COVID-19

Containment Strategy & Measures
Current Scenario in the state

- Average no. of days for doubling cases - 4 days
- No of districts affected – 25
- No of deaths so far - 62
- No of people discharged - 70
- Increasing number of tests identifying more positive cases.

Need a containment strategy to effectively counter spread of infection to newer areas.
Number of days since last positive case (data since 5th April)

- BHOPAL: 0
- INDORE: 2
- HOSHANGABAD: 2
- RAISEN: 2
- UJJAIN: 2
- KHANDWA: 2
- DEWAS: 2
- AGAR MALWA: 2
- RATLAM: 2
- MANDSAUR: 2
- BARWANI: 2
- JABALPUR: 1
- DEWAS: 1
- KHANDWA: 1
- UJJAIN: 0
- RAISEN: 0
- HOSHANGABAD: 0
- INDORE: 0
- BHOPAL: 0
I - Identification of Suspected cases, Hotspots and Clusters

I - Isolation and quarantine of Suspected cases and containment zone

T - Tracing of contacts and testing of high risk cases.

T - Treatment of Suspected and Confirmed Cases
Identification of Hotspots

**Hotspots (Red zones)** – focus attention on districts/cities reporting large number of cases/high growth rate- to be decided dynamically at state level

- **Inclusion Criteria**
  - Highest case load districts contributing to **more than 80% of cases in India** or
  - Highest case load districts contributing to **more than 80% of cases in the state**
  - Districts with doubling rate less than 4 days (calculated every Monday for last 7 days)

- **Exclusion criteria**
  - No new confirmed cases for last 28 days (Green zone)
Notification of Hotspots

• Hotspots shall be decided dynamically through an IT tool developed by GoI, based on the data entered at the district level,

• 3 categories of Districts in the State
  • Red (Hotspots)
  • Non-hotspots – with sporadic cases
  • Green – without positive cases

• Hotspots may have
  • Large outbreak area
  • Clusters

• Non-Hotspots may have
  • Clusters
  • Sporadic cases
Hotspots - Clusters and Large Outbreaks

• **Large Outbreak**
  - Localized increase in the incidence of COVID-19 cases occurring within a defined geographic area e.g., in a village, town, or city.
  - Cases may not be epidemiologically linked
  - More than 15 cases
  - Implies progression of a small cluster or evolvement of multiple clusters

• **Cluster**
  - Less than 15 cases in a limited area
  - Cases are epidemiologically linked
Current Status (as of 16th April 2020)

- All districts
  - Hotspots (Red Zone) (13)
    - Hotspot districts with large outbreaks (11)
    - Hotspot districts with clusters (2)
  - Non-hotspot districts (12)
  - Clusters/Sporadic cases
  - Non infected Districts (Green Zone) (27)

**Criteria for shifting categories**

- A district currently in **hotspots** can move to **green category** if no new cases arise in 28 days
• Earmarking containment zones in hotspots, clusters and non-hotspot districts (sporadic cases)

• Boundaries of containment zone to be decided by DRRT and details of each containment zone to be entered in the portal

• Epidemiology of cases, geography of area and density of population to be taken into consideration while deciding the boundaries of containment zone.

• Perimeter of mapped containment zone can be facilitated by existing geographic boundaries - like roads, rivers, etc.

• Establish clear entry and exit points.

• Measurable and monitorable parameters of managing containment areas
A containment operation (large outbreak or cluster) is deemed to be over 28 days from the date the last case in the district tests negative.
### Defining Area of Operation

#### Clusters/Sporadic cases

- Geographic area mapped for cases & contacts for defining the area of operation
- If data for mapping is not readily available in:
  - **Rural areas**: containment zone of 3 km radius and additional 7 km radius of buffer zone
  - **Urban areas**: Administrative boundaries of residential colony and a buffer zone of additional 5 km radius

#### Large Outbreak

- Geographic area mapped for cases & contacts for defining the area of operation
- If data for mapping is not readily available in:
  - **Rural areas**: Block/Sub district/district population with buffer zone of all neighboring block/sub district/district
  - **Urban areas**:
    - Containment Zone: Entire population of towns and for large cities, zones/districts from where cases are reported
    - Buffer Zone: Neighboring urban/rural districts

The area should be appropriately defined by the district administration/local urban body with technical inputs at local level & it would be appropriate to err on the higher side.
Applying Perimeter Control

• Perimeter of containment zone to be decided by DRRT depending upon local conditions
• Establish clear entry and exit points.
• Only 1 or 2 arterial roads into containment zone will be kept open for essential services
• All roads connecting the containment zone will be guarded by police/volunteers/technology.
• No unchecked outward movement and influx except for essential services
• All vehicular movement, public transport and personnel movement will be restricted
  ▪ Details of people moving out of perimeter will be recorded & followed up with IDSP

The perimeter control operations for the clusters & large outbreaks remain the same except for the enhanced scale of arrangements for large outbreaks
Activities in Buffer and Containment Zone

**Containment Zone**
- Defined area around epicenter
- Perimeter control
- Active search for high risk cases
- Testing of high risk cases as per sampling guidelines

**Buffer Zone**
- Defined area around the containment zone
- No perimeter control
- No active search for cases
  - ILI/SARI cases report to health institutions falling in the buffer zone
- Testing of ILI/SARI cases reporting to health institutions falling in the buffer zone

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The buffer zone is an area where new cases are more likely to appear.

Thus, the health institutions, including private institutions, should be aware of the signs & symptoms.
Surveillance outside containment zones

• Area surveillance should be done outside buffer zone specially for contacting SARI, ILI and other possible suspects

• Identifying individuals who would have migrated from containment areas

• Monitoring respiratory illness cases in health institutions

• Contact tracing wherever necessary
Surveillance Teams and Planning

- **District Crisis Management Group** chaired by district collector
- **District Rapid Response Team** (DRRT) - CEO ZP/ Additional Collector, Additional SP, Physician, Epidemiologist, Microbiologist and CMHO;
- **Survey team** - ANM, AWW, Teacher/patwari/ Secretary / Nagar Nigam/ Police constable with at least face mask and gloves
  - 1 survey team to visit on an average 50 households
  - Sufficient Number of survey teams to complete the survey and enter details in **Sarthak App within 2-3 days** of identification of containment zone and report to DRRT
  - Questionnaire regarding signs, symptoms, & travel, Listing of contacts and their tracking
  - Covid-19 brochure distribution to Create awareness on hand hygiene, respiratory etiquettes, sanitation and Social distancing measures
- Administer HCQ to healthcare workers and high risk contacts
- **Outcome – Identification of high risk cases**
1. All symptomatic individuals who have undertaken international travel in the last 14 days
2. All symptomatic contacts of laboratory confirmed cases
3. All symptomatic health care workers
4. All patients with Severe Acute Respiratory Illness (fever AND cough and/or shortness of breath)
5. 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

In hotspots/cluster (as per MoHFW) and in large migration gatherings/ evacuees centres

6. All symptomatic ILI (fever, cough, sore throat, runny nose)
   a. Within 7 days of illness – rRT-PCR
   b. After 7 days of illness – Antibody test (If negative, confirmed by rRT-PCR)
Surveillance Teams and Planning - Sampling

- **Mobile Medical Unit** (MMU) consisting of doctor, lab Technician and staff Nurse with PPE to contact identified high risk contacts (Guideline issued by ICMR on 9th April, 2020) for clinical examination, treatment strategy and sample collection
  - Sufficient Number of teams to complete the zone within 2 days of report of survey team
  - Sample collection can be at home or in identified collection center
  - MMU to do one of these three thing in order of priority for each high risk contact
    1. Home quarantine if possible- install Sarthak App on his/her mobile and data entry to be made mandatory
    2. Institutional quarantine if home quarantine is not possible
    3. Admission in CCC if symptoms so warrant
- **Data entry in portal preferably through Sarthak App**
Sampling Strategy

• **A. Community Testing (To be done by MMU in the field)**
  - High risk cases identified by survey teams

• **B. Institutional Testing (To be done at designated health facilities)**
  - All hospitalized cases of acute respiratory illness
  - Symptomatic cases screened and referred by health professional
  - All health workers who came in contact with positive case without adequate protection

• 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
Based on Projection of probable positive cases, three categories of COVID dedicated facilities are to be planned at the district level:

1. **CCC-COVID Care Centre** – for clinically mild/very mild cases or COVID suspect cases – e.g. Hostel, Hotel, CHC.

2. **DCHC- Dedicated COVID Health Centre** – for clinically moderate cases – e.g. District Hospital, Private hospitals.

3. **DCH Dedicated COVID Hospital** – for clinically severe cases – e.g. Medical College, Pvt Hospitals.

- All high risk contacts would be kept in home/institutional quarantine or CCC
- Cases would be managed as per clinical management protocol.
- Separate earmarked areas for suspect and confirmed cases in all three types.
- Planning for transportation (ambulances) of positive tested cases to appropriate hospitals.
Other Focus Areas

**Pharmaceutical Interventions**
- Severe cases should be treated with HCQ in the prescribed dose
- **Treatment of non-COVID cases in government and private hospitals**

**Non-pharmaceutical Interventions**
- Physical distancing measures, including staying at home
- Closure of schools & other establishments, except for emergency and essential services
- Public health measures (hand washing & cough etiquettes)
- Ban on public gathering
- Cancellation of public transport

**Biosafety measures**
- Lab based biowaste;
- PPE and other biowaste at community level;
- Management protocol for deceased; GoI guidelines on Dead Body Management 15/3/20
Other Focus Areas

**Human Resource**
- Trained health workforce for surveillance – ANM, AASHA, Anganwadi, NSS, Red Cross, Ayush students, NYK Volunteers, Teachers, Patwaris, Sachiv and employees of other departments.
- Trained supervisory field staff – PHC, Ayush and CHC doctors
- For DCCC – Ayush doctors
- For DCHC – PHC doctors
- For DCH – staff drawn from medical college/private hospitals
- All training material made available on IGOT platform

**Material Resource**
- Personal protection of health workforce is of prime importance
- Sufficient stock of PPEs/N95 masks etc to be made available in the districts in accordance with guidance on rational use of PPEs

**Risk Communication**
- Awareness to be created through mass communication modalities and through interpersonal communication at the time of house-to-house visit of healthcare workers
Action for Non-infected Districts

- 27 districts have not reported any infections so far
- These districts needs to be under enhanced surveillance for ILI and SARI and prepare district contingency plans
- ILI and SARI cases in Facilities to be tested and reported in IDSP
- Preparation for dedicated DCCC, DCHC and DHC
- Health professionals training to be undertaken
- Effective community engagement for awareness creation
Cluster Containment in Non-hotspot Districts

- 12 districts have reported cases and could be a potential hotspot.
- Preemptive action for cluster containment is to be initiated in all these districts.
- Clear delineation of containment zone and buffer zone to be done.
- Contact tracing and surveillance to be initiated.
- Laboratory testing as per protocol.
- Clinical management of positive cases to be undertaken
- Effective community engagement to be ensured
Parameters to monitor containment work in districts

- **Districts to report**
  - **Surveillance and Monitoring indicators**
    - No of containment areas
    - Population in containment areas
    - Strength and number of survey teams
    - Progressive reports on daily survey conducted and high risk cases identified
  - **Testing and Patient care indicators**
    - Strength and number of MMUs
    - No of samples collected
    - No of cases quarantined (home/institution)
    - Number of cases admitted in CCC(suspected/confirmed)
    - Number of test report received and positive cases identified
    - Number of cases admitted in DCHC and DCH, discharged, deaths
  - Reporting to be done through **MP COVID-19 Patient Management** portal
Expectations from District regarding data entry

• Data entry to be regularly done in mphealthresponse.nhmmp.gov.in and covid19.nhp.gov.in
• Use of Sarthak app and Arogyasetu app
• District login credentials have already been intimated to the districts and they can create new users
• District can contact Mrs Swati Meena, Mr Nand Kumaram and Mr Frank Noble for any problem.
• CEO ZP/Additional Collector to be in-charge of Data entry and management of control room
• Sufficient number (at least 5) of trained Data entry operators to be kept in the districts.
• No Form to be sent to the testing lab unless it has been entered in the Portal
• District to ensure the result of the lab are updated in the System and the corresponding citizen is made aware of the lab result through District Call Centre.
• For mobile Tower based monitoring of quarantined person, send numbers in format intimated by MAPIT
THANK YOU
## Appendix – Classification of districts as on 16\(^{th}\) Apr

<table>
<thead>
<tr>
<th>S.No</th>
<th>Hotspot districts</th>
<th>Non-hotspot districts</th>
<th>Non-infected districts (green zone)</th>
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<tbody>
<tr>
<td></td>
<td>Large outbreak</td>
<td>Cluster</td>
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<tr>
<td>1</td>
<td>Indore</td>
<td>Jabalpur</td>
<td>Gwallor</td>
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<td>Bhopal</td>
<td>Morena</td>
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<td>Ujjain</td>
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