (MOHFW, GOI)](image)

**Figure 1: Helpline for COVID-19 (MOHFW, GOI)**

**Sample collection:**
- **Preferred sample:** Throat and nasal swab in viral transport media (VTM) and transported on ice
- **Alternate:** Nasopharyngeal swab, BAL or endotracheal aspirate which has to be mixed with the viral transport medium and transported on ice

**General guidelines:**
- Trained health care professionals to wear appropriate PPE with latex free purple nitrile gloves while collecting the sample from the patient. Maintain proper infection control when collecting specimens
- Restricted entry to visitors or attendants during sample collection
- Complete the requisition form for each specimen submitted
- Proper disposal of all waste generated

**Respiratory specimen collection methods:**

A. Lower respiratory tract
- Bronchoalveolar lavage, tracheal aspirate, sputum
- Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
B. Upper respiratory tract

- Nasopharyngeal swab AND oropharyngeal swab

**Oropharyngeal swab (e.g. throat swab):** Tilt patient’s head back 70 degrees. Rub swab over both tonsillar pillars and posterior oropharynx and avoid touching the tongue, teeth, and gums. Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts. Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media.

**Combined nasal & throat swab:** Tilt patient’s head back 70 degrees. While gently rotating the swab, insert swab less than one inch into nostril (until resistance is met at turbinates). Rotate the swab several times against nasal wall and repeat in other nostril using the same swab. Place tip of the swab into sterile viral transport media tube and cut off the applicator stick. For throat swab, take a second dry polyester swab, insert into mouth, and swab the posterior pharynx and tonsillar areas (avoid the tongue). Place tip of swab into the same tube and cut off the applicator tip.

**Nasopharyngeal swab:** Tilt patient’s head back 70 degrees. Insert flexible swab through the nares parallel to the palate (not upwards) until resistance is encountered or the distance is equivalent to that from the ear to the nostril of the patient. Gently, rub and roll the swab. Leave the swab in place for several seconds to absorb secretions before removing.

Clinicians may also collect lower respiratory tract samples when these are readily available (for example, in mechanically ventilated patients). In hospitalized patients with confirmed COVID-19 infection, repeat upper respiratory tract samples should be collected to demonstrate viral clearance.
5. Early supportive therapy and monitoring

a. Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia, or shock: Initiate oxygen therapy at 5 L/min and titrate flow rates to reach target SpO₂ ≥90% in non-pregnant adults and SpO₂ ≥92-95% in pregnant patients. Children with emergency signs (obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions) should receive oxygen therapy during resuscitation to target SpO₂ ≥94%, otherwise, the target SpO₂ is ≥90%. All areas where patients with SARI are cared for should be equipped with pulse oximeters, functioning oxygen systems and disposable, single-use, oxygen-delivering interfaces (nasal cannula, simple face mask, and mask with reservoir bag). Use contact precautions when handling contaminated oxygen interfaces of patients with COVID-19.

b. Use conservative fluid management in patients with SARI when there is no evidence of shock: Patients with SARI should be treated cautiously with intravenous fluids, because aggressive fluid resuscitation may worsen oxygenation, especially in settings where there is limited availability of mechanical ventilation.

c. Give empiric antimicrobials to treat all likely pathogens causing SARI. Give antimicrobials within one hour of initial patient assessment for patients with sepsis: Although the patient may be suspected to have COVID-19, administer appropriate empiric antimicrobials within one hour of identification of sepsis. Empirical antibiotic treatment should be based on the clinical diagnosis (community-acquired pneumonia, health care-associated pneumonia [if infection was acquired in healthcare setting], or sepsis), local epidemiology and susceptibility data, and treatment guidelines. Empirical therapy includes a neuraminidase inhibitor for treatment of influenza when there is local circulation or other risk factors, including travel history or exposure to animal influenza viruses. Empirical therapy should be de-escalated on the basis of microbiology results and clinical judgment.

d. Do not routinely give systemic corticosteroids for treatment of viral pneumonia or ARDS outside of clinical trials unless they are indicated for another reason: A systematic review of observational studies of corticosteroids administered to patients with SARS reported no survival benefit and possible harms (cerebrovascular necrosis, psychosis, diabetes, and delayed viral clearance). A systematic review of observational studies in influenza found a higher risk of mortality and secondary infections with corticosteroids; the evidence was judged as very low.
to low quality due to confounding by indication. A subsequent study that addressed this limitation by adjusting for time-varying confounders found no effect on mortality. Finally, a recent study of patients receiving corticosteroids for MERS used a similar statistical approach and found no effect of corticosteroids on mortality but delayed lower respiratory tract (LRT) clearance of MERS-CoV. Given lack of effectiveness and possible harm, routine corticosteroids should be avoided unless they are indicated for another reason. See section F for the use of corticosteroids in sepsis.

e. Closely monitor patients with SARI for signs of clinical deterioration, such as rapidly progressive respiratory failure and sepsis, and apply supportive care interventions immediately: Application of timely, effective, and safe supportive therapies is the cornerstone of therapy for patients that develop severe manifestations of COVID-19.

f. Understand the patient’s co-morbid condition(s) to tailor the management of critical illness and appreciate the prognosis: During intensive care management of SARI, determine which chronic therapies should be continued and which therapies should be stopped temporarily.

g. Communicate early with patient and family: Communicate pro-actively with patients and families and provide support and prognostic information. Understand the patient’s values and preferences regarding life-sustaining interventions.
6. Management of hypoxemic respiratory failure and ARDS

- Recognize severe hypoxemic respiratory failure when a patient with respiratory distress is failing standard oxygen therapy. Patients may continue to have increased work of breathing or oxygenation even when oxygen is delivered via a face mask with reservoir bag (flow rates of 10-15 L/min, which is typically the minimum flow required to maintain bag inflation; FIO2 0.60-0.95). Hypoxemic respiratory failure in ARDS commonly results from intrapulmonary ventilation-perfusion mismatch or shunt and usually requires mechanical ventilation.

- High flow nasal catheter oxygenation or non-invasive mechanical ventilation: When respiratory distress and/or hypoxemia of the patient cannot be alleviated after receiving standard oxygen therapy, high-flow nasal cannula oxygen therapy or non-invasive ventilation can be considered. If conditions do not improve or even get worse within a short time (1–2 hours), tracheal intubation and invasive mechanical ventilation should be used in a timely manner. Compared to standard oxygen therapy, HFNO reduces the need for intubation. Patients with hypercapnia (exacerbation of obstructive lung disease, cardiogenic pulmonary oedema), hemodynamic instability, multi-organ failure, or abnormal mental status should generally not receive HFNO, although emerging data suggest that HFNO may be safe in patients with mild-moderate and non-worsening hypercapnia. Patients receiving HFNO should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr).

- NIV guidelines make no recommendation on use in hypoxemic respiratory failure (apart from cardiogenic pulmonary oedema and post-operative respiratory failure) or pandemic viral illness (referring to studies of SARS and pandemic influenza). Risks include delayed intubation, large tidal volumes, and injurious transpulmonary pressures. Limited data suggest a high failure rate when MERS patients received NIV. Patients receiving a trial of NIV should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr). Patients with hemodynamic instability, multiorgan failure, or abnormal mental status should not receive NIV.
- Recent publications suggest that newer HFNO and NIV systems with good interface fitting do not create widespread dispersion of exhaled air and therefore should be associated with low risk of airborne transmission.

- Endotracheal intubation should be performed by a trained and experienced provider using airborne precautions. Patients with ARDS, especially young children or those who are obese or pregnant, may de-saturate quickly during intubation. Pre-oxygenate with 100% FiO₂ for 5 minutes, via a face mask with reservoir bag, bag-valve mask, HFNO, or NIV. Rapid sequence intubation is appropriate after an airway assessment that identifies no signs of difficult intubation.

- Implement mechanical ventilation using lower tidal volumes (4–8 ml/kg predicted body weight, PBW) and lower inspiratory pressures (plateau pressure <30 cmH₂O). This is a strong recommendation from a clinical guideline for patients with ARDS, and is suggested for patients with sepsis-induced respiratory failure. The initial tidal volume is 6 ml/kg PBW; tidal volume up to 8 ml/kg PBW is allowed if undesirable side effects occur (e.g. dyssynchrony, pH <7.15). Hypercapnia is permitted if meeting the pH goal of 7.30-7.45. Ventilator protocols are available. The use of deep sedation may be required to control respiratory drive and achieve tidal volume targets.

- In patients with severe ARDS, prone ventilation for >12 hours per day is recommended. Application of prone ventilation is strongly recommended for adult and paediatric patients with severe ARDS but requires sufficient human resources and expertise to be performed safely.

- Use a conservative fluid management strategy for ARDS patients without tissue hypoperfusion.

- In patients with moderate or severe ARDS, higher PEEP instead of lower PEEP is suggested. PEEP titration requires consideration of benefits (reducing atelectrauma and improving alveolar recruitment) vs. risks (end-inspiratory overdistension leading to lung injury and higher pulmonary vascular resistance). Tables are available to guide PEEP titration based on the FiO₂ required to maintain SpO₂. A related intervention of recruitment manoeuvres (RM) is delivered as episodic periods of high continuous positive airway pressure (30-40 cm H₂O), progressive incremental increases in PEEP with constant driving pressure, or high driving pressure; considerations of benefits vs. risks are similar. Higher PEEP and RM were both conditionally recommended in a clinical practice guideline. In patients with moderate-
severe ARDS (PaO₂/FiO₂<150), neuromuscular blockade by continuous infusion should not be routinely used.

- In settings with access to expertise in extracorporeal life support (ECLS), consider referral of patients with refractory hypoxemia despite lung protective ventilation. ECLS should only be offered in expert centres with a sufficient case volume to maintain expertise and that can apply the IPC measures required for COVID – 19 patients.

- Avoid disconnecting the patient from the ventilator, which results in loss of PEEP and atelectasis. Use in-line catheters for airway suctioning and clamp endotracheal tube when disconnection is required (for example, transfer to a transport ventilator).
7. Management of septic shock

- Recognize septic shock in adults when infection is suspected or confirmed AND vasopressors are needed to maintain mean arterial pressure (MAP) ≥65 mmHg AND lactate is < 2 mmol/L, in absence of hypovolemia. Recognize septic shock in children with any hypotension (systolic blood pressure [SBP] <5th centile or >2 SD below normal for age) or 2-3 of the following: altered mental state; tachycardia or bradycardia (HR <90 bpm or >160 bpm in infants and HR <70 bpm or >150 bpm in children); prolonged capillary refill (>2 sec) or warm vasodilation with bounding pulses; tachypnea; mottled skin or pectechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia.

- In the absence of a lactate measurement, use MAP and clinical signs of perfusion to define shock. Standard care includes early recognition and the following treatments within 1 hour of recognition: antimicrobial therapy and fluid loading and vasopressors for hypotension. The use of central venous and arterial catheters should be based on resource availability and individual patient needs. Detailed guidelines are available for the management of septic shock in adults and children.

- In resuscitation from septic shock in adults, give at least 30 ml/kg of isotonic crystalloid in adults in the first 3 hours. In resuscitation from septic shock in children in well-resourced settings, give 20 ml/kg as a rapid bolus and up to 40-60 ml/kg in the first 1 hr. Do not use hypotonic crystalloids, starches, or gelatins for resuscitation.

- Fluid resuscitation may lead to volume overload, including respiratory failure. If there is no response to fluid loading and signs of volume overload appear (for example, jugular venous distension, cracks on lung auscultation, pulmonary oedema on imaging, or hepatomegaly in children), then reduce or discontinue fluid administration. This step is particularly important where mechanical ventilation is not available. Alternate fluid regimens are suggested when caring for children in resource-limited settings.

- Crystalloids include normal saline and Ringer’s lactate. Determine need for additional fluid boluses (250-1000 ml in adults or 10-20 ml/kg in children) based on clinical response and improvement of perfusion targets. Perfusion targets include MAP (>65 mmHg or age-appropriate targets in children), urine output (>0.5 ml/kg/hr in adults, 1 ml/kg/hr in children), and improvement of skin mottling, capillary refill, level of consciousness, and lactate. Consider
dynamic indices of volume responsiveness to guide volume administration beyond initial resuscitation based on local resources and experience. These indices include passive leg raises, fluid challenges with serial stroke volume measurements, or variations in systolic pressure, pulse pressure, inferior vena cava size, or stroke volume in response to changes in intrathoracic pressure during mechanical ventilation.

- **Administer vasopressors when shock persists during or after fluid resuscitation.** The initial blood pressure target is MAP ≥65 mmHg in adults and age-appropriate targets in children.

- If central venous catheters are not available, vasopressors can be given through a peripheral IV, but use a large vein and closely monitor for signs of extravasation and local tissue necrosis. If extravasation occurs, stop infusion. Vasopressors can also be administered through intraosseous needles.

- If signs of poor perfusion and cardiac dysfunction persist despite achieving MAP target with fluids and vasopressors, consider an inotrope such as dobutamine.
8. Other therapeutic measures:

For patients with progressive deterioration of oxygenation indicators, rapid worsening on imaging and excessive activation of the body’s inflammatory response, glucocorticoids can be used for a short period of time (3 to 5 days). It is recommended that dose should not exceed the equivalent of methylprednisolone 1 – 2mg/kg/day. Note that a larger dose of glucocorticoid will delay the removal of coronavirus due to immunosuppressive effects. For pregnant severe and critical cases, pregnancy should be preferably terminated. Consultations with obstetric, neonatal, and intensive care specialists (depending on the condition of the mother) are essential. Patients often suffer from anxiety and fear and they should be supported by psychological counseling.
9. Prevention of complications

Implement the following interventions (Table 3) to prevent complications associated with critical illness. These interventions are based on Surviving Sepsis or other guidelines, and are generally limited to feasible recommendations based on high quality evidence.

<table>
<thead>
<tr>
<th>Anticipated Outcome</th>
<th>Interventions</th>
</tr>
</thead>
</table>
| Reduce days of invasive mechanical ventilation | • Use weaning protocols that include daily assessment for readiness to breathe spontaneously  
• Minimize continuous or intermittent sedation, targeting specific titration endpoints (light sedation unless contraindicated) or with daily interruption of continuous sedative infusions |
| Reduce incidence of ventilator associated pneumonia | • Oral intubation is preferable to nasal intubation in adolescents and adults  
• Keep patient in semi-recumbent position (head of bed elevation 30-45°)  
• Use a closed suctioning system; periodically drain and discard condensate in tubing  
• Use a new ventilator circuit for each patient; once patient is ventilated, change circuit if it is soiled or damaged but not routinely  
• Change heat moisture exchanger when it malfunctions, when soiled, or every 5–7 days |
<p>| Reduce incidence of venous thromboembolism | • Use pharmacological prophylaxis (low molecular-weight heparin [preferred if available] or heparin 5000 units subcutaneously twice daily) in adolescents and adults without contraindications. For those with contraindications, use mechanical prophylaxis (intermittent pneumatic compression devices). |
| Reduce incidence of catheter related bloodstream infection | • Use a checklist with completion verified by a real-time observer as reminder of each step needed for sterile insertion and as a daily reminder to remove catheter if no longer needed |
| Reduce incidence of pressure                | • Turn patient every two hours                                                                                                           |</p>
<table>
<thead>
<tr>
<th>Ulcers</th>
<th></th>
</tr>
</thead>
</table>
| Reduce incidence of stress ulcers and gastrointestinal bleeding | - Give early enteral nutrition (within 24–48 hours of admission)
- Administer histamine-2 receptor blockers or proton-pump inhibitors in patients with risk factors for GI bleeding. Risk factors for gastrointestinal bleeding include mechanical ventilation for ≥48 hours, coagulopathy, renal replacement therapy, liver disease, multiple co-morbidities, and higher organ failure score |
| Reduce incidence of ICU-related weakness | - Actively mobilize the patient early in the course of illness when safe to do so |
10. **Specific therapy**

NO SPECIFIC ANTIVIRALS have been proven to be effective as per currently available data. However, based on the available information (uncontrolled clinical trials), the following drugs may be considered as an off – label indication in patients with severe disease and requiring ICU management:

- Hydroxychloroquine (Dose 400mg BD – for 1 day followed by 200mg BD for 4 days)

  In combination with

- Azithromycin (500 mg OD for 5 days) under close monitoring including QTc interval.

The above medication is presently not recommended for children less than 12 years, pregnant and lactating women.

*These guidelines are based on currently available information and would be reviewed from time to time as new evidence emerges.*

---

**Support to Treating Physicians:** AIIMS, New Delhi is running a 24x7 helpline to provide support to the treating physicians on clinical management. The helpline number is 9971876591. The identified nodal doctor of the State appointed for clinical management of COVID – 19 should only contact AIIMS Call Centre.
11. Preparedness and management of quarantine centres identified by the District Administration (30-Mar-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Directorate of Health Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HA-MISS-01-2020 8510</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>30-Mar-2020</td>
</tr>
</tbody>
</table>
DIRECTORATE OF HEALTH SERVICES ODISHA, BHubaneswar

*****

No. 8510 / HA- MISC-01/2020, BBSR, Date. 30/3/20

To

All CDM & PHO.

Sub: Preparedness and management of quarantine centers identified by District Administration.

Sir/Madam,

With reference to the subject cited above I am to state that district administration has identified many quarantine centers at Panchayat to District level. You are requested to coordinate with District administration and prepare a micro plan by attaching the health personnel of concerned or near by health facility (One Medical Officer and one Paramedic [Pharmacist/Staff nurse/ MPH/HW (M/F)]) to each of the quarantine centers. The teams may suitably be instructed to remain vigilant and visit the centers on being informed regarding symptomatic cases and further management may be done as per Covid-19 management protocol. Basic logistics for screening are to be supplied to the teams. Compliance in this regard may please be intimated to the undersigned by 31st March 2020 F.N.

This may be treated as most Urgent

Yours faithfully,

Director of Health Services, Odisha.

Memo. No. 8511 BBSR Date. 30/3/20

Copy to PS to DC-cum-ACS, Govt. of Odisha, Bhubaneswar for information.

Director of Health Services, Odisha
Memo. No. 8512 BBSR  
Copy to PS to Principal Secretary, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Date: 30/7/20

P.T.O

Director of Health Services, Odisha

---

Memo. No. 8513 BBSR  
Copy to PS to MD (NHM), Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Date: 30/7/20

Director of Health Services, Odisha

---

Memo. No. 8514 BBSR  
Copy to DPH, Health & F.W. Dept, Govt. of Odisha, Bhubaneswar for information.

Date: 30/7/20

Director of Health Services, Odisha

---

Memo. No. 8515 BBSR  
Copy to All collector-cum-DM for information and necessary action.

Date: 30/7/20

Director of Health Services, Odisha

---

<table>
<thead>
<tr>
<th>Department</th>
<th>Health &amp; Family Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HFW-SCH-I-EMER-0001-2020 8789</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>23-Mar-2020</td>
</tr>
</tbody>
</table>
Loksewa Bhavan, Bhubaneswar - 751001
Tel : +91 674 1586632
Fax : +91 674 2395215
E-mail : onhealth@nic.in

Nikunja B. Dhal, IAS
Principal Secretary to Government
Health & Family Welfare Department

No: 8379
Date: 23.03.2020

All Dean & Principals and Superintendents of Medical Colleges & Hospital
All Directors Health & Family Welfare Department, Odisha
All Chief Medical Officers & Public Health Officers, Odisha.


Sir/Madam,

In continuation of my letter No. 8611 dt. 20.03.2020, it is informed that Government of India, Ministry of Health & Family Welfare has issued updated guidelines on Clinical Management of COVID-19 on 17.03.2020 (copy enclosed). So, the said guidelines will supersede Annexure IV of the guidelines communicated earlier. In fact, the latest Clinical Management Guidelines issued by MCHFW from time to time shall be followed by all healthcare facilities. The same are available on the website of MCHFW.

Yours faithfully,

{ Nikunja B. Dhal }

Copy to

1. Chief Secretary, Odisha/ DC cum-ACS for kind information.
2. Mission Director, NNM, Odisha for information and necessary action.
3. All Collectors & District Magistrates for information and necessary action.
4. Copy to ME-II Section for circulation among private health care providers.
5. Team Leader, WHO, Odisha for information.

{ Nikunja B. Dhal }

Copy to

Director, AIIMS, Bhubaneswar/ Sr. Regional Director, Ministry of Health & Family Welfare, Government of India, Bhubaneswar.

{ Nikunja B. Dhal }

https://health.odisha.gov.in

Page 77
Guidelines on Clinical Management of COVID – 19

This document is intended for clinicians taking care of hospitalized adult and paediatric patients of COVID – 19. It is not meant to replace clinical judgment or specialist consultation but rather to strengthen clinical management of these patients and provide up-to-date guidance. Best practices for COVID – 19 including IPC and optimized supportive care for severely ill patients are essential. This document aims to provide clinicians with updated interim guidance on timely, effective, and safe supportive management of patients with COVID – 19, particularly those with severe acute respiratory illness and critical ill.

17th March 2020
Triage: Early recognition of patients with COVID - 19

The purpose of triage is to recognize and sort all patients with COVID - 19 at first point of contact with health care system (such as the emergency department). Consider COVID - 19 as a possible etiology under certain conditions (see Table 1). Triage patients and start emergency treatments based on disease severity.

Table 1: Definitions of patients with COVID - 19

| SARI | An SARI is defined as a person with history of fever or cough, at least 16 days, and requiring hospitalization.
| Surveillance case definitions for SARI | 1. SARI in a patient, with history of fever and cough requiring admission to hospital, with no other etiology that fully explains the clinical presentation (clinicians should also be alert to the possibility of atypical presentations in patients who are immune-compromised), AND any of the following:
   a) A history of international travel in 14 days prior to symptom onset; or
   b) the disease occurs in a health care worker who has been working in an environment where patients with severe acute respiratory infections are being cared for, without regard to place of residence or history of travel; or
   c) the person develops an unusual or unexpected clinical course, especially sudden deterioration despite appropriate treatment, without regard to place of residence or history of travel, even if another etiology has been identified that fully explains the clinical presentation.
   2. A patient with acute respiratory illness of any degree of severity who, within 14 days before onset of illness, had any of the following exposures:
      a) close physical contact with a confirmed case of COVID - 19 infection, while that patient was symptomatic; or
      b) a healthcare facility in a country where hospital-associated COVID - 19 infections have been reported.

* see https://nshlw.gov.in/media/disease-alerts for latest case definition.
1- Testing should be according to local guidance for management of community-acquired pneumonia. Examples of other etiologies include Streptococcus pneumoniae, Hemophilus influenzae type B, Legionella pneumophila, other recognized primary bacterial pneumonias, influenza viruses, and respiratory syncytial virus.

2- **Close contact is defined as:**
   - Health care associated exposure, including providing direct care for COVID-19 patients, working with health care workers infected with COVID-19, visiting patients or staying in the same close environment of a COVID-19 patient.
   - Working together in close proximity or sharing the same classroom environment with a COVID-19 patient.
   - Travelling together with COVID-19 patient in any kind of conveyance.
   - Living in the same household as a COVID-19 patient.

The epidemiological link may have occurred within a 14-day period before or after the onset of illness in the case under consideration.

COVID-19 may present with mild, moderate, or severe illness; the latter includes severe pneumonia, ARDS, sepsis and septic shock. Early recognition of suspected patients allows for timely initiation of IPC (see Table 2). Early identification of those with severe manifestations (see Table 2) allows for immediate optimized supportive care treatments and safe, rapid admission (or referral) to intensive care unit according to national protocols. For those with mild illness, hospitalization may not be required unless there is concern for rapid deterioration. All patients discharged for home should be instructed to return to hospital if they develop any worsening of illness.

**Table 2: Clinical symptoms associated with COVID-19 infection**

<table>
<thead>
<tr>
<th>Uncomplicated illness</th>
<th>Patients with uncomplicated upper respiratory tract viral infection, may have non-specific symptoms such as fever, cough, sore throat, nasal congestion, malaise, headaches. The elderly and immunosuppressed may present with atypical symptoms. These patients do not have any signs of dehydration, sepsis or shortness of breath.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild pneumonia</td>
<td>Patient with pneumonia and no signs of severe pneumonia. Child with non-severe pneumonia has cough or difficulty in breathing/ fast breathing (fast breathing: in breast/breast:&lt;2 months; &gt;60; 1-11 months; 250; 1-5 years, &gt;40 and no signs of severe pneumonia)</td>
</tr>
</tbody>
</table>
### Severe pneumonia

Adolescent or adult: fever or suspected respiratory infection, plus one of the following: respiratory rate \( >50 \) breaths/min, severe respiratory distress, SpO\(_2\) \(<90\%\) on room air.

Child with cough or difficulty in breathing, plus at least one of the following: central cyanosis or SpO\(_2\) \(<90\%\); severe respiratory distress (e.g., grunting, chest indrawing); signs of pneumonia with any of the following danger signs: inability to breastfeed or drink, lethargy or unreassurance, or convulsions. Other signs of pneumonia may be present: chest indrawing, fast breathing (in breaths/min): <2 months \( >60\); 2-11 months \( >50\); 1-5 years \( >40\). The diagnosis is clinical; chest imaging can exclude complications.

### Acute Respiratory Distress Syndrome (ARDS)

**Onset:** new or worsening respiratory symptoms within one week of known clinical insult.

Chest imaging (radiograph, CT scan, or lung ultrasound); bilateral opacities, not fully explained by effusions, lobar or lung collapse, or nodules.

**Origin of sepsis:** respiratory failure not fully explained by cardiac failure or fluid overload. Need objective assessment (e.g., echocardiography) to exclude hydrostatic cause of sepsis if septic factor present.

**Oxygenation (adults):**

- **Mild ARDS:** 100 mmHg < PaO\(_2\)/FiO\(_2\) \(<300\) mmHg with PEEP or CPAP \(\geq 5\) cm H\(_2\)O, or non-ventilated.
- **Moderate ARDS:** 100 mmHg < PaO\(_2\)/FiO\(_2\) \(<200\) mmHg with PEEP \(\geq 5\) cm H\(_2\)O, or non-ventilated.
- **Severe ARDS:** PaO\(_2\)/FiO\(_2\) \(<100\) mmHg with PEEP \(\geq 10\) cm H\(_2\)O or non-ventilated.

When PaO\(_2\) is not available, SpO\(_2\)/FiO\(_2\) \(<151\) suggests ARDS (excluding in non-ventilated patients). Oxygenation (children): note OI = Oxygenation Index and OSI = Oxygenation Index using SpO\(_2\).

- **Bilevel NIV or CPAP \(\geq 5\) cm H\(_2\)O via full face mask:** PaO\(_2\)/FiO\(_2\) \(\geq 300\) mmHg or SpO\(_2\)/FiO\(_2\) \(\geq 264\).
- **Mild ARDS (invasively ventilated):** 4 \(\leq\) OI \(\leq 8\) or 5 \(\leq\) OSI \(\leq 1.5\).
- **Moderate ARDS (invasively ventilated):** 8 \(\leq\) OI \(\leq 16\) or 7.5 \(\leq\) OSI \(\leq 12.3\).
- **Severe ARDS (invasively ventilated):** OI \(\geq 16\) or OSI \(\geq 12.3\).
A. Immediate implementation of appropriate IPC measures

IPC is a critical and integral part of clinical management of patients and should be initiated at the point of entry of the patient to hospital (typically the Emergency Department). Standard precautions should always be routinely applied in all areas of health care facilities. Standard precautions include hand hygiene; use of PPE to avoid direct contact with patients’ blood, body fluids, secretions (including respiratory secretions) and non-intact skin. Standard precautions also include prevention of needle-stick or sharp injury; safe waste management; cleaning and disinfection of equipment; and cleaning of the environment.

Table 3: How to implement infection prevention and control measures for patients with suspected or confirmed COVID-19 infection

| At triage | - Give suspect patient a triple layer surgical mask and direct patient to separate area, an isolation room if available. Keep at least 1-meter distance between suspected patients and other patients. Instruct all patients to cover nose and mouth during coughing or sneezing with tissue or flexed elbow for others. Perform hand hygiene after contact with respiratory secretions |

---
Apply droplet precautions

- Droplet precautions prevent large droplet transmission of respiratory viruses. Use a triple layer surgical mask if working within 1-2 metres of the patient. Place patients in single rooms, or group together those with the same etiological diagnosis. If an etiological diagnosis is not possible, group patients with similar clinical diagnoses and based on epidemiological risk factors, with a spatial separation. When providing care in close contact with a patient with respiratory symptoms (e.g., coughing or sneezing), use eye protection (face mask or goggles), because sprays of secretions may occur. Limit patient movement within the institution and ensure that patients wear triple layer surgical masks when outside their rooms.

Apply contact precautions

- Droplet and contact precautions prevent direct or indirect transmission from contact with contaminated surfaces or equipment (i.e. contact with contaminated oxygen tubing/interfaces). Use PPE (triple layer surgical mask, eye protection, gloves and gowns) when entering rooms and remove PPE when leaving. If possible, use either disposable or dedicated equipment (e.g., stethoscopes, blood pressure cuffs and thermometers). If equipment needs to be shared among patients, clean and disinfect between each patient use. Ensure that healthcare workers refrain from touching their eyes, nose, and mouth with potentially contaminated gloved or ungloved hands. Avoid contamination of environmental surfaces that are not directly related to patient care (e.g., door handles and light switches). Ensure adequate room ventilation. Avoid movement of patients or transport. Perform hand hygiene.

Apply airborne precautions when performing an aerosol generating procedure

- Ensure that healthcare workers performing aerosol generating procedures (i.e. open suctioning of respiratory tract, intubation, bronchoscopy, cardiopulmonary resuscitation) use PPE, including gloves, long-sleeved gown, eye protection, and fit-tested particulate respirators (N95). (The scheduled fit test should not be confused with user seal check before each use.) Whenever possible, use adequately ventilated single rooms when performing aerosol-generating procedures, ensuring negative pressure rooms with a minimum of 12 air changes per hour or at least 100 litres/second/patient in facilities with natural ventilation. Avoid the presence of unnecessary individuals in the room. Care for the patient in the same type of room after mechanical ventilation commences.

Abbreviations: ARI, acute respiratory infection; PPE, personal protective equipment
B. Early supportive therapy and monitoring

a. Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxemia, or shock: Initiate oxygen therapy at 5 L/min and titrate flow rates to reach target \( \text{SpO}_2 \geq 90\% \) in non-pregnant adults and \( \text{SpO}_2 \geq 92-95 \% \) in pregnant patients. Children with emergency signs (obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions) should receive oxygen therapy during resuscitation to target \( \text{SpO}_2 \geq 94\% \); otherwise, the target \( \text{SpO}_2 \) is \( \geq 90\% \). All areas where patients with SARI are cared for should be equipped with pulse oximeters, functioning oxygen systems and disposable, single-use, oxygen-delivering interfaces (naso cannula, simple face mask, and mask with reservoir bag). Use contact precautions when handling contaminated oxygen interfaces of patients with COVID-19.

b. Use conservative fluid management in patients with SARI when there is no evidence of shock: Patients with SARI should be treated cautiously with intravenous fluids, because aggressive fluid resuscitation may worsen oxygenation, especially in settings where there is limited availability of mechanical ventilation.

c. Give empiric antimicrobials to treat all likely pathogens causing SARI. Give antimicrobials within one hour of initial patient assessment for patients with sepsis. Although the patient may be suspected to have COVID-19, administer appropriate empiric antimicrobials within one hour of identification of sepsis. Empirical antibiotic treatment should be based on the clinical diagnosis (community-acquired pneumonia, health care-associated pneumonia [if infection was acquired in healthcare setting], or sepsis), local epidemiology and susceptibility data, and treatment guidelines. Empirical therapy includes a neuraminidase inhibitor for treatment of influenza when there is local circulation or other risk factors, including travel history or exposure to animal influenza viruses. Empirical therapy should be de-escalated on the basis of microbiology results and clinical judgment.

d. Do not routinely give systemic corticosteroids for treatment of viral pneumonia or ARDS outside of clinical trials unless they are indicated for another reason: A systematic review of observational studies of corticosteroids administered to patients with SARS reported no survival benefit and possible harms (avascular necrosis, psychosis, diabetes, and delayed viral clearance). A systematic review of observational studies in influenza found a higher risk of mortality and secondary infections with corticosteroids; the evidence was
judged as very low to low quality due to confounding by indication. A subsequent study that addressed this limitation by adjusting for time-varying confounders found no effect on mortality. Finally, a recent study of patients receiving corticosteroids for MERS used a similar statistical approach and found no effect of corticosteroids on mortality but delayed lower respiratory tract (LRT) clearance of MERS-CoV. Given lack of effectiveness and possible harm, routine corticosteroids should be avoided unless they are indicated for another reason. See section F for the use of corticosteroids in septis.

e. Closely monitor patients with SARI for signs of clinical deterioration, such as rapidly progressive respiratory failure and sepsis, and apply supportive care interventions immediately: Application of timely, effective, and safe supportive therapies is the cornerstone of therapy for patients that develop severe manifestations of COVID-19.

f. Understand the patient’s co-morbid condition(s) to tailor the management of critical illness and appreciate the prognosis. During intensive care management of SARI, determine which chronic therapies should be continued and which therapies should be stopped temporarily.

g. Communicate early with patient and family: Communicate pro-actively with patients and families and provide support and prognostic information. Understand the patient’s values and preferences regarding life-sustaining interventions.

C. Collection of specimens for laboratory diagnosis

Guidance on specimen collection, processing, transportation, including related biosafety procedures, is available on https://mshfw.gov.in/media/disease-alerts.

Points to remember:
- Collect blood cultures for bacteria that cause pneumonia and sepsis: ideally before antimicrobial therapy. DO NOT delay antimicrobial therapy to collect blood cultures.
- Collect specimens of nasopharyngeal and oropharyngeal swab for RT-PCR. Clinicians may also collect LRT (Lower Respiratory Tract) samples when these are readily available (for example, in mechanically ventilated patients).
- Use appropriate PPE for specimen collection (douplet and contact precautions for URT specimens; airborne precautions for LRT specimens). When collecting URT samples, use viral swabs (sterile dacron or rayon, not cotton) and viral transport media. Do not simple
the nostrils or tonsils. In a patient with suspected COVID-19, especially with pneumonia or severe illness, a single URT sample does not exclude the diagnosis, and additional URT and LRT samples are recommended. Sputum induction should be avoided due to increased risk of increasing aerosol transmission.

- Dual infections with other respiratory viral infections have been found in SARS and MERS cases. At this stage we need detailed microbiologic studies in all suspected COVID-19 cases. Both URT and LRT specimens can be tested for other respiratory viruses, such as influenza A and B (including zoonotic influenza A), respiratory syncytial virus, parainfluenza viruses, coronaviruses, adenoviruses, enteroviruses (e.g. EVD88), human metapneumovirus, and endemic human coronaviruses (i.e. HKU1, OC43, NL63, and 229E). LRT specimens can also be tested for bacterial pathogens, including Legionella pneumophila.

- In hospitalized patients with confirmed COVID-19 infection, repeat URT samples should be collected to demonstrate viral clearance. The frequency of specimen collection will depend on local circumstances but should be done at least every 2 to 4 days until there are two consecutive negative results (of URT samples) in a clinically recovered patient at least 24 hours apart.

D. Management of hypoxemic respiratory failure and ARDS

- Recognize severe hypoxemic respiratory failure when a patient with respiratory distress is failing standard oxygen therapy. Patients may continue to have increased work of breathing or hypoxemia even when oxygen is delivered via a face mask with reservoir bag (flow rates of 10-15 L/min, which is typically the minimum flow required to maintain bag inflation; FiO2, 0.80-0.95). Hypoxemic respiratory failure in ARDS commonly results from intrapulmonary ventilation-perfusion mismatch, atelectasis and usually requires mechanical ventilation.

- High-flow nasal catheter oxygenation or non-invasive mechanical ventilation: When respiratory distress and/or hypoxemia of the patient cannot be alleviated after receiving standard oxygen therapy, high-flow nasal cannula oxygen therapy or non-invasive ventilation can be considered. If conditions do not improve or even get worse within a short time (1-2 hours), tracheal intubation and invasive mechanical ventilation should be
used in a timely manner. Compared to standard oxygen therapy, HFNO reduces the need for intubation. Patients with hypoxemia (exacerbation of obstructive lung disease, cardiogenic pulmonary oedema, hemodynamic instability, multi-organ failure, or abnormal mental status should generally not receive HFNO, although emerging data suggest that HFNO may be safe in patients with mild-moderate and non-worsening hypercapnia\(^2\). Patients receiving HFNO should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr).

- NIV guidelines make no recommendation on use in hypoxemic respiratory failure (apart from cardiogenic pulmonary oedema and post-operative respiratory failure) or pandemic viral illness (referring to studies of SARS and pandemic influenza). Risks include delayed intubation, large tidal volumes, and iatrogenous transpulmonary pressures. Limited data suggest a high failure rate when MERS patients received NIV. Patients receiving a trial of NIV should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr). Patients with hemodynamic instability, multiorgan failure, or abnormal mental status should not receive NIV.

- Recent publications suggest that newer HFNO and NIV systems with good interface fitting do not create widespread dispersion of exhaled air and therefore should be associated with low risk of airborne transmission.

- Endotracheal intubation should be performed by a trained and experienced provider using airway precautions. Patients with ARDS, especially young children or those who are obese or pregnant, may desaturate quickly during intubation. Pre-oxygenate with 100% FiO\(_2\) for 5 minutes, via a face mask with reservoir bag, bag-valve mask, HFNO, or NIV. Rapid sequence intubation is appropriate after an airway assessment that identifies no signs of difficult intubation.

- Implement mechanical ventilation using lower tidal volumes (4-8 ml/kg predicted body weight, PBW) and lower inspiratory pressures (plateau pressure <30 cmH\(_2\)O). This is a strong recommendation from a clinical guideline for patients with ARDS, and is suggested for patients with sepsis-induced respiratory failure. The initial tidal volume is 6 ml/kg PBW; tidal volume up to 8 ml/kg PBW is allowed if undesirable side effects occur (e.g. dysynchrony, pH <7.15). Hypercapnia is permitted if meeting the pH goal of 7.30-
7.45 Ventilator protocols are available. The use of deep sedation may be required to control respiratory drive and achieve tidal volume targets.

- In patients with severe ARDS, prone ventilation for >12 hours per day is recommended. Application of prone ventilation is strongly recommended for adult and paediatric patients with severe ARDS but requires sufficient human resources and expertise to be performed safely.
- Use a conservative fluid management strategy for ARDS patients without tissue hypoperfusion.
- In patients with moderate or severe ARDS, higher PEEP instead of lower PEEP is suggested. PEEP titration requires consideration of benefits (reducing atelectrauma and improving alveolar recruitment) vs. risks (end-inspiratory overdistension leading to lung injury and higher pulmonary vascular resistance). Tables are available to guide PEEP titration based on the FiO2 required to maintain SpO2. A related intervention of recruitment manoeuvres (RM) is delivered as episodic periods of high continuous positive airway pressure [30–40 cm H2O], progressive incremental increases in PEEP with constant driving pressure, or high driving pressure; considerations of benefits vs. risks are similar. Higher PEEP and RMs were both conditionally recommended in a clinical practice guideline. In patients with moderate-severe ARDS (PaO2/FiO2 <130), neuromuscular blockade by continuous infusion should not be routinely used.
- In settings with access to expertise in extracorporeal life support (ECLS), consider relabel of patients with refractory hypoxemia despite lung protective ventilation. ECLS should only be offered in expert centres with a sufficient case volume to maintain expertise and that can apply the ICP measures required for COVID—19 patients.
- Avoid disconnecting the patient from the ventilator, which results in loss of PEEP and atelectasis. Use in-line catheters for airway suctioning and clamp endotracheal tube when disconnection is required (for example, transfer to a transport ventilator).

E. Management of septic shock

- Recognize septic shock in adults when infection is suspected or confirmed AND vasopressors are needed to maintain mean arterial pressure (MAP) ≥65 mmHg AND
lactate is < 2 mmol/L, in absence of hypovolemia. Recognize septic shock in children with any hypotension (systolic blood pressure [SBP] < 5th centile or > 2 SD below normal for age) or 2-3 of the following: altered mental state; tachycardia or bradycardia (HR < 90 bpm or > 160 bpm in infants and HR < 70 bpm or > 110 bpm in children); prolonged capillary refill (> 2 sec) or warm vascularity with bounding pulses; tachypnea; motiled skin or petechial or purpural rash; increased lactate; oliguria; hyperthermia or hypothermia.

- In the absence of a lactate measurement, use MAP and clinical signs of perfusion to define shock. Standard care includes early recognition and the following treatments within 1 hour of recognition: antimicrobial therapy and fluid loading and vasopressors for hypotension. The use of central venous and arterial catheters should be based on resource availability and individual patient needs. Detailed guidelines are available for the management of septic shock in adults and children.

- In resuscitation from septic shock in adults, give at least 30 ml/kg of isotonic crystalloid in adults in the first 3 hours. In resuscitation from septic shock in children in well-resourced settings, give 20 ml/kg as a rapid bolus and up to 40-60 ml/kg in the first 1 hr. Do not use hypotonic crystalloids, starches, or gelatins for resuscitation.

- Fluid resuscitation may lead to volume overload, including respiratory failure. If there is no response to fluid loading and signs of volume overload appear (for example, jugular venous distension, crackles on lung auscultation, pulmonary oedema on imaging, or hepatomegaly in children), then reduce or discontinue fluid administration. This step is particularly important where mechanical ventilation is not available. Alternate fluid regimens are suggested when caring for children in resource-limited settings.

- Crystalloids include normal saline and Ringer’s lactate. Determine need for additional fluid boluses (250-1000 ml in adults or 10-20 ml/kg in children) based on clinical response and improvement of perfusion targets. Perfusion targets include MAP (> 65 mmHg or age-appropriate targets in children), urine output (> 0.5 ml/kg/hr in adults, 1 ml/kg/hr in children), and improvement of skin motility, capillary refill, level of consciousness, and lactate. Consider dynamic indices of volume responsiveness to guide volume administration beyond initial resuscitation based on local resources and experience. These indices include passive leg raises, fluid challenges with serial stroke volume measurements, or variations in systolic pressure, pulse pressure, inferior vena
cava size, or stroke volume in response to changes in intrathoracic pressure during
mechanical ventilation.

- **Administer vasopressors when shock persists during or after fluid resuscitation. The initial blood pressure target is MAP ≥ 65 mmHg in adults and age-appropriate targets in children.**

- If central venous catheters are not available, vasopressors can be given through a peripheral IV, but use a large vein and closely monitor for signs of extravasation and local tissue necrosis. If extravasation occurs, stop infusion. Vasopressors can also be administered through intramuscular needles.

- If signs of poor perfusion and cardiac dysfunction persist despite achieving MAP targets with fluids and vasopressors, consider an inotrope such as dobutamine.

**F. Other Therapeutic Measures:**

For patients with progressive decompensation of oxygenation indicators, rapid worsening on imaging and excessive activation of the body’s inflammatory response, glucocorticoids can be used for a short period of time (3 to 5 days). It is recommended that dose should not exceed the equivalent of methylprednisolone 1 – 2mg/kg/day. Note that a larger dose of glucocorticoid will delay the removal of coronavirus due to immunosuppressive effects. For pregnant severe and critical cases, pregnancy should be preferentially terminated. Consultations with obstetric, neonatal, and intensive care specialists (depending on the condition of the mother) are essential. Patients often suffer from anxiety and fear and should be supported by psychological counselling.

**G. Prevention of complications**

Implement the following interventions (Table 4) to prevent complications associated with critical illness. These interventions are based on Surviving Sepsis or other guidelines, and are generally limited to feasible recommendations based on high quality evidence.

**Table 4: Prevention of complications**

<table>
<thead>
<tr>
<th>Anticipated Outcome</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce days of invasive mechanical ventilation</td>
<td>- Use weaning protocols that include daily assessment for readiness to breathe spontaneously&lt;br&gt;- Minimize continuous or intermittent sedation, targeting specific titration endpoints (light sedation unless contraindicated) or with daily interruption of continuous sedative infusions</td>
</tr>
</tbody>
</table>
### Reduce incidence of ventilator associated pneumonia

- Oral intubation is preferable to nasal intubation in adolescents and adults.
- Keep patient in semi-recumbent position (head of bed elevation 30-45°).
- Use a closed suctioning system, periodically drain and discard condensate in tubing.
- Use a new ventilator circuit for each patient; once patient is ventilated, change circuit if it is soiled or damaged but not routinely.
- Change heat moisture exchanger when it malfunctions, when soiled, or every 5-7 days.

### Reduce incidence of venous thromboembolism

- Use pharmacological prophylaxis (low molecular-weight heparin [preferred if available] or heparin 5000 units subcutaneously twice daily) in adolescents and adults without contraindications. For those with contraindications, use mechanical prophylaxis (intermittent pneumatic compression devices).

### Reduce incidence of catheter related bloodstream infection

- Use a checklist with completion verified by a real-time observer as a reminder of each step needed for sterile insertion and as a daily reminder to remove catheter if no longer needed.

### Reduce incidence of pressure sores

- Turn patient every two hours.

### Reduce incidence of stress ulcers and gastrointestinal bleeding

- Give early enteral nutrition (within 24-48 hours of admission).
- Administer histamine-2 receptor blockers or proton-pump inhibitors in patients with risk factors for GI bleeding. Risk factors for gastrointestinal bleeding include mechanical ventilation for 248 hours, coagulopathy, renal replacement therapy, liver disease, multiple co-morbidities, and higher organ failure score.

### Reduce incidence of ICU-related weakness

- Actively mobilize the patient early in the course of illness when safe to do so.

## H. Specific COVID-19 treatments and clinical research

There is no current evidence from RCTs to recommend any specific treatment for suspected or confirmed patients with COVID-19. No specific anti-virals are recommended for treatment of COVID - 19 due to lack of adequate evidence from literature. The use of Lopinavir/ Ritonavir in PEP regimens for HIV (4 weeks) is also associated with significant adverse events which many a times leads to discontinuation of therapy. In light of the above, Lopinavir/ Ritonavir should ONLY be used with proper informed expressed consent on a
case to case basis for severe cases, within the under-mentioned framework along with supportive treatment as per need.

a) Administration of Lopinavir/ Ritonavir

Administration of Lopinavir/ Ritonavir to be considered in laboratory confirmed cases of COVID – 19 when the following criteria are met:

- Symptomatic patients with any of the following:
  - Hypoxia,
  - Hypotension,
  - New onset organ dysfunction (one or more)
    * Increase in creatinine by 50% from baseline, GFR reduction by >25% from baseline or urine output of <0.5 ml/kg for 6 hours.
    * Reduction of CCS by 2 or more
    * Any other organ dysfunction

- High Risk Groups:
  - Age > 60 yrs
  - Diabetes Mellitus, Renal Failure, Chronic Lung disease
  - Immune – compromised persons

- Dosage:
  1. Lopinavir/ Ritonavir (200 mg/ 50 mg) – 2 tablets twice daily
  2. For patients unable to take medications by mouth: Lopinavir 400mg/ Ritonavir 100 mg – 5ml suspension twice daily

- Duration: 14 days or for 7 days after becoming asymptomatic.

b) Support to Treating Physicians

AIIMS, New Delhi is running a 24x7 helpline to provide support to the treating physicians on clinical management. The helpline number is 9971876591. The identified nodal doctor of the State, appointed for clinical management of COVID – 19 should only contact AIIMS Call Centre.

<table>
<thead>
<tr>
<th>Department</th>
<th>Planning &amp; Convergence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Issue</td>
<td>21-Mar-2020</td>
</tr>
</tbody>
</table>
COVID-19 Matter Urgent

Government of Odisha
Planning & Convergence Department

No. U671/2020, Bhubaneswar Dated the 21.3.20

From
Dr. Yeddula Vijay, IAS
Deputy Secretary to Government

To
The Additional Chief Secretaries to Government/
The Principal Secretaries to Government/
The Commissioner-cum-Secretaries to Government/
The Revenue Divisional Commissioners/
The Collectors/
The Project Directors, DRDAs.

Sub: Guidelines on Management of Temporary Health Centres
(Quarantine Purpose) in Rural and Urban Areas of the State.

Sir,

I am directed to enclose herewith the “Guidelines on Management of Temporary Health Centres (Quarantine Purpose) in Rural and Urban Areas of the State” for information and immediate necessary action.

Yours faithfully,

Deputy Secretary to Government

Memo No. U672, P, Dated 21.3.20
Copy forwarded to Sr. P.S to DC-cum-ACS for information.
GUIDELINES ON MANAGEMENT OF TEMPORARY HEALTH CENTRES (QUARANTINE PURPOSE) IN RURAL AND URBAN AREAS OF THE STATE.

