6 Local Transmission of Zika Virus Disease

The local transmission is defined as a laboratory confirmed case of Zika virus disease:

(i) who has not travelled from an area reporting confirmