Preparedness and response to COVID-19 in Urban Settlements

1. Background

Informal settlements within cities that may have mushroomed due to migration have inadequate housing and poor living conditions. These settlements are affordable and accessible to the poor in the cities. The main reason for these settlements proliferation is rapid and non-inclusive patterns of urbanization catalyzed by increasing rural migration to urban areas. According to 2011 Census there are 2613 towns/cities such settlements with 6.54 crore population residing in 1.39 crore households, representing 17.4 of all urban population. This would have increased in number further since last few years.

2. Key vulnerabilities of these urban settlements

These localities are often overcrowded, with many people crammed into very small living spaces. A substantial percentage of this population is migrant workers employed in industrial and other informal sector. These areas are characterized by poor structural quality of housing, inadequate access to safe water, poor sanitation and insecure residential status. There are gaps in health and healthcare services.

In the context of COVID (or any other respiratory infectious disease for that matter) implementing strategic interventions such as surveillance, physical distancing, isolation, quarantine and communicating the risk to the dwellers could be challenging.

3. Scope of document

This document delineates focus area that need to be addressed by the Urban Local Bodies for preparedness in these settlements for responding to COVID-19.

4. Preparing these urban settlements for prevention and control of COVID-19.

4.1 Institutional mechanism

As these settlements are governed under the jurisdiction of Urban Local Bodies (Municipal Corporations or Municipalities). Planning on preparedness and response to COVID-19 by such local bodies should cover the management of COVID-19 as well as focusing on challenges unique to such populations.

4.1.1 Incident Response System

An Incident Commander of appropriate seniority would be identified depending upon the geographic extent of the settlements and its population size. The Incident Commander will identify its planning, operation, logistics and finance teams to implement the preparedness
measures to respond to a COVID outbreak. The Incident Commander shall report to the Municipal Commissioner.

4.1.2 Coordination Mechanism

A coordination mechanism shall be evolved under the leadership of Incident Commander and would comprise of representatives from Health, W&CD, ICDS, Housing & Urban Affairs, Public Health Engineering Wing, Swachh Bharat Mission, elected representatives, prominent NGOs already serving the area, community leaders, etc.

4.2 COVID-19 containment plan

The COVID containment plan for these urban settlements will address the key challenges specific to these areas. Implementation of this plan will ensure that the core capacities are available to respond to COVID-19. The core components of this plan shall be as detailed in the following sections.

4.2.1 Surveillance

In most of the cities/towns the disease surveillance system is not as well organized as in the rural areas. This is more so pronounced in these urban settlements. Hence the surveillance system shall be strengthened for surveillance and contact tracing mechanism. This would include identification of the health workers in the health posts/dispensaries, ANMs, ASHAs, Anganwadi Workers, municipal health staff, sanitation staff, community health volunteers and other volunteers (NSS/NYK/IRCS/NCC and NGOs) etc. The trained manpower available on www.covidwarriors.gov.in will be contacted for their readiness to deployment at short notice.

An orientation training will be organized by the Chief Medical Officer/Executive Health Officer to train the identified surveillance workers. The training would emphasize on the following:

i. Basic information on COVID-19
ii. Orientation on basic Dos and Don’ts with focus on hand hygiene, respiratory hygiene, environmental sanitation and use of face covers/masks
iii. Active case search through questionnaire during field visit
iv. Listing and tracking of contacts
v. Recording temperature with handheld thermometer, recording oxygen saturation with pulse oximeter
vi. Identification of high risk individuals based on contact history, age, and co-morbidities
vii. Inter-personal communication with households for creating awareness on COVID-19 and other essential health services (immunization, RCH, nutrition, NCDs etc.)
viii. Addressing stigma, health seeking behavior and other issues
ix. Establishing rapport with the community
The plan will clearly delineate the allocation of households for the surveillance staff for house to house survey for case detection & contact tracing, coordinating sample collection, case management, data collection and reporting. The existing routine surveillance would be strengthened through dispensaries/health posts/urban health center and private health facilities for ILI/SARI surveillance.