To contain the spread of COVID-19 virus, it has been decided by Government to open large number of temporary health centres both in rural and urban areas to keep people for quarantine purpose. The detailed guideline to be followed for management of such centres is as follows:

1. In rural areas every Gram Panchayat will have at least one building which can accommodate 50-100 persons for quarantine purpose. It will have all basic facilities like electricity including back up, water supply, toilet etc. Service providers will be identified and kept in standby for providing materials like bed, mattress, cleaning & sanitation facilities, catering, watch & ward, etc. with a short notice. For each such centre one officer in charge will be appointed by PR & DW Department. All the staff deployed by the service provider have to be thoroughly trained by Health & FW Department Officers before operationalization of the centres. They may be provided necessary protective materials like mask etc. All the guidelines issued by Health & FW Department will be followed in such centres on quarantine.

2. **Who will be quarantined in the Centre**:

   i) Normally people will go for self-quarantine at home only. People who have arrived from outside India or other States having Corona virus cases and those who have come in close contact with Corona virus positive cases will be quarantined for 14 days. If home quarantine will not be possible in some cases then they can be shifted to the temporary health centres for quarantine purpose.
ii) People living in small building having more than one family member in one room can also be shifted if they need quarantine. Some people who have returned back from outside the State or outside the country may face obstruction or ostracization from the villagers to live among them, such people can also be housed in the temporary health camp for quarantine purpose and released after the period is over.

3. Collectors of the district will be in overall charge of all such rural health camps which will be set up through BDOs. The expenditure borne for such camp will be paid out of SDRF fund placed with Health & FW Department. Rs.5.00 lakh earmarked by PR&DW Deptt. for each such camp will be utilised for essential maintenance and refurbishment of the temporary camps, maintenance of buildings including proper toilet, electricity and drinking water facilities. Health & FW Department will tag one doctor and paramedical staff to each rural health camp who will be on standby. However, when people will stay in the camps, regular health check-up will be done by doctor and his team.

4. If any person shows symptoms of COVID-19, he can be shifted by following all protocols to hospital for isolation on the advice of doctors.

5. **Temporary Health Camps in urban areas:**

All urban areas in the State will identify buildings which is suitable for temporary health centres (for quarantine purpose). Buildings belonging to private Engineering Colleges can also be considered. Buildings should have single room accommodation with preferably attached toilet facility. For each such building service provider have to be identified to provide services like catering, cleaning & sanitation, watch & ward, room attendance etc. All the staff deployed by the service provider have to be thoroughly trained by Health & FW
Department Officers before operationalization of the centres. They may
be provided necessary protective materials like mask etc. The ULBs will
appoint one officer in charge for management of each such camp. All
the camps will be under the overall supervision of the Collector of the
district except in Municipal Corporation areas where the Commissioner
will be in overall charge. Health & FW Department will identify and tag
doctors and suitable staff to each such centre. There may be some
people under quarantine who will show symptoms of COVID-19 viral
attack. In such cases, Health & FW Deptt. as per their protocol will shift
such patient from the temporary centre to Hospitals. All the guidelines
issued by Health & FW Department will be followed in such centres on
quarantine.

All expenditure for management of such centres will be borne out
of SDRF Fund which has been placed with Health & FW Deptt.

(S.C. Mahapatra)
Development Commissioner-cum-ACS

<table>
<thead>
<tr>
<th>Department</th>
<th>Health &amp; Family Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HFW-SCH-I-EMER-0001-2020 8611</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>20-Mar-2020</td>
</tr>
</tbody>
</table>
To

All Deans & Principals and Superintendents of Medical Colleges & Hospital
All Directors Health and Family Welfare Department, Odisha
All Chief District Medical and Public Health Officers, Odisha

Sub: Technical guidelines for quarantine, isolation and treatment for effective COVID-19 response

Sir/Madam,

As you are aware that Corona Virus Disease (COVID-19) which is caused by a new Virus (SARS-CoV-2), first appeared in Wuhan city of Hubei province of China in December 2019. By 17th March this disease has affected 157 countries including India. Looking at the severity of the situation, World Health Organization (WHO) has declared this as Pandemic.

Government of Odisha has initiated various preventive measures to keep the virus at bay. The State has framed, COVID-19 Regulations 2020, exercising the powers conferred under section 2,3 & 4 of Epidemic Disease Act, 1897 for effective prevention & containment of the outbreak.

It is necessary to interrupt human-to-human transmission, identify, isolate and care patients early and to reduce the impact of the outbreak. I am enclosing the "Technical guidelines for quarantine, isolation and treatment for effective COVID-19 response". While sharing this to all of you, I request you to go through it meticulously and ensure compliance of the same by all concerned.

Yours faithfully,

[Signature]

(Nikunja B. Dhal)

---

https://heath.odisha.gov.in

 bangla odisha Odisha
Copy to
1. Chief Secretary, Odisha / DC-cum- ACS for kind information
2. Mission Director, NHM, Odisha for information and necessary action.
3. All Collectors and District Magistrates for information and necessary action.
4. Copy to ME-II Section for circulation among private health care providers.
5. Team Leader, WHO, Odisha for information.

(Dated 20/03/2020)

(Nikunja B. Dhal)

Copy to

Director, AIIMS, Bhubaneswar / Sr. Regional Director, Ministry of Health & Family Welfare, Government of India, Bhubaneswar.

(Dated 20/03/2020)

(Nikunja B. Dhal)
Technical guidelines for quarantine, isolation and treatment of COVID-19

COVID-19 is caused by SARS COV-2 virus first detected in Wuhan city of Hubei province in China on 31.12.2019. It belongs to same family of viruses of like SARS and MERS. The virulence is relatively less with very high infection rate. Certain cases could be fatal. The main mode of transmission is through droplet infection and fomites. On March 5, WHO declared it as Global Pandemic.

Till now, no prophylactic vaccine or effective antiviral drug has been developed. So the mainstay of management is prevention and containment of the disease. For effective management of COVID-19 the following protocol should be followed for quarantine, isolation and treatment.

(i) CATEGORIES OF PERSONS WHO REQUIRE QUARANTINE, ISOLATION AND TREATMENT

A. QUARANTINE

It may be home quarantine or facility level quarantine.

a. Home Quarantine

It is required for the following categories of persons:

(i) Persons with travel history abroad in the last 14 days, but asymptomatic or with very milder symptoms.

(ii) Persons with contact history with affected person in the last 14 days but asymptomatic or with very mild symptoms.

(iii) Persons with no travel history or contact history, but having flu-like symptoms.

The protocol for home quarantine is at Annexure-I.

Persons violating home quarantine shall be dealt appropriately by the local authorities.

b. Facility-level quarantine is required for the following categories of persons:-

(i) Persons with travel history abroad in the last 14 days and showing moderate or severe flu-like symptoms.

(ii) Persons with contact history with affected persons in last 14 days and showing moderate or severe flu-like symptoms.

The protocol for facility-level quarantine is at Annexure-II.
B. ISOLATION & TREATMENT

It is at facility-level for the following categories of persons -

(i) Those confirmed to be Covid-19 positive.
(ii) Close contacts (parents, spouse, children, siblings, home staff etc.) of confirmed cases.

The protocol for facility-level isolation & treatment has been detailed by Govt. of India as at Annexure III & IV.

(II) IDENTIFICATION OF SUSPECT CASES FOR QUARANTINE

Suspect cases for quarantine are to be identified through the following means:

(i) Self registration of persons with travel history abroad or contact history with affected persons in the last 14 days, with 104 Health Helpline or www.covid19.odisha.gov.in portal.
(ii) Persons calling District Help lines and reporting travel / contact history.
(iii) Persons screened at airport and recommended for home/ facility quarantine, due to travel / contact history.
(iv) Persons whose travel abroad details have been shared by the Bureau of Immigration.
(v) Persons identified with travel/contact history through third parties i.e police, hotels, neighbours / public / private hospitals, etc.

In all such cases of reporting of suspect persons, the prescribed protocol to be adhered to for follow-up.

(III) GUIDELINES FOR CONTACT TRACING

A. Definition of a Contact

A contact is the person who is involved in direct care without proper personal protective equipment for Covid-19 patients OR staying in the same close environment of a COVID-19 patient and traveling together in close proximity (<1m) with a symptomatic person who later tested positive for COVID-19 OR Family member who was handling the clothes or articles used by the confirmed case.

B. Essentials steps of Contact Tracing

- The state/district control room need to get the complete list of the contacts as soon as possible.
- To trace out the current address of residence of contacts with landmark within 24 hours of getting the list.
- If the address of residence of any contact is other states of the country, they should be cross notified to the concerned authority of that state with a copy to NCDC, Director Public Health.
• For contacts who travelled to other country the list with address needs to be shared with NCDC by State IDSP cell with a copy to Team leader WHO.
• For the cases residing within the state the address should be shared to the concerned district and block officials maximum within 48 Hours

C. Interview and Follow up of identified contacts
• Standard Questionnaire for first time interview of contacts is at Appendix A. All contacts should be followed up as per the prescribed protocol.

(IV) PROTOCOL FOR FOLLOW-UP OF HOME QUARANTINE CASES.

All persons advised home quarantine are to be followed up to ascertain their health status, provide them medical advice if needed and to find out whether home quarantine guidelines are being followed by them or not.

All persons identified for home quarantine are to be followed up as below:

(i) Follow-up calls to be made twice daily once between 8.00AM - 12.00 Noon and one between 5.00 PM – 8.00 PM and questions asked as per the Standard Questionnaire at Appendix B.

(ii) If the person is asymptomatic, then Standard Advisory to be given to them (daily) as per Appendix C. The advisory may be communicated through human interface or Robo calls.

(iii) If the person has symptoms, a doctor is to call him/ her within 2 hours and decide on continuation of home quarantine or shifting to facility level quarantine / isolation, depending on the patient’s history and severity of symptoms.

(iv) For persons who have been identified as suspect cases at district level, the follow up calls will be made by the district team. Critical cases should be referred to State Surveillance Unit.

(v) For persons who have been identified as suspect cases at state level (104, portal, airport, State Control Room) the follow-up calls will be made by the state level Outgoing Call Centre.

(vi) All cases who develop COVID-19 like symptoms and cases who have violated home quarantine guidelines are to be reported by the Outgoing Call Centre to the State Control Room of Health & F.W Deptt, for follow up by doctor, and if necessary, to bring to a government quarantine/isolation facility.
(vii) The prescribed safety protocol will be followed by the Rapid Response Teams/Monitoring Teams while transporting the suspect to the quarantine/isolation facility.

(vii) The follow-up calls and their findings of compliance to quarantine guidelines, development of symptoms (if any) will be recorded online on the portal.

(V) STATE/ DISTRICT LEVEL RESPONSE TEAMS

To enable quick and efficient contact tracing and follow-up of suspect cases, state health team & district health teams to be equipped with the following :-

1. A team of trained persons for making follow-up calls.
2. Adequate telephone lines for follow-up calls (at least 3 land lines)
3. A panel of doctors for advising all symptomatic cases.
4. Adequate number of vehicles and ambulances for transport of suspect/confirmed cases, to be requisitioned by the Collector.
5. State level and District Level Nodal officers for follow up calls.
6. State and District Teams will make ready adequate number of Monitoring Teams (consisting of a vehicle with driver, one male health worker/ Ayush doctor/ Volunteer and one female health worker/ Ayush doctor/ Volunteer). Collectors will requisition the required vehicles (with front shield labeling) and train the identified manpower.
7. The Monitoring Teams will be deployed for contact tracing as per need and surprise home visits to persons advised home quarantine.
Annexure- I

PROTOCOL FOR HOME QUARANTINE

Any person(s) suggestive of COVID-19, should be confined at home for a period of 14 days and avoid close contact with public and other members in the family.

Guiding Principles for Home Quarantine

1. Stay home, isolated in a separate and well ventilated room with separate bathroom. Avoid common areas frequented by other members of the family.
2. Avoid close contact with others. If inevitable, always maintain at least one metre distance.
3. Avoid all visitors.
4. Avoid frequent touching of face.
5. Cover mouth and nose with flexed elbow, tissue/ handkerchief when coughing or sneezing.
6. Wash hands frequently with soap and water.
7. Do not share household items, utensils or bedding with other people at home.
8. Clean and disinfect floor and surfaces in quarantine room daily with bleach/disinfectant.
9. Used linen, clothes and towels should be washed, disinfected and sun-dried before next use.
10. Soap and water should be at the room entrance to be used for hand washing by the care-givers.
11. Take plenty of fluids and have nutritious food.

Monitor your health symptoms like fever, cough and/or breathing difficulty. If you develop any of these symptoms, please call Health Helpline 104.
Annexure-II

PROTOCOL FOR FACILITY LEVEL QUARANTINE

A quarantine is the restriction on the movement of people and goods which is intended to prevent the spread of disease. It is often used in connection to disease and illness, preventing the movement of those who may have been exposed to a communicable disease, but do not have a confirmed medical diagnosis. Quarantine is used for people who are not sick and is similar to, but not the same as, isolation, which is used when a person is sick.

In view of the present COVID-19 epidemic one may need quarantine upon arrival due to risk related to new Corona Virus COVID-19. Typically a COVID-19 related quarantine last for 14 days period from the departure from the affected area, but is determined by the local health department.

SOP for creation of quarantine at facility level:

1. The place is to be identified, designated and notified by the District Collector/Municipality Commissioner/Sub-collector/BDOs of the area.

2. Overall-in-charge: As will be authorised by the District Collector/ Municipality Commissioner/Sub-collector/BDOs of the area, preferably a facility manager is to be appointed.

3. Adequate security arrangement must be provided through outsourcing, which will be monitored by the local police. If required, the District administration can co-opt for provision of the additional police security.

4. Adequate numbers of supporting staff, like Room attendants, Sanitation workers, etc. are to be provided.

5. A Multipurpose health worker (Male/Female) or AYUSH doctor will be available shift-wise to monitor the health conditions. They will counsel each person at the time of admission into the quarantine home. The facility manager will maintain a stock of common drugs & consumables to be utilised by the MHW/AYUSH doctor, in consultation with local doctors.

Provision:

1. Preferably single room for each person with attached toilet.

2. If attached toilet will not be available, common toilet can be used, but must be cleaned after each use.

3. Water supply, electricity/back up must be available 24X7.

4. Required manpower for sanitation, security, laundry, diet, waste management and patient attendant service may be outsourced through empanelled agency.

5. Strict sanitation practice must be followed as per guideline.

6. Biomedical waste disposal should be done as per the protocol.
7. On arrival the person must be registered, detailed history including history of travel & contacts must be recorded. The contact number of the persons as well as the relative who can be contacted must also be recorded.

6. To make his/her stay more enjoyable, he/she should be advised to have enough clean and comfortable clothes, cell phone, laptop, toiletry kit.

9. Hand washing facility must be available at the entrance.

10. Health care supplies to be ensured as follows:
   - In addition to personal items, the following supplies are to be provided during the time of quarantine.
     - Digital thermometer (for daily use)
     - Temperature & symptom log
     - Water bottle (stay hydrated)
     - Soap
     - Utensils

11. Face masks (should be available) to wear if in a shared space, or to a health care appointment if needed. Adequate amount of PPEs must be kept in reserve for use, if required for attending persons, who develop symptoms and transportation.

12. Transport facilities for persons who develop symptom during quarantine to the isolation facility must be available in coordination with CDM&PHO.

13. No guest or outsiders except authorised persons/service providers will be allowed to enter the centre.

14. The person quarantined will also not be allowed to leave the premises unless it is required.
Appendix-A

Questionnaire to interview the contacts of COVID-19 cases

Introduce yourself and the purpose of telephonic call
1. Inform him/her, you are exposed to COVID-19 confirmed case and stand a chance of getting infected. We would take few information, which is very important and is required for your good health.
2. Where are you currently staying, complete address with landmark and additional contact number in case your number will not be reachable?
3. Have you developed any symptoms like fever, cough or breathing difficulty? If so since when you have developed it?
4. You need to stay in house and don’t come in contact with other persons.
5. If you are working, inform your authority that you can’t go to the workplace. This is as per the Government of Odisha’s mandate.
6. You will be called 2-3 times a day by health department to know your health status. You should positively attend the call and provide correct information to them. This will help to take care of your health in a better way.
7. Do you know any person who has traveled from abroad?
8. Do you know any person who is having fever with cough or breathing difficulty?
9. Inform that, if he/she develops symptoms of COVID-19, he/she should proactively inform and contact the local authorities for isolation and testing.
10. He/she should not visit health facility without prior information to district officials.
Appendix-B
Standard Questionnaire for Follow up of Individuals under Home Quarantine

1. What is your current location?
   a. In the designated room
   b. In house but in other room
   c. Outside of house (specify)

2. Are you strictly following the home quarantine? (Confined in home and not coming in close contact with anyone of family member or outsider) procedure?
   a. Yes  b. No  c. Don’t know

3. Did you visit outside of your designated room for any specific purpose?
   a. Yes  b. No
      Details of the place visited
      Name of the people met during the visit (with number)

4. Did you meet any person who visited you? Did s/he come in contact with you i.e. touching/coming closer than one meter?
   a. Yes  b. No
      Name of the people met during the visit (with number)

5. Have you developed any health problems?
   a. Sore
   b. Fever with cough
   c. Breathing difficulty
   d. Other specify
Appendix-C
Standard Advisory for Individuals under Home Quarantine

a. Home quarantine is an effective method to prevent the spread of COVID-19 from one person to other.
b. You should strictly confine yourself in a well ventilated room with separate dedicated toilet for you. Avoid using common areas and facilities.
c. Ensure that no other person should touch clothes and other personal belongings used by you.
d. Avoid outside visitors. Maintain more than one meter distance from your care giver.
e. Practice frequent handwashing and cover your you face during cough/sneezing with fold of elbow/ handkerchief/ tissue paper.
f. Take plenty of fluids and report to 164 Helpline number in case of any health problem (fever, cough or breathing difficulty).
g. After 14 days quarantine period is over, monitor your health for another 14 days and do report to 104 Helpline number if you develop fever or cough or breathing difficulties.
COVID-19 Outbreak
Guidelines for Setting up
Isolation Facility/Ward

National Centre for Disease Control
22 Sham Nath Marg, Delhi 110054
Directorate General of Health Services
Ministry of Health and Family Welfare
Table of Contents

A. Quarantine and isolation 1
B. Setting up isolation facility/ward 2
C. Checklist for isolation rooms 4
D. Wearing and removing Personal Protective Equipment (PPE) 5
E. Transport of Infectious Patients 6

Annexure I

Annexure II
WHO has declared the COVID-19 (SARS-CoV-2) outbreak as Public Health Emergency of international concern and has raised the risk assessment of China, Regional Level and Global Level to Very High and "all countries should be prepared for containment, including active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread of SARS-CoV-2 infection. Among the factors affecting cluster containment, isolation of cases and quarantine of contacts is the mainstay of outbreak containment.

Scope of document: This guidance document has been prepared to establish an isolation facility at the level of district hospital, a secondary health care facility.

A. Quarantine and isolation
Quarantine and isolation are a mainstay of cluster containment. These measures help by breaking the chain of transmission in the community.

Quarantine
Quarantine refers to separation of individuals who are not yet ill but have been exposed to COVID-19 and therefore have a potential to become ill. There will be voluntary home quarantine of contacts of suspect /confirmed cases. The guideline on home quarantine available on the website of the Ministry provides detailed guidance on home quarantine.

Isolation
Isolation refers to separation of individuals who are ill and suspected or confirmed of COVID-19. All suspected cases detected in the containment buffer zones (until a diagnosis is made), will be hospitalized and kept in isolation in a designated facility till such time they are tested negative. Persons testing positive for COVID-19 will remain to be hospitalized till such time 2 of their samples are tested negative as per MoHFW’s discharge policy. About 15% of the patients are likely to develop pneumonia, 5% of whom requires ventilator management.

Hence dedicated intensive care beds need to be identified earmarked. Some among them may progress to multi-organ failure and hence critical care facility/dialysis facility/ and Salvage therapy [Extra Corporeal Membrane Oxygenator (ECMO)] facility for managing the respiratory/renal complications/multi-organ failure shall be required. If such facilities are not available in the containment zone, nearest tertiary care facility in Government/private sector needs to be identified, that becomes a part of the micro-plan.

There are various modalities of isolating a patient. Ideally, patients can be isolated in individual isolation rooms or negative pressure rooms with 12 or more air-changes per hour.

In resource constrained settings, all positive COVID-19 cases can be cohorted in a ward with good ventilation. Similarly, all suspect cases should also be cohorted in a separate
ward. However, under no circumstances these cases should be mixed up. A minimum distance of 1 meter needs to be maintained between adjacent beds. All such patients need to wear a triple-layer surgical mask at all times.

Nosocomial infection in fellow patients and attending healthcare personnel are well documented in the current COVID-19 outbreak as well. There shall be strict adherence to infection prevention control practices in all health facilities. IPC committees would be formed (if not already in place) with the mandate to ensure that all healthcare personnel are well aware of IPC practices and suitable arrangements for requisite PPE and other logistic (hand sanitizer, soap, water etc.) are in place. The designated hospitals will ensure that all healthcare staff is trained in washing of hands, respiratory etiquettes, donning/doffing & proper disposal of PPEs and bio-medical waste management.

At all times doctors, nurses and para-medics working in the clinical areas will wear three layered surgical mask and gloves. The medical personnel working in isolation and critical care facilities will wear full complement of PPE (including N95 masks).

The support staff engaged in cleaning and disinfection will also wear full complement of PPE. Environmental cleaning should be done twice daily and consist of damp dusting and floor mopping with Lysol or other phenolic disinfectants and cleaning of surfaces with sodium hypochlorite solution. Detailed guidelines available on MoHFW’s website may be followed.

B. Setting up isolation facility/ward

An isolation facility aims to control the airflow in the room so that the number of airborne infectious particles is reduced to a level that ensures cross-infection of other people within a healthcare facility is highly unlikely.

- At State level, a minimum of 50 bed isolation ward should be established.
- At District level, a minimum of 10 bed isolation ward should be established.
  - Pest signages on the door indicating that the space is an isolation area.
  - Remove all non-essential furniture and ensure that the remaining furniture is easy to clean, and does not conceal or retain dirt or moisture within or around it.
  - COVID-19 patients should be housed in single rooms.
  - However, if sufficient single rooms are not available beds could be put with a spatial separation of at least 1 meter (3 feet) from one another.
  - To create a 10 bed facility, a minimum space of 2000 sq. feet area clearly segregated from other patients care areas is required.
  - Preferably the isolation ward should have a separate entry/exit and should not be co-located with post-surgical wards/dialysis unit/SNCU/labour room etc.
  - It should be in a segregated area which is not frequented by outsiders.
  - The access to isolation ward should be through dedicated lift/guarded stairs.
• There should be double door entry with changing room and nursing station. Enough PPE should be available in the changing room with waste disposal bins to collect used PPEs. Used PPEs should be disposed as per the BMWM guidelines.

• Stock the PPE supply and linen outside the isolation room or area (e.g. in the change room). Setup a trolley outside the door to hold PPE. A checklist may be useful to ensure that all equipment is available.

• Place appropriate waste bags in a bin. If possible, use a touch-free bin. Ensure that used (i.e., dirty) bins remain inside the isolation rooms.

• Place a puncture-proof container for sharp disposal inside the isolation room/area and bio-medical waste should be managed as per the BMWM guidelines.

• Keep the patient’s personal belongings to a minimum. Keep water pitchers and cups, tissue wipes, and all items necessary for attending to personal hygiene within the patient’s reach.

• Non-critical patient-care equipment (e.g., stethoscope, thermometer, blood pressure cuff, and sphygmomanometer) should be dedicated for the patient, if possible. Any patient-care equipment that is required for use by other patients should be thoroughly cleaned and disinfected before use.

• Place an appropriate container with a lid outside the door for equipment that requires disinfection or sterilization.

• Ensure that appropriate hand washing facilities and hand-hygiene supplies are available. Stock the sink area with suitable supplies for hand washing, and with alcohol-based hand rub near the point of care and the room door.

• Ensure adequate room ventilation if room is air-conditioned, ensure 12 air changes/hour and filtering of exhaust air. A negative pressure in isolation rooms is desirable for patients requiring aerosolization procedures (intubation, suction nebulisation). These rooms may have stand-alone air-conditioning. These areas should not be a part of the central air-conditioning.

• If air-conditioning is not available negative pressure could also be created through putting up 3-4 exhaust fans driving air out of the room.

• In district hospital, where there is sufficient space, natural ventilation may be followed. Such isolation facility should have large windows on opposite walls of the room allowing a natural unidirectional flow and air changes. The principle of natural ventilation is to allow and enhance the flow of outdoor air by natural forces such as wind and thermal buoyancy forces from one opening to another to achieve the desirable air change per hour.

• The isolation ward should have a separate toilet with proper cleaning and supplies.

• Avoid sharing of equipment, but if unavoidable, ensure that reusable equipment is appropriately disinfected between patients.
• Ensure regular cleaning and proper disinfection of common areas, and adequate hand hygiene by patients, visitors and care givers. Keep adequate equipment required for cleaning or disinfection inside the isolation room or area, and ensure scrupulous daily cleaning of the isolation room or area.

• **Visitors to the isolation facility should be restricted/disallowed.** For unavoidable entries, they should use PPE according to the hospital guidance, and should be instructed on its proper use and in hand hygiene practices prior to entry into the isolation room/area.

• Ensure that visitors consult the health-care worker in charge (who is also responsible for keeping a visitor record) before being allowed into the isolation areas. Keep a roster of all staff working in the isolation areas, for possible outbreak investigation and contact tracing.

• Doctors, nurses and paramedics posted to isolation facility need to be dedicated and not allowed to work in other patient-care areas.

• Consider having designated portable X-ray and portable ultrasound equipment.

• Corridors with frequent patient transport should be well-ventilated.

• All health staff involved in patient care should be well trained in the use of PPE.

• Set up a telephonic or other method of communication in the isolation room or area to enable patients, family members or visitors to communicate with health-care workers. This may reduce the number of times the workers need to don PPE to enter the room or area.

C. Checklist for isolation rooms

- Eye protection (visor or goggles)
- Face shield (provides eye, nose and mouth protection)
- Gloves
- Reuseable vinyl or rubber gloves for environmental cleansing
- Latex single-use gloves for clinical care
- Hair covers
- Particulate respirators (N95, FFP2, or equivalent)
- Medical (surgical or procedure) masks
- Gowns and aprons
- Single-use long-sleeved fluid-resistant or reusable non-fluid-resistant gowns
- Plastic aprons (for use over non-fluid-resistant gowns if splashing is anticipated and fluid-resistant gowns are not available)
- Alcohol-based hand rub
- Plain soap (liquid if possible, for washing hands in clean water)
- Clean single-use towels (e.g. paper towels)
- Sharps containers
D. Wearing and removing Personal Protective Equipment (PPE)

Before entering the isolation room or area:

- Collect all equipment needed;
- Perform hand hygiene with an alcohol-based hand rub (preferably when hands are not visibly soiled) or soap and water;
- Put on PPE in the order that ensures accurate placement of PPE items and prevents self-contamination and self-inoculation while using and taking off PPE, an example of the order in which to don PPE when all PPE items are needed is hand hygiene, gown, mask or respirator, eye protection and gloves.

Leaving the isolation room or area:

- Either remove PPE in the anteroom or, if there is no anteroom, make sure that the PPE will not contaminate either the environment outside the isolation room or area, or other people.
- Remove PPE in a manner that prevents self-contamination or self-inoculation with contaminated PPE or hands. General principles are:
  - remove the most contaminated PPE items first;
  - perform hand hygiene immediately after removing gloves;
  - remove the mask or particulate respirator last (by grasping the ties and discarding in a rubbish bin);
  - discard disposable items in a closed rubbish bin;
  - put reusable items in a dry (e.g. without any disinfectant solution) closed container; an example of the order in which to take off PPE when all PPE items are needed is gloves (if the gown is disposable, gloves can be peeled off together with the gown upon removal), hand hygiene, gown, eye protection, mask or respirator, and hand hygiene;
  - Perform hand hygiene with an alcohol-based hand rub (preferably) or soap and water wherever ungloved hands touch contaminated PPE items.
E. Transport of Infectious Patients

It is recommended that transport of infectious patients is limited to movement considered medically essential by the clinicians, e.g. for diagnostic or treatment purposes. Where infectious patients are required to be transported to either units within the hospital or outside the following precautions may be implemented:

- Infected or colonised areas of the patient’s body are covered: For contact isolation this may include a gown, sheets or dressings to surface wounds; these patients are transferred to a Standard Pressure or Protective Environment Isolation Room. For respiratory isolation the patient is dressed in a mask, gown and covered in sheets; these patients are accommodated in a Negative Pressure Isolation Room. For quarantine isolation the patient may be transported in a fully enclosed transport cell or isolator with a filtered air supply and exhaust; these patients are accommodated in a high-level quarantine isolation suite.

- The transport personnel remove existing PPE, cleanse hands and transport the patient on a wheelchair, bed or trolley, applying clean PPE to transport the patients and when handling the patient at the destination. Gown-up and gown-down rooms located at the entry to a Unit will assist the staff to enter and exit the facility according to the strict infection control protocols required, thereby reducing the risk of contamination.

- The destination unit should be contacted and notified prior to the transfer to ensure suitable accommodation on arrival.

- It is preferred that the patient is transported through staff and service corridors, not public access corridors. During planning stages, design can assist transfer of infectious patients by providing service corridors and strategically placed lifts, capable of separation from other lifts. The nominated lift may be isolated from public and staff transit through access control measures and cleaned following transit of the infectious patient.

- Design may also incorporate a designated floor for horizontal bed transfers of infectious patients away from busy clinical areas. The designated floor may be located at mid-level in the hospital.

- A combination of nominated lifts, corridors and bed transfer floor would assist in the movement of infectious patients through the hospital and minimise the risk of spread of infection.
Annexure I

Checklist for isolation rooms

- Eye protection (visor or goggles)
- Face shield (provides eye, nose and mouth protection)
- Gloves
- Reusable vinyl or rubber gloves for environmental cleaning
- Latex single-use gloves for clinical care
- Hair covers
- Particulate respirators (N95, FFP2, or equivalent)
- Medical (surgical or procedure) masks
- Gowns and aprons
- Single-use long-sleeved fluid-resistant or reusable non-fluid-resistant gowns
- Plastic aprons (for use over non-fluid-resistant gowns if splashing is anticipated and if fluid-resistant gowns are not available)
- Alcohol-based hand rub
- Plain soap (liquid if possible, for washing hands in clean water)
- Clean single-use towels (e.g., paper towels)
- Sharps containers
- Appropriate detergent for environmental cleaning and disinfectant for disinfection of surfaces, instruments or equipment
- Large plastic bags
- Appropriate clinical waste bags
- Linen bags
- Collection container for used equipment
- Standard IEC
- Standard protocols for hand hygiene, sample collection and BMV displayed clearly
- Standard Clinical management protocols
Annexure II

Hospital Preparedness & Isolation Facility Assessment Checklist - COVID19

I. GENERAL INFORMATION

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name of the healthcare facility (HCF)</td>
<td></td>
</tr>
<tr>
<td>2. Type</td>
<td>□ Public □ Private</td>
</tr>
<tr>
<td>3. Category of HCF</td>
<td>□ Primary □ Secondary □ Tertiary</td>
</tr>
<tr>
<td>4. Subcategory</td>
<td>□ OPD □ IPD □ IOC □ Injury/Sub-District Hospital □ District hospital □ General Hospital □ Medical College Hospital □ Multi-Speciality Hospital □ Nursing Home □ Dispensary □ Clinic</td>
</tr>
<tr>
<td>5. Address of the health facility</td>
<td></td>
</tr>
<tr>
<td>a) Block</td>
<td></td>
</tr>
<tr>
<td>b) District</td>
<td></td>
</tr>
<tr>
<td>c) State</td>
<td></td>
</tr>
<tr>
<td>d) Email ID</td>
<td></td>
</tr>
<tr>
<td>e) Contact no.</td>
<td></td>
</tr>
<tr>
<td>6. Name of Director/ Principal/Medical superintendent</td>
<td></td>
</tr>
<tr>
<td>a) Email ID</td>
<td></td>
</tr>
<tr>
<td>b) Contact no.</td>
<td></td>
</tr>
<tr>
<td>7. Name of RMG/Hospital In-charge</td>
<td></td>
</tr>
<tr>
<td>a) Email ID</td>
<td></td>
</tr>
<tr>
<td>b) Contact no.</td>
<td></td>
</tr>
<tr>
<td>8. Total number of inpatient beds</td>
<td></td>
</tr>
<tr>
<td>9. Total number of ICU beds</td>
<td></td>
</tr>
<tr>
<td>10. Average number of OPD attendance per month</td>
<td></td>
</tr>
<tr>
<td>11. Average number of new admissions /months</td>
<td></td>
</tr>
<tr>
<td>12. Bed occupancy rate (Annual)</td>
<td></td>
</tr>
<tr>
<td>13. Total staff strength</td>
<td></td>
</tr>
</tbody>
</table>

| Doctors - MBBS |   |
| Doctors- AYUSH |   |
| Clinical Specialists other than |   |
| Internists/Pulmonologist |   |
| Non-Clinical specialists other than Microbiologists |   |

| Microbiologists |   |
| Internists # |   |
| Pulmonologist # |   |
| Senior Resident # |   |
| Junior Resident # |   |
| Senior # |   |
| Junior # |   |
| Interns |   |
| Nurses |   |
| Lab technicians |   |
| 14. | Does the HCF have a designated COVID-19 isolation facility? | Yes/No |
| 15. | Core Emergency Response/ Rapid Response Team for outbreak management identified? | Available/In progress/Not started |
| 16. | Roles and responsibilities of RRT/EERT clearly defined? | Available/In progress/Not started |
| 17. | Is there a contingency plan for covering for a core team member who is absent? | Available/In progress/Not started |
| 18. | Monitoring and managing Health Care Personnel (HCP) | Yes/No |
| a) | The facility follows the Central/State public health policies/procedures for maintaining and managing HCP with potential for exposure to COVID-19 | Yes/No |
| b) | The facility has a process to conduct symptom and temperature checks prior to the start of duty shift for HCP | Yes/No |
| 19. | Training for Healthcare Personnel (HCP) | Completed/In progress/Not started |
| a) | All education and job-specific training to HCP regarding | | |
| b) | Signs and symptoms of infection | | |
| c) | Triage procedures including patient placement and filling the CIF | | |
| d) | Safety and collection of clinical specimens | | |
| e) | Correct infection control practices and PPE use | | |
| f) | HCP sick leave policies | | |
| g) | Recommended actions for not using recommended PPE | | |
| h) | How and to whom suspected cases (COVID-19) should be reported | | |

### III. Triage

| 20. | Triage protocols available at the healthcare facility? | Available/In progress/Not started |
| 21. | Availability of telemedicine facility as a way to provide clinical support without direct interaction with the patient | Available/In progress/Not started |
| 22. | Is there specific waiting area for people with respiratory symptoms? | Available/In progress/Not started |
| 23. | Availability of designated ARU/COVID-19 triage area | Available/In progress/Not started |
| 24. | Do they have non-contact infra-red thermometer available near the registration desk? | Available/In progress/Not started |
| 25. | Availability of signage directing to triage area and signage to instruct patients to alert staff if they have symptoms of COVID-19 | Available/In progress/Not started |
| 26. | Do they have dedicated/single examination rooms in triage area? | Yes/No |
| a) | Dedicated rooms should satisfy criteria of one patient per room with door closed for examination | Yes/No |
| 27. | Triage area has sign/alerts about respiratory etiquette and hand hygiene? | Yes/No |
| 28. | Does the HCF provide masks for patients with respiratory symptoms? | Yes/No |
29. Triage staff trained on revised COVID19 case definition and identify suspected cases?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

30. Screening questionnaire and algorithm for triage available with staff?

<table>
<thead>
<tr>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
</table>

31. Infrared thermometer available with the triage staff?

<table>
<thead>
<tr>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
</table>

32. Waste bins and access to cleaning/disinfection supplies available in triage area?

<table>
<thead>
<tr>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
</table>

33. Physical barriers (e.g., glass or plastic screens) at reception areas available to limit close contact between triage staff and potentially infectious patients?

<table>
<thead>
<tr>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
</table>

34. Does the patient waiting area have cross ventilation?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

35. Waiting area cleaned at least twice daily with 0.5% hypochlorite solution or 70% alcohol for surfaces that do not tolerate chlorine?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

36. Does the hospital have dedicated infrastructure for isolation facility? [If yes skip to Section IV]

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

37. Type of isolation facility?

<table>
<thead>
<tr>
<th>Temporary</th>
<th>Permanent</th>
</tr>
</thead>
</table>

### Isolation Facility

38. Is the isolation facility near OR/IR/other crowded area?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

39. Screening rooms identified and available at the isolation area?

<table>
<thead>
<tr>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
</table>

40. Is there separate entry to the isolation area?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

41. Dedicated space for staff to put on PPE while entering the isolated area?

<table>
<thead>
<tr>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
</table>

42. Is there separate exit for isolation area?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

43. Dedicated space for staff to take off PPE near exit?

<table>
<thead>
<tr>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
</table>

44. Isolation facility is separate and has rooms/wards?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

45. Are washrooms available as 1 toilet per 20 persons?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

46. Number of beds in each isolation wards/rooms?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

47. Is the distance between two beds in isolation wards/rooms more than 1 meter?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

48. Do the hospital have policy to segregate clinical staff (e.g., nurses) for care of COVID19 cases?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

49. Whether PPE is available and located near point of use?

<table>
<thead>
<tr>
<th>a. Gloves</th>
<th>b. Gowns</th>
<th>c. Face masks</th>
<th>d. 95 respirators</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

50. Whether the hospital limits the movement of patients in the isolation facility outside for medically necessary purposes only?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

51. Are the known or suspected COVID19 patients placed on contact and droplet precautions?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

52. If a patient leaves their room for medical purposes, are they provided face mask?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

53. Do staff transporting the patient wear PPE?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

54. While transporting patients are specific routes used to minimize contact with other patients and staff?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

55. For a patient on Airborne Precautions, air pressure is monitored daily with visual indicators (e.g., s/n tubes, flutter strips), regardless of the presence of differential pressure sensing devices (e.g., manometers).

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>
### IV. INFECTION PREVENTION AND CONTROL PRACTICES

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Available</th>
<th>In progress</th>
<th>Not started</th>
</tr>
</thead>
<tbody>
<tr>
<td>74. Does the hospital have a Hospital infection control committee (HICC)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75. Are there any infection control protocols/guidelines available?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76. Functioning handwashing stations (including water, soap and paper towel or air dryer) at isolation area?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77. Does the facility have uninterrupted running water supply?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78. Is alcohol based hand sanitizer available at isolation area?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>79. Are the staff following five moments of hand washing?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80. Are the staff following six steps of hand washing?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81. Is there posters to reinforce hand washing and PPE at hand washing stations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### VI. ENVIRONMENTAL CLEANING

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Available</th>
<th>In progress</th>
<th>Not started</th>
</tr>
</thead>
<tbody>
<tr>
<td>82. Are objects and environmental surfaces in patient care areas touched frequently, e.g., bed rails, overbed table, bedside commode, patient surfaces are cleaned</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83. Are they disinfected with an approved disinfectant frequency (at least daily) and when visibly soiled?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84. Is there cleaning chart?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85. Frequency of cleaning of high touch areas, beds, rails, commodes, keyboards etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>86. Is there any housekeeping policy available at isolation area?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### VII. BIOMEDICAL WASTE MANAGEMENT (BMWWM)

<table>
<thead>
<tr>
<th>Question</th>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
<tbody>
<tr>
<td>87. Availability of terminal cleaning checklist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>88. Availability of three bucket system</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>89. Are they following correct contact time for disinfection with hypochlorite solution? (10 minutes for non-porous surfaces)</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>90. Are the staff following outward mopping technique</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>91. Availability of separate maps for each area</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>92. Frequency of cleaning of isolation rooms</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>93. Frequency of cleaning of ambulatory areas</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>94. Frequency of cleaning of bathrooms of isolation areas</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>95. Staff wearing PPE while cleaning</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>a. Gloves</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>b. Masks</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>c. Apron</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>96. Are the staff trained in housekeeping and infection control practices?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>97. Doctors, nurses &amp; cleaning staff available/shift at isolation area</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>98. Barrier nursing practiced at isolation area in 1:1 ratio</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>99. Is there any policy for linen management for isolation facility?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>100. What is the frequency of changing linen in isolation rooms?</td>
<td>Daily</td>
<td>Alternate Day</td>
<td>Weekly</td>
</tr>
<tr>
<td>101. Type of linen used</td>
<td>Disposable</td>
<td>Durable</td>
<td></td>
</tr>
</tbody>
</table>

### VII. ICU FACILITY

<table>
<thead>
<tr>
<th>Question</th>
<th>Available</th>
<th>In-progress</th>
<th>Not started</th>
</tr>
</thead>
<tbody>
<tr>
<td>112. Are there any beds dedicated for COVID-19 infection?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>113. If yes, Number of beds dedicated to COVID-19 cases</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114. Is the distance between beds in ICU more than 1 meter?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>115. Is the oxygen supply by cylinder or central connection?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>116. Are there any separate Ventilators, nebulisers, Infusion pumps in ICU?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>117. Adequate supply of masks, ET tubes, PPE kits available at ICU?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>118. All ICU Staff received training in donning &amp; doffing of PPE?</td>
<td>Completed</td>
<td>In-progress</td>
<td>Not started</td>
</tr>
<tr>
<td>119. Are there separate area for donning &amp; doffing of PPE?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>120. Hand washing facility &amp; hand sanitiser available at donning &amp; doffing areas?</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.1 Is there strategy available for optimizing the PPE supply?</td>
<td>Not started</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.2 Are there any stockout experience for PPEs in the last year?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.3 Designated ambulance facility for transporting patients from isolation area?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.4 List of contact numbers of ambulance drivers displayed at isolation area?</td>
<td>Not started</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.5 Ambulance staff trained in wearing PPE &amp; other infection control practices?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.6 SOP for disinfecting ambulance after transporting confirmed case/dead body?</td>
<td>Not started</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.7 Written protocol available for disposing dead bodies of confirmed cases?</td>
<td>Not started</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.8 Is there enough availability of body bags?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.9 Are the staff trained in handling dead bodies and wearing PPE?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Guidelines on Clinical management of severe acute respiratory illness (SARI) in suspect/confirmed novel coronavirus (nCoV) cases

Coronaviruses are respiratory viruses and broadly distributed in humans and other mammals. Some causing illness in people and others that circulate among animals, including camels, cats and bats. Rarely, animal coronaviruses can evolve and infect people and then spread between people such as has been seen with MERS and SARS. Although most human coronavirus infections are mild, the epidemics of the severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV), have caused more than 10000 cumulative cases in the past two decades, with mortality rates of 10% for SARS-CoV and 27% for MERS-CoV.

The current outbreak was initially noticed in a seafood market in Wuhan city in Hubei Province of China on 26th December, 2019 and has spread across China and many countries.

Purpose and scope of document

This document is intended for clinicians taking care of hospitalised adult and paediatric patients with severe acute respiratory infection (SARI) when an nCoV infection is suspected. It is not meant to replace clinical judgment or specialist consultation but rather to strengthen clinical management of these patients and provide to up-to-date guidance. Best practices for SARI including IPC and optimised supportive care for severely ill patients are essential.

This document aims to provide clinicians with updated interim guidance on timely, effective, and safe supportive management of patients with nCoV and SARI particularly those with critical illness. The recommendations in this document are derived from WHO publications.

A. Triage: Early recognition of patients with SARI associated with nCoV infection.

The purpose of triage is to recognize and sort all patients with SARI at first point of contact with health care system (such as the emergency department). Consider nCoV as a possible etiology of SARI under certain conditions (see Table 1). Triage patients and start emergency treatments based on disease severity.

<table>
<thead>
<tr>
<th>Table 1: Definitions of patients with SARI, suspected of nCoV*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SARI</strong></td>
</tr>
<tr>
<td><strong>Surveillance case definitions for nCoV</strong></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
</tbody>
</table>
within 14 days before onset of illness, had any of the following exposures:

a) close physical contact with a confirmed case of nCoV infection, while that patient was symptomatic;

b) a healthcare facility in a country where hospital-associated nCoV infections have been reported;

*see https://mhsofa.gov.in/mediadocuments/alerts for latest case definition

1. Testing should be according to local guidance for management of community-acquired pneumonia. Examples of other etiologies include Streptococcus pneumoniae, Haemophilus influenzae type b, Legionella pneumophila, other recognized primary bacterial pneumonias, rickettsial diseases, and respiratory syncytial virus.

2. Close contact is defined as:
   - Health-care associated exposure, including providing direct care for nCoV patients, working with health-care workers infected with nCoV, visiting patients or staying in the same close environment as a nCoV patient
   - Working together in close proximity or sharing the same classroom environment with a nCoV patient
   - Traveling together with nCoV patient in any kind of accommodation
   - Living in the same household as a nCoV patient

The epidemiological link may have occurred within a 14-day period before or after the onset of illness in the case under consideration.

Novel Coronavirus may present with mild, moderate, or severe illness; the latter includes severe pneumonia, ARDS, sepsis and septic shock. Early recognition of suspected patients allows for timely isolation of IPC (see Table 2). Early identification of those with severe manifestations (see Table 2) allows for immediate optimized supportive care treatments and safe, rapid admission (or referral) to intensive care unit according to institutional or national protocols. For those with mild illness, hospitalization may not be required unless there is concern for rapid deterioration. All patients discharged home should be instructed to return to hospital if they develop any worsening of illness.

Table 2. Clinical syndromes associated with nCoV infection

<table>
<thead>
<tr>
<th>Uncomplicated Illness</th>
<th>Mild Pneumonia</th>
<th>Severe Pneumonia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with uncomplicated upper respiratory tract viral infection may have nonspecific symptoms such as fever, cough, sore throat, nasal congestion, rhinorrhea, headache, muscle pain or malaise. The elderly and immunosuppressed may present with atypical symptoms. These patients do not have any signs of deterioration, tachypnea or shortness of breath.</td>
<td>Child with non-severe pneumonia has cough or difficulty breathing, fast breathing (in breaths/minute): &lt; 2 months, 2-11 months, ≥ 2 years; ≥ 40 and no signs of severe pneumonia.</td>
<td>Adolescent or adult fever or suspected respiratory infection, plus one of the following: oxygen saturation &lt; 90% on room air; signs of pneumonia with a general danger sign; liability to be confused or have delirium, unconsciousness, or convulsions. Other signs of pneumonia may be present. Chest imaging can exclude complications.</td>
</tr>
</tbody>
</table>

Acute Respiratory Distress Syndrome:
- Onset: new or worsening respiratory symptoms within one week of known clinical insult.
- Chest imaging (radiograph, CT scan, or lung ultrasound) bilateral opacities, not fully explained by effusions, lobe or lung collapse, or nodules.
Origin of oedema: respiratory failure not fully explained by cardiac failure or fluid overload. Need objective assessment (e.g., echocardiography) to exclude hydrostatic cause of oedema if no risk factor present.

**Oxygenation (adults):**
- Mild ARDS: Pao_2/Fio_2 ≥ 300 mmHg (with PEEP or CPAP ≥ 5 cm H_2O, or non-ventilated)
- Moderate ARDS: Pao_2/Fio_2 200-300 mmHg with PEEP ≥ 5 cm H_2O, or non-ventilated)
- Severe ARDS: Pao_2/Fio_2 ≤ 100 mmHg with PEEP ≥ 10 cmH_2O, or non-ventilated)
- When Pao_2 is not available, SpO_2/FiO_2 ≤ 315 suggests ARDS (including in non-ventilated patients)

**Oxygenation (children):**
- OI = Oxygenation Index and OSI = Oxygenation Index using SpO_2
  - Bi-level NIV or CPAP ≤ 5 cmH_2O via full face mask: Pao_2/Fio_2 ≥ 300 mmHg or SpO_2/FiO_2 ≤ 264
  - Mild ARDS (invasively ventilated): 4 ≤ OI ≤ 8 or 5 ≤ OSI ≤ 7.5
  - Moderate ARDS (invasively ventilated): 8 ≤ OI ≤ 16 or 7.5 ≤ OSI ≤ 12.3
  - Severe ARDS (invasively ventilated): OI ≥ 16 or OSI ≥ 12.3

**Septis**

**Adults:** life-threatening organ dysfunction caused by a dysregulated host response to suspected or proven infection, with organ dysfunction. Signs of organ dysfunction include: altered mental status, difficult or fast breathing, low oxygen saturation, reduced urine output, fast heart rate, weak pulse, cold extremities or low blood pressure, skin mottling, or laboratory evidence of coagulopathy, thrombocytopenia, anemia, high lactate or hyperlactatemia.

**Children:** suspected or proven infection and ≥ 2 SIRS criteria, of which one must be abnormal temperature or white blood cell count.

**Septic shock**

**Adults:** persisting hypotension despite volume resuscitation, requiring vasopressors to maintain MAP ≤ 65 mmHg and serum lactate level ≥ 2 mmol/L.