4.2.2 Hospital preparedness and clinical management

There may not be community level structures in these areas that can be transformed into designated health facilities (COVID Care Centers); hence the existing facilities identified by the urban local body near to these settlements shall be earmarked as COVID Care Centers, Dedicated COVID Health Center and Dedicated COVID Hospital.

The civil dispensaries, health posts, health & family welfare centers and private health facilities within these settlements will act as nodal points for the wards/sub-wards/zones for detecting and reporting ILI/SARI cases through their OPDs. Such facilities will also be used as depot holder for Hydroxychloroquine, masks, household disinfectants etc. Non Covid services especially immunization, management of communicable and non-communicable diseases, and maternal and child health services should continue to be provided in these areas.

The earmarked COVID health facilities will identify teams for sample collection of suspect cases.

Ambulances for referral to be stationed within or at the perimeter of these localities, will be identified. The toll free number shall be widely disseminated in the community.

4.2.3 Pharmaceutical intervention

Enough quantity of Hydroxychloroquine will be stocked in civil dispensaries, health posts, health & family welfare centers for chemo-prophylaxis of healthcare workers and high risk contacts of confirmed cases of COVID-19.

4.2.4 Non-pharmaceutical interventions

4.2.4.1 COVID Related Behaviour: There will be community mobilization to adopt COVID related behavior for life style changes. This would include

(i) practicing frequent hand washing,
(ii) following respiratory etiquettes,
(iii) ban spitting in public places,
(iv) following social distancing and promotion of masks/face covers
(v) avoiding consumption of gutkha, paan, cigarettes/bidis etc.
4.2.4.2 **Social distancing** will be a major challenge due to many people crammed into very small living spaces. While sleeping the distancing can be achieved to an extent by sleeping in opposite direction in a manner that head end of one person faces the leg of the other. Social distancing should be practiced particularly in

(i) community water points,

(ii) public toilets,

(iii) PDS distribution points,

(iv) health centers etc.

Social distancing is to be promoted at all formal and informal gatherings.

4.2.4.3 **Quarantine facility** (school, stadium, etc.) in a nearby area needs to be identified, where large number of high risk contacts can be accommodated. Shifting of high risk contacts (elderly and those with co-morbid conditions) is a crucial intervention to minimize the spread of disease in such persons, thereby limiting morbidity and mortality among them. A contingency plan will also be in place to move high risk population to alternate or temporary sites.

4.2.4.4 **Face cover** should be made mandatory. It can be manufactured locally within the area as self-help group activity or through NGOs. Common mask distribution sites and disposal sites should be identified and all dwellers may be made aware about the same.

4.2.4.5 **Sanitation**: Community cleaning and disinfection drive needs to be undertaken on daily basis. In particular, the community toilets need to be cleaned at-least three to four times a day.

4.2.5 **Logistics**

Adequate arrangement for soaps (in public toilets), disinfectants (bleaching powder, 1% sodium hypochlorite) will be ensured at the civil dispensaries, health posts, health & family welfare centers catering to the area. Similarly, availability of triple layer medical masks and gloves for healthcare workers will be ensured.

The civil dispensaries, health posts, health & family welfare centers will also be used as depot holder for Hydroxychloroquine, masks household disinfectants etc.

4.2.6 **Community Volunteers**

Community groups are key to creating awareness on COVID among these populations. Use of local (political, religious and opinion) leaders for communicating all aspects of the COVID prevention and control is vital as dwellers are more inclined to trust them. Under these leaders, community cadres need to be created for community engagement.
4.2.7 Risk communication

All risk communication interventions must address psycho-social issues and stigma removal messages particularly in local languages. Posters should be put up outside in the community area, toilets, water points. Local cable TV channels may be utilized to create community awareness. The population uses mobile and social media applications for communication. Hence social media should be used with appropriate messages to target these population and for refuting fake news. Community groups should also popularize adoption of AarogyaSetu application. The risk communication will be designed to create awareness on:

- Common signs and symptoms of COVID-19
- High risk population particularly elderlies with co-morbidities like hypertension, cardiovascular diseases, diabetes, renal disease etc.

Helpline number should be widely publicized for reporting cases.

4.2.8 Capacity building

The District Surveillance Officer will undertake orientation trainings of different cadres of healthcare workers working in health facilities catering to these areas, designated COVID health facilities. Such trainings will cover case management, IPC practices and data management. The District IDSP unit will also map field workers that can be used for surveillance and contact tracing. This includes ANMs, ASHAs, AWWs, corporation health staff, and community level volunteers (NSS, NCC, IRCS, NYK). Their trainings would focus on surveillance, contact tracing, home quarantine, IPC, managing quarantine and isolation centers, supply of ration to homes etc.

5. Response to COVID-19 outbreak in Urban settlements

5.1 Trigger for Action

The trigger for action would be reporting of a suspect/confirmed case from routine ILI/SARI surveillance or cluster of cases of similar ILI/SARI observed by the health post/practitioners etc. It could also be a contact of a known confirmed case.

5.2 Implementation of Cluster Containment plan

5.2.1 Incident Command System and Control room will be activated for planning, operations and logistic support. Pre-implementation coordination meetings will be held at the incident command level and at sub-ward/ward/zone level with ward officer/assistant commissioner/local CBOs/NGOs. Inter-departmental meetings will be held with health department, District Surveillance Officer, National Urban Health Mission, Sanitation Officials, Education, WCD/ICDS/ AWW, MAHILA AROGYA SAMITIS, AYUSH, NYK, NSS etc.
5.2.2 Implementation of COVID Cluster Containment Plan

The following activities will be ensured:

5.2.2.1 Defining area of operation: Upon reporting of a suspect/confirmed case of COVID-19, the District Surveillance Unit will undertake rapid identification of other cases and contacts to define containment and buffer zones. If data for mapping is not readily available, for small clusters the containment zone can be mapped as the administrative boundaries of residential colony/mohalla, surrounded by a buffer zone. In case of a large outbreak, the entire population of municipal ward, municipal zone, police station area, towns etc. from where cases and contacts are reported may be taken as containment zone with all neighboring wards/zones/towns/districts in the buffer zone.

5.2.2.2 Applying strict perimeter control:

Most of the inhabitants of such communities are daily wage workers, who might be compelled to go outside for work. Hence, strict perimeter control must be enforced to regulate entry and exit from the containment zone.

Section 144 under CrPC will be enforced to ensure people remain in their dwelling units. The local administration however must make every effort to maintain supply of essential commodities (food, milk, groceries, medicine and other essential supplies) in such area. The routine medical needs of the population (immunization, RCH, TB, Dialysis, NCDs) must be catered to. If feasible, the relief centers in the containment zone may be geo-tagged and information may be made available through mobile applications.

The containment activities shall be implemented in line with the MoHFW’s plans on COVID-19 containment (available at:


and


for small clusters and large outbreaks respectively.

However, special considerations and needs of such population should be kept in mind while implementing the plan in these dwellings as detailed below.

5.2.2.3 Surveillance

Active Surveillance: Considering the large and dense population, the designated health worker may be allotted a much larger number of households to be visited per day. However, in spite of that some of these areas would require mobilization of large human resource
trained and listed earlier. The identified and trained health workforce and also the already listed volunteers shall be deployed for active surveillance in the containment zone. The key activities for surveillance workers during house to house visits are:

i. Active case search through questionnaire
ii. Listing and tracking of contacts
iii. Coordinating sample collection as per criteria
iv. Recording temperature with handheld thermometer, recording oxygen saturation with pulse oximeter
v. Identification of high risk individuals based on contact history, age, and co-morbidities
vi. Inter-personal communication with households for creating awareness on COVID-19 and other essential health services (immunization, RCH, nutrition, NCDs etc.)

vii. Address stigma, health seeking behavior and other issues

Adequate provisions for appropriate PPEs must be made for field level surveillance teams.

**Passive Surveillance:** In addition to government health facilities serving these population, surveillance network linkages need to be established with private medical practitioners working in such localities. These practitioners also need to be informed about common signs and symptoms of COVID-19, the IPC protocol to be followed while dealing with suspect cases, need for alerting the local public health authorities and referral centers for suspect cases. If deemed necessary, suitable incentive/compensation to such practitioners may be considered by local authorities.

The surveillance teams conducting active surveillance and passive surveillance being undertaken in the containment as well as buffer zones must submit their daily reports on suspect cases detected and referred, contacts traced etc.

**5.2.2.4 Clinical management**

The management of the suspect and confirmed cases shall be institutional, in accordance with MoHFW guidelines (available at: [https://www.mohfw.gov.in/pdf/FinalGuidancementofCovidcasesversion2.pdf](https://www.mohfw.gov.in/pdf/FinalGuidancementofCovidcasesversion2.pdf)) and no COVID-19 case will be managed at home.

Those undergoing treatment at the identified COVID care centers shall be monitored using pulse oximetry and a provision for early oxygen supplementation and referral to Dedicated COVID Health Centers shall be made for those showing low/declining oxygen saturation.

Referral system has to be clearly defined and it shall be ensured that there are no delays in transferring patients from one facility to another as per need including availability of sufficient ambulances.
Strict adherence to Infection, Prevention and Control practices shall be followed in all COVID and Non-COVID health facilities.

In case of occurrence of a death, management of the dead body shall be in accordance with the MoHFW guidelines (available at: https://www.mohfw.gov.in/pdf/1584423700568_COVID19GuidelinesonDeadbodymanagement.pdf)

5.2.2.5 Psychosocial support

A provision for psycho-social counselling (including addressing issues like stigma, discrimination etc) through inter-personal communication or helplines should be made available to such communities by trained personnel. Psycho-social teams shall be deployed to the area to address mental health needs (incl. treatment of pre-existing psychiatric illness) and provide mental health services.

Resource material available at https://www.mohfw.gov.in/ under Behavioural Health : Psycho-Social module can be utilised for the same.

5.2.2.6 Non-pharmaceutical interventions (NPI)

5.2.2.6.1 NPI measures include

(i) Imposition of social distancing, including ban on all sorts of social gatherings, and very restricted movement of personnel especially within the containment zone

(ii) mandatory use of face covers with proper disposal at identified sites and

(iii) intensification of community cleaning and disinfection drive under the Swatchh Bharat initiative, with more frequent cleaning of public places especially toilets.

5.2.2.6.2 The high risk population as per clinical assessment and feasibility of effective home quarantine, if need be, can be shifted to institutional quarantine so as to have focused management of such cases as it may have an impact on mortality.

5.2.2.7 Risk Communication

COVID Appropriate Behaviour: There will be further intensification of risk communication and community mobilization to inculcate COVID appropriate behaviour for life style changes, especially hand hygiene and respiratory etiquettes.

The surveillance teams during their house to house visits shall inform the inhabitants about common signs and symptoms, preventive measures that need to be adopted, need for prompt reporting of symptoms and also address stigma and fake news. It must be stressed at all times that hiding of cases would only prove detrimental to not only their health but also to their close family members. Social mobilization will be achieved by engaging local religious, self-help groups, NGOs, local community, opinion makers and religious leaders.
5.2.3.8 Supervising, monitoring and reporting

The Incident Command will daily review the implementation of containment plans in the settlements. All information will be shared on a daily basis with the District and State Control rooms also.

The Control rooms shall analyze the information on a daily basis and necessary guidance in turn will be provided to the teams at field level as per the information so collated regularly.