**Children:** hypotension (SBP ≤ 5th centile or ≥ 2 SD below normal for age) or ≥ 3 of the following: altered mental state; tachycardia or bradycardia (HR > 100 bpm or < 60 bpm in infants and HR ≤ 90 bpm or ≥ 160 bpm in children); prolonged capillary refill (≥ 2 sec) or warm vasodilatation with bounding pulse; tachypnoea; mottled skin or petechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia.

### B. Immediate implementation of appropriate IPC measures

IPC is a critical and integral part of clinical management of patients and should be initiated at the point of entry of the patient to hospital (typically the Emergency Department). Standard precautions should always be routinely applied in all areas of health care facilities. Standard precautions include hand hygiene, use of PPE to avoid direct contact with patients' blood, body fluids, secretions (including respiratory secretions) and non-intact skin. Standard precautions also include prevention of needle-stick or sharps injury; safe waste management; cleaning and disinfection of equipment; and cleaning of the environment.

**Table 3:** How to implement infection prevention and control measures for patients with suspected or confirmed COVID-19 infecion

**At triage:**
- Give suspect patient a medical mask and direct patient to separate area, an isolation room if available. Keep at least 1 meter distance between suspected patients and other patients. Isolate all patients to cover nose and mouth during coughing or sneezing with tissue or flexed elbow for others. Perform
### Early Supportive Therapy and Monitoring

a. **Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia, or shock:** initiate oxygen therapy at 5 L/min and titrate flow rates to reach target SpO2 ≥ 96% in non-pregnant adults and SpO2 ≥ 95% in pregnant patients. Children with emergency signs (obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions) should receive oxygen therapy during resuscitation to target SpO2 ≥ 94%; otherwise, the target SpO2 is ≥ 90%. All areas where patients with SARI are cared for should be equipped with pulse oximeters, functioning oxygen systems and disposable, single-use, oxygen-delivering interfaces (nasal cannula, simple face mask, and mask with reservoir bag). Use contact protection when handling contaminated oxygen interfaces of patients with nCoV infection.

b. **Use conservative fluid management in patients with SARI when there is no evidence of shock.** Patients with SARI should be treated cautiously with intravenous fluids, because aggressive fluid
assessments may worsen oxygenation, especially in settings where there is limited availability of mechanical ventilation.

c. Give empiric antimicrobials to treat all likely pathogens causing SARI. Give antimicrobials within one hour of initial patient assessment for patients with sepsis. Although the patient may be suspected to have nCoV, administer appropriate antimicrobials within one hour of identification of sepsis. Empiric antimicrobial treatment should be based on the clinical diagnosis (community-acquired pneumonia, healthcare-associated pneumonia [if infection was acquired in healthcare setting], or sepsis), local epidemiology and susceptibility data, and treatment guidelines. Empiric therapy includes a neuraminidase inhibitor for treatment of influenza when there is local circulation or other risk factors, including travel history or exposure to animal influenza viruses. Empiric therapy should be de-escalated on the basis of microbiology results and clinical judgment.

d. Do not routinely give systemic corticosteroids for treatment of viral pneumonia or ARDS outside of clinical trials unless they are indicated for another reason. A systematic review of observational studies of corticosteroids administered to patients with SARS reported no survival benefit and possible harm (avascular necrosis, psychosis, diabetes, and delayed viral clearance). A systematic review of observational studies in influenza found a higher risk of mortality and secondary infections with corticosteroids; the evidence was judged as very low to low quality due to confounding by indication. A subsequent study that addressed this limitation by adjusting for time-varying confounders found no effect on mortality. Finally, a recent study of patients receiving corticosteroids for MERS used a similar statistical approach and found no effect of corticosteroids on mortality but delayed lower respiratory tract (LRT) clearance of MERS-CoV.

Given lack of effectiveness and possible harm, routine corticosteroids should be avoided unless they are indicated for another reason. See section F.1 for the use of corticosteroids in sepsis.

e. Closely monitor patients with SARI for signs of clinical deterioration, such as rapidly progressive respiratory failure and sepsis, and apply supportive care interventions immediately: Application of timely, effective, and safe supportive therapies is the cornerstone of therapy for patients that develop severe manifestations of nCoV.

f. Understand the patient’s comorbid condition(s) to tailor the management of critical illness and appreciate the prognosis. During intensive care management of SARI, determine which chronic therapies should be continued and which therapies should be stopped temporarily.

g. Communicate early with patient and family: Communicate proactively with patients and families and provide support and prognostic information. Understand the patient’s values and preferences regarding life-sustaining interventions.

D. Collection of specimens for laboratory diagnosis

Guidance on specimen collection, processing, transportation, including related biosafety procedures, is available on [https://mohfw.gov.in/media/disease-alerts](https://mohfw.gov.in/media/disease-alerts)

Points to remember:

- Collect blood cultures for bacteria that cause pneumonia and sepsis, ideally before antimicrobial therapy. DO NOT delay antimicrobial therapy to collect blood cultures.
- Collect specimens from BOTH the upper respiratory tract (URT) (nasopharyngeal and oropharyngeal) AND lower respiratory tract (LRT) (expectorated sputum, endotracheal aspirate, or bronchoalveolar lavage) for nCoV testing by RT-PCR. Clinicians may elect to collect only LRT samples when these are readily available (for example, in mechanically ventilated patients).
• Use appropriate PPE for specimen collection (droplet and contact precautions for URT specimens; airborne precautions for LRT specimens). When collecting URT samples, use viral swabs (sterile Dacron or rayon, not cotton) and viral transport media. Do not sample the nostrils or tonsils. In a patient with suspected novel coronavirus, especially with pneumonia or severe illness, a single URT sample does not exclude the diagnosis, and additional URT and LRT samples are recommended. LRT (vs. URT) samples are more likely to be positive and for a longer period. Clinicians may elect to collect only LRT samples when these are readily available (for example, in mechanically ventilated patients). Sputum induction should be avoided due to increased risk of increasing aerosol transmission.

Dual infections with other respiratory viral infections have been found in SARS and MERS cases. At this stage we need detailed microbiologic studies in all suspected cases. Both URT and LRT specimens can tested for other respiratory viruses, such as influenza A and B (including zoogenic influenza A), respiratory syncytial virus, parainfluenza viruses, rhinoviruses, adenoviruses, coronaviruses (e.g. EVO98), human metapneumovirus, and endemic human coronaviruses (i.e. H1KU, OC43, NL63, and 229E). LRT specimens can also be tested for bacterial pathogens, including Legionella pneumophila.

In hospitalized patients with confirmed nCoV infection, repeat URT and LRT samples should be collected to demonstrate viral clearance. The frequency of specimen collection will depend on local circumstances but should be at least every 2 to 4 days until there are two consecutive negative results (both URT and LRT samples if both are collected) in a clinically recovered patient at least 24 hours apart. If local infection control practice requires two negative results before removal of droplet precautions, specimens may be collected as often as daily.

E. Management of hypoxemic respiratory failure and ARDS

Recognize severe hypoxemia respiratory failure when a patient with respiratory distress is failing standard oxygen therapy. Patients may continue to have increased work of breathing or hypoxemia even when oxygen is delivered via a face mask with reservoir bag flow rates of 30-15 L/min, which is typically the minimum flow required to maintain bag inflated (FiO₂ 0.60-0.65). Hypoxemic respiratory failure is ARDS conversely results from intrapulmonary ventilation-perfusion mismatch; or shunt and usually requires mechanical ventilation.

High-flow nasal oxygen (HFNO) or non-invasive ventilation (NIV) should only be used in selected patients with hypoxemic respiratory failure. The risk of treatment failure is high in patients with MERS treated with NIV, and patients treated with either HFNO or NIV should be closely monitored for clinical deterioration. HFNO systems can deliver 60 L/min of gas flow and FiO₂ up to 1.0; pediatric circuits generally only handle up to 15 L/min, and many children will require an adult circuit to deliver adequate flow. Compared to standard oxygen therapy, HFNO reduces the need for intubation. Patients with hypercapnia (exacerbation of obstructive lung disease, cardiogenic-pulmonary edema), hemodynamic instability, multi-organ failure, or abnormal cardiac status should generally not receive HFNO. Although emerging data suggest that HFNO may be safe in patients with mild-moderate and non-worsening hypercapnia,22 Patients receiving HFNO should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr). Evidence-based guidelines on HFNO do not exist, and reports on HFNO in MERS patients are limited.
NIV guidelines make no recommendation on use in hypoxemic respiratory failure (apart from cardiogenic pulmonary edema and post-operative respiratory failure) or pandemic viral illness (referring to studies of SARS and pandemic influenza). Risks include delayed intubation, large tidal volumes, and injurious transpulmonary pressures. Limited data suggest a high failure rate when MERS patients receive NIV. Patients receiving a trial of NIV should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr). Patients with hemodynamic instability, multiorgan failure, or abnormal mental status should not receive NIV.

Recent publications suggest that newer HFNO and NIV systems with good interface fitting do not create widespread dispersion of exhaled air and therefore should be associated with low risk of airborne transmission.

Endotracheal intubation should be performed by a trained and experienced provider using airway precautions. Patients with ARDS, especially young children or those who are obese or pregnant, may desaturate quickly during intubation. Pre-oxygenate with 100% FiO2 for 5 minutes, via a face mask with reservoir bag, bag-valve mask, HFO2, or NIV. Rapid sequence intubation is appropriate after an airway assessment that identifies no signs of difficult intubation.

Implement mechanical ventilation using lower tidal volumes (4–8 ml/kg predicted body weight, PBV) and lower inspiratory pressures (plateau pressure <50 cmH2O). This is a strong recommendation from a clinical guideline for patients with ARDS, and it is suggested for patients with sepsis-induced respiratory failure who do not meet ARDS criteria. The initial tidal volume is 6 ml/kg PBV; tidal volume up to 8 ml/kg PBV is allowed if undesirable side effects occur (e.g. dyskinesia, pH <7.35). Hypocapnia is permitted if meeting the pH goal of 7.30-7.40. Ventilator protocols are available. The use of deep sedation may be required to control respiratory drive and achieve tidal volume targets. Although high driving pressure (plateau pressure–PEEP) may more accurately predict increased mortality in ARDS compared to high tidal volume or plateau pressure, RCTs of ventilation strategies that target driving pressure are not currently available.

In patients with severe ARDS, prone ventilation for >12 hours per day is recommended. Application of prone ventilation is strongly recommended for adult and pediatric patients with severe ARDS but requires sufficient human resources and expertise to be performed safely.

Use a conservative fluid management strategy for ARDS patients without tissue hypoperfusion.

In patients with moderate or severe ARDS, higher PEEP instead of lower PEEP is suggested. PEEP titration requires consideration of benefits (reducing alveolar recruitment and improving alveolar recruitment vs. risks (end-inspiratory overdistention leading to lung injury and higher pulmonary vascular resistance). Tables are available to guide PEEP titration based on the Fio2 required to maintain SpO2. A related intervention of recruitment manoeuvres (RM) is delivered as episodic periods of high continuous positive airway pressure [30–40 cmH2O] progressive incremental increases in PEEP with constant driving pressure, or high driving pressure. Considerations of benefits vs. risks are similar. Higher PEEP and RMs were both conditionally recommended in a clinical practice guideline. For PEEP, the guideline considered an individual patient data meta-analysis of 3 RCTs. However, a subsequent RCT of high PEEP and prolonged high-pressure RMs showed harm, suggesting that the protocol in this RCT should be avoided. Monitoring of patients to identify those who respond to the
initial application of higher PEEP or a different RM protocol, and stopping these interventions in non-responders, is suggested.

In patients with moderate-severe ARDS (PaO₂/FiO₂ <150), neuromuscular blockade by continuous infusion should not be routinely used. One trial found that this strategy improved survival in patients with severe ARDS (PaO₂/FiO₂ <150) without causing significant weakness, but results of a recent larger trial found that use of neuromuscular blockade with high PEEP strategy was not associated with survival when compared to a light sedation strategy without neuromuscular blockade. Continuous neuromuscular blockade may still be considered in patients with ARDS in certain situations, ventilator dysynchrony despite sedation, such that tidal volume limitation cannot be reliably achieved, or refractory hypoxemia or hypercapnia.

In settings with access to expertise in extracorporeal life support (ECLS), consider referral of patients with refractory hypoxemia despite lung protective ventilation. A recent guideline made no recommendation about ECLS in patients with ARDS. Since then, an RCT of ECLS for patients with ARDS was stopped early and found no statistically significant difference in the primary outcome of 60-day mortality between ECLS and standard medical management (including prone positioning and neuromuscular blockade). However, ECLS was associated with a reduced risk of the composite outcome of mortality and crossover to ECLS, and a post hoc Bayesian analysis of this RCT showed that ECLS is very likely to reduce mortality across a range of prior assumptions. In patients with MERS-CoV infection, ECLS vs. conventional treatment was associated with reduced mortality in a cohort study. ECLS should only be offered in expert centers with a sufficient case volume to maintain expertise and that can apply the IPC measures required for nCoV patients.

Avoid disconnecting the patient from the ventilator, which results in loss of PEEP and aectasis. Use in-line catheters for airway suctioning and clamp endotracheal tube when disconnection is required (for example, transfer to a transport ventilator).

F. Management of septic shock

Recognize septic shock in adults when infection is suspected or confirmed, AND vasopressors are needed to maintain mean arterial pressure (MAP) ≥65 mmHg AND lactate is ≥2 mmol/L in absence of hypovolemia. Recognition septic shock in children with any hypotension (systolic blood pressure [SBP] <50 mmHg or >2 SD below normal for age) or ≥2 of the following: altered mental state, tachycardia or bradycardia (HR <90 bpm or >160 bpm in infants and HR <70 bpm or >150 bpm in children), prolonged capillary refill (>2 sec) or warm vasoconstriction with bounding pulses; tachypnea; mottled skin or petechial or purpuric rash; increased lactate; oliguria, hypothermia or hyperthermia.

In the absence of a lactate measurement, use MAP and clinical signs of perfusion to define shock. Standard care includes early recognition and the following treatments within 1 hour of recognition: antimicrobials therapy and fluid loading and vasopressors for hypotension. The use of central venous and arterial catheters should be based on resource availability and individual patient needs. Detailed guidelines are available for the management of septic shock in adults and children.

In resuscitation from septic shock in adults give at least 30 ml/kg of isotonic crystalloid in adults in the first 3 hours. In resuscitation from septic shock in children in well-resourced settings, give 20 ml/kg as a rapid bolus and up to 40-60 ml/kg in the first 1 hr.
Do not use hypertonic crystalloids, staches, or gelatins for resuscitation.

Fluid resuscitation may lead to volume overload, including respiratory failure. If there is no response to fluid loading and signs of volume overload appear (for example, jugular venous distension, crackles on lung auscultation, pulmonary oedema on imaging, or hepatomegaly in children), then reduce or discontinue fluid administration. This step is particularly important where mechanical ventilation is not available. Alternate fluid regimens are suggested when caring for children in resource-limited settings.

Crystalloids include normal saline and Ringer’s lactate. Determine need for additional fluid boluses (250-1000 ml in adults or 10-20 ml/kg in children) based on clinical response and improvement of perfusion targets. Perfusion targets include MAP (>65 mmHg or age-appropriate targets in children), urine output (>0.5 ml/kg/hr in adults, 1 ml/kg/hr in children), and improvement of skin turgor, capillary refill, level of consciousness, and lactate. Consider dynamic indices of volume responsiveness to guide volume administration beyond initial resuscitation based on local resources and experience. These indices include passive leg raises, fluid challenges with a serial stroke volume measurements, or variations in systolic pressure, pulse pressure, inferior vena cava size, or stroke volume in response to changes in intrathoracic pressure during mechanical ventilation.

Staches are associated with an increased risk of death and acute kidney injury vs. crystalloids. The effects of gelatins are less clear, but they are more expensive than crystalloids. Hypertonic (vs. isotonic) solutions are less effective at increasing intravascular volume. Surviving Sepsis also suggests albumin for resuscitation when patients require substantial amounts of crystalloids, but this conditional recommendation is based on low-quality evidence.

Administer vaspressors when shock persists during or after fluid resuscitation. The initial blood pressure target is MAP ≥65 mmHg in adults and age-appropriate targets in children.

If central venous catheters are not available, vaspressors can be given through a peripheral IV, but use a large vein and closely monitor for signs of extravasation and local tissue necrosis. If extravasation occurs, stop infusion. Vaspressors can also be administered through intravenous needles.

If signs of poor perfusion and cardiac dysfunction persist despite achieving MAP target with fluids and vaspressors, consider an inotrope such as dobutamine.

Vaspressors (i.e. norepinephrine, epinephrine, vasopressin, and dopamine) are most safely given through a central venous catheter at a titratable controlled rate, but it is also possible to safely administer them via peripheral vein and intravenous needles. Monitor blood pressure frequently and titrate the vaspressor to the minimum dose necessary to maintain perfusion and prevent side effects. Norepinephrine is considered first-line in adult patients; epinephrine or vasopressin can be added to achieve the MAP target. Because of the risk of tachycardia, reserve dopamine for selected patients with low risk of tachycardia or those with bradycardia. In children with cold shock (more common), epinephrine is considered first-line, while norepinephrine is used in patients with warm shock (less common).
G. Prevention of complications

Implement the following interventions (Table 4) to prevent complications associated with critical illness. These interventions are based on Surviving Sepsis or other guidelines, and are generally limited to feasible recommendations based on high-quality evidence.

<table>
<thead>
<tr>
<th>Anticipated Outcome</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce days of invasive mechanical ventilation</td>
<td>Use weaning protocols that include daily assessment for readiness to breathe spontaneously. Minimize continuous or intermittent sedation, targeting specific titration endpoints (light sedation unless contraindicated) or with daily interruption of continuous sedation infusions.</td>
</tr>
<tr>
<td>Reduce incidence of ventilator-associated pneumonia</td>
<td>Oral intubation is preferred to nasal intubation in adolescents and adults. Keep patient in semi-recumbent position (head of bed elevation 30–45°). Use a closed suctioning system; periodically drain and discard condensate in tubing. Use a new ventilator circuit for each patient; once patient is ventilated, change circuit if it is soiled or damaged but not routinely. Change heat moisture exchanger when it malfunctions, when soiled, or every 5–7 days.</td>
</tr>
<tr>
<td>Reduce incidence of venous thromboembolism</td>
<td>Use pharmacological prophylaxis (low molecular-weight heparin [preferred if available] or heparin 5000 units subcutaneously twice daily) in adolescents and adults without contraindications. For those with contraindications, use mechanical prophylaxis (intermittent pneumatic compression devices).</td>
</tr>
<tr>
<td>Reduce incidence of catheter-related bloodstream infection</td>
<td>Use a checklist with completion verified by a real-time observer as reminder of each step needed for urinary catheter and as a daily reminder to remove catheter if no longer needed.</td>
</tr>
<tr>
<td>Reduce incidence of pressure ulcers</td>
<td>Turn patient every two hours.</td>
</tr>
<tr>
<td>Reduce incidence of stress ulcers and gastrointestinal bleeding</td>
<td>Give early enteral nutrition (within 24–48 hours of admission). Administer histamine-2 receptor blockers or proton-pump inhibitors in patients with risk factors for GI bleeding. Risk factors for gastrointestinal bleeding include mechanical ventilation for ≥48 hours, sepsis, hypoprolactinemia, renal replacement therapy, liver disease, multiple comorbidities, and higher organ failure scores.</td>
</tr>
<tr>
<td>Reduce incidence of ICU-related weakness</td>
<td>Actively mobilize the patient early in the course of illness when safe to do so.</td>
</tr>
</tbody>
</table>

II. Specific anti-Novel-CoV treatments and clinical research

There is no current evidence from RCTs to recommend any specific anti-nCoV treatment for patients with suspected or confirmed nCoV. Unlicensed treatments should be administered only in the context of ethically approved clinical trials or the Monitored Emergency Use of Unregistered Interventions Framework (MEURI), with strict monitoring.

I. Special considerations for pregnant patients

Pregnant women with suspected or confirmed sCoV should be treated with supportive therapies as described above, taking into account the physiologic adaptations of pregnancy.

The use of investigational therapeutic agents outside of a research study should be guided by individual risk-benefit analysis based on potential benefit for mother and safety to fetus, with consultation from an obstetric specialist and ethics committee.

Emergency delivery and pregnancy termination decisions are challenging and based on many factors: gestational age, maternal condition, and fetal stability. Consultations with obstetric, neonatal, and intensive care specialists (depending on the condition of the mother) are essential.

Note: These guidelines are preliminary in nature and will be updated as soon as more information on clinical profile and treatment are available.
15. Guidelines to all Private Health Care Institutions in the State (19-Mar-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Health &amp; Family Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HFW-DCMA-CASE-0062-2019 8349</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>19-Mar-2020</td>
</tr>
</tbody>
</table>
To

The President and Secretary of
All Odisha Private Medical Establishment
Forum (AOPMEF), Bhubaneswar

Sub: COVID-19 Regulation and other measures.

Sir,

In the wake of the prevailing COVID-19 situation and in order to strengthen the containment measures, I am to enclose herewith the guidelines to be followed by Private Health Care Facilities in the State. You are requested to communicate the guidelines to all Private Health Care Institutions in the State. As discussed in the meetings held on 08.03.2020 and 17.03.2020, you are requested to create isolation Facilities and enhance critical care facilities in the Hospitals.

Yours faithfully,

[Signature]
Principal Secretary to Government

https://health.odisha.gov.in

Page 139
Memo No. 8350/JH  
Dated: 17th March 2020

Copy along with the above Guidelines forwarded to the Director and Superintendents of KIIMS, Bhubaneswar / SUM Hospital, Bhubaneswar / Hi-Tech Medical College and Hospital, Bhubaneswar / Apollo Hospital, Bhubaneswar / AMRI Hospital, Bhubaneswar / Care Hospital, Bhubaneswar / Kalinga Hospital, Bhubaneswar / Hill side Nursing Home, Bhubaneswar / Indian Medical Association, Odisha / President, Sanjeevani Medicare, Bhubaneswar / Neelachal Hospital, Bhubaneswar / Blue Hill Hospital, Bhubaneswar / Sparse Hospital, Bhubaneswar / Jagannath Hospital, Bhubaneswar / Sun Shine Hospital Bhubaneswar / Ashwini Hospital, Cuttack/ Sun Hospital, Cuttack for information and necessary action.

Deputy Secretary to Government

Memo No. 8351/JH  
Dated: 17th March 2020

Copy forwarded to Senior Private Secretary to the Principal Secretary to Government Health and Family Welfare Department for kind information of the Principal Secretary.

Deputy Secretary to Government

Memo No. 8371/JH  
Dated: 19th March 2020

Copy forwarded to the DMET, Odisha / All Collectors & District Magistrates for information and necessary action.

Deputy Secretary to Government
Guidelines for Private Health Care Facilities

- Strict compliance with the COVID19 Regulations issued by the Department (attached).
- A COVID counter must be opened with proper signage and separate entrance.

- Central registration is to be suspended for the time being and manual registration to be taken up in each OPD to avoid large gathering at Central Registration Counter.

- Have a screening station at the healthcare facility near the entrance to screen the persons with history of travel to the affected countries/areas within preceding 14 days or any history of contacts with confirmed COVID19 case during 14 days. Asymptomatic patients will be advised for quarantine. Separate waiting area and triage area must be designated. The patients will be admitted to isolation ward or ICUs depending on the severity of the cases.

- Unnecessary admission is to be avoided.
- The elective surgery may be deferred and emergency treatment should continue in the hospital.

- Entry of visitors to the hospitals should be regulated to avoid overcrowding.
- In indoor, one attendant is to be allowed for serious patient and no attendant to be allowed inside the ward for ambulatory patient.

- In OPD the medical officer should avoid advising frequent re-visit of the patients if not required.
- Display of advisories for public in the premises of health facility.
- Conduct training and orientation of health staffs and other on COVID-19 management.

- Effective infection control measures should be put in place.
- Ensure having hand wash facility with soap and running water/alcohol based (>70% alcohol) hand rub for the use of healthcare workers, patients and visitors.
• Details of the contacts, suspected case and confirmed case including the travel history must be recorded in detail and be informed to the district and the State Surveillance Unit.

• Staff should be sensitized for standard precaution and appropriate use of appropriate Personal Protective Equipment (PPE).

• Provide medical mask to all patients presenting flu-like symptoms.

• Perform regular environment cleaning and disinfection with 1% hypochlorite solution for mopping the floors and 0.5% for cleaning the furniture surfaces.

• Maintain good ventilation within OPDs/ IPDs and Emergency care wards.

• No patient will be refused for examination and treatment.

• Any other steps are to be adopted by Hospital Administration depending on local situation to ensure social distancing and good care in hospitals.

\[ \text{Principal Secretary to Government} \]
\[ \text{H & FW Department.} \]
Extract of the Odisha COVID-19 Regulations.

Duties and Responsibilities of the Hospitals:

i. All hospitals (government & private) shall have separate and distinct COVID-19 corners for screening of suspected cases of COVID-19.

ii. All hospitals (government & private) during screening of such cases shall record the history of travel of the person to any country, state or area where COVID-19 has been reported. In addition, the history of contacts of the suspected or confirmed case of COVID-19 is also required to be recorded.

iii. In case the person has any history of travel abroad in last 14 days and he/she is asymptomatic, he/she must be advised to remain in home quarantine for 14 days from the day of exposure. He/she must abide by the Home Quarantine Guidelines issued by Ministry of Health & Family Welfare, Government of India & the State Government meticulously. All those such persons may be clearly told that who do not observe the Home Quarantine Guidelines shall be forcibly quarantined in the quarantine facilities set up by Government. Further, they may also be prosecuted under the provisions of Indian Penal Code & Code of Criminal Procedure.

iv. Person with travel history and symptoms as per case definition of COVID-19, must be isolated in a hospital as per protocol and he/she will be tested for COVID-19 as per protocol. The close relatives such as family members shall also either home quarantined or isolated in a health facility based on risk assessment. If any of them develop symptoms, their samples shall also be taken for testing by the hospital.

v. Information of all such cases must be given to State Integrated Disease Surveillance Unit (for symptomatic cases) and on 104 Toll Free Number (for asymptomatic cases) immediately.

vi. No person other than the Medical Superintendent or person duly authorized by him shall speak to the media regarding persons who are under treatment and isolation. Under no circumstances the name, exact address and telephone number of the persons shall be disclosed.

<table>
<thead>
<tr>
<th>Department</th>
<th>Directorate of Public Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>295/SSU</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>18-Mar-2020</td>
</tr>
</tbody>
</table>
DIRECTORATE OF PUBLIC HEALTH, ODISHA

State Health Control Room
Director of Public Health, Odisha, 2nd Floor, HOD Building, Bhubaneswar - 751001
Phone No.: +91-674-2396977 / 2396466, E-Mail ID: dpho.issu@gmail.com / dirhealtho@gmail.com

Letter No. 295/SSU Dated: 8/03/20

From
Dr. Ajit Kumar Mohanty
Director of Public Health, Odisha

To
All Chief District Medical and Public Health Officers

Sub: Maintenance of various measures to combat COVID-19.

Sir,

With reference to the above cited subject, I am to say that it has been decided that the following instructions and standard operating procedures will be followed while administrating the measures to combat COVID-19.

1. All the Districts will have control room for receive the calls from the citizens who are possibly affected by COVID-19 and require medical attention. The control room will clear the doubts about the misconceptions of general citizens about the above disease and facilities available for the treatment at various levels. Similar facilities will also be available at the CHC level also. Common hygiene and sanitation, washing of hands in soap etc. should also be promoted through the call centres. The CHC in charge will be responsible for operation of the call centres from 19th March 2020.

2. IEC & BCC activities will be undertaken at various levels throughout the Districts to spread the message of prevention of spread of COVID-19.

3. The Inter-Department convergence with W&CD, SSJD & PR&DO specially may be made for the above activities at the District level.

4. Training status of health workers (Male & Female), ASHA and Anganwadi Workers by the master trainers to combat Covid-19 should be reported to this office.
5. The status of stock store of different types including the medicines should also be reported.

6. The ANM & GNM training centres including the Nursing Schools running at various Districts of the State should not be closed. The classes of above institution stands suspended but they are not allowed to leave the institution and Clinical classes in IPD & OPD of the hospitals will continue as usual. If somebody is suffering, then he/she may be allowed to remain leave. The students of the above institution will be a work force at various levels for treatment and administration of preventive measures to combat COVID-19.

The above instructions should be followed meticulously and point wise compliance should be submitted on return mail within 24 hours positively.

Yours faithfully

Director, Public Health

Cc to:

All Collector & District Magistrates/ Superintendent of all Medical Colleges for kind information and necessary action.
17. Instructions for People coming from abroad (16-Mar-2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>Health &amp; Family Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reference No.</td>
<td>HFW-SCH-I-EMER-0001-2020 8025/H</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>16-Mar-2020</td>
</tr>
<tr>
<td>Website Link</td>
<td><a href="https://health.odisha.gov.in/pdf/8025.pdf">https://health.odisha.gov.in/pdf/8025.pdf</a></td>
</tr>
</tbody>
</table>
WHEREAS, COVID-19 which originated in Wuhan city of China has now spread to about 140 countries infecting more than 1,50,000 persons and has taken about 5700 lives so far. India has also reported about 107 laboratory tested positive cases with two deaths. WHO has declared COVID-19 as a global pandemic. Odisha Government have brought in Regulations to prevent and contain the spread of the disease.

WHEREAS, at this point of time the biggest source of infection of Covid-19, is persons coming from abroad into the State. With closure of Colleges, Universities etc, coupled with lock down in many countries and home based work option for professionals it is expected there will be a huge surge of people returning from foreign countries into Odisha. This multiplies the threat of spread of COVID-19 in the State.

Hence, the State Government has decided to implement the following measures:

1. Anyone who comes to Odisha from abroad has to register himself / herself mandatorily in the toll free number 104 or the online portal https://covid19.odisha.gov.in.

2. This should be done within 24 hrs of arrival with basic details such as name, age, address, travel history, telephone number, etc. Advance registration before arrival will be highly preferable.

3. They will be required to be in home quarantine for 14 days.

4. Their location will be tracked during their home isolation and mandated number of calls will be made every day to keep a close watch and give appropriate medical guidance.
5. To encourage people coming from abroad to provide information to health authorities, Government have been pleased to incentivize the persons coming from abroad to report about their date and time of arrival, contact details and particulars of place of stay, etc.

6. They will be given an incentive of Rs. 15,000 for Registration and Home Isolation / quarantine successfully.

7. Money announced above will be provided to them on completion of quarantine period to the satisfaction of the health authorities and on full adherence to all the protocols and formalities prescribed.

8. However, to trace and track persons who have already entered the State, (those who have entered the state on or after 4th March) a 48 hours' period till 19th March 6 A.M. is allowed to enable them to register.

9. This will help the State in tracking persons who are already inside the State, sensitise them about home isolation and keep a watch on their health for effective monitoring of the situation.

10. Registrations can be done either by the passenger or by his/her relatives or friends.

11. Anyone not complying the above instructions will be punishable under the provisions of Indian Penal code and Code of Criminal Procedure.

This will be in force till 15th April and may be extended based on situation.

By Order of the Governor

Principal Secretary to Government

Memo No. 8026 /H, Dated 16/03/2020
Copy forwarded to the Gazette Cell, Lokaseva Bhavan, C/o. Commerce Department, Bhubaneswar with a request to publish this notification in the next issue of the Odisha Extraordinary Gazette and supply 50 (fifty) copies of the same to this Department for record.

Memo No. 8027 /H, Dated 16/03/2020
Copy forwarded to the AG (A & E), Odisha Bhubaneswar for information and necessary action.

Joint Secretary to Government.
Memo No. 8028 /H, Dated 16/03/2020
Copy forwarded to All Departments / All HODs / DG&IG, Prisons / Member, Board of Revenue / All RDCs / All Collectors / All CDM&PHOs / All Municipal Commissioners of Municipal Corporations for information and necessary action.

Memo No. 8029 /H, Dated 16/03/2020
Copy forwarded to all Directors under Health & Family Welfare Deptt. / MD, NHM, Odisha, Bhubaneswar / MD, OSMCL, Bhubaneswar / Honorary Secretary, Indian Red Cross Society, Odisha State Branch, Bhubaneswar for information and necessary action.

Memo No. 8030 /H, Dated 16/03/2020
Copy forwarded to all Sections of Health & Family Welfare Department for information and necessary action.

Memo No. 8031 /H, Dated 16/03/2020
Copy forwarded to the PS to Hon'ble Chief Minister, Odisha / P.S to Hon'ble Minister, Health & FW, Odisha / P.S to Chief Secretary, Odisha / P.S to Principal Secretary to Govt., Health & FW Department for kind information of Hon'ble Chief Minister / Hon'ble Minister, Health & FW / Chief Secretary / Principal Secretary, Health & FW Department respectively.

Joint Secretary to Government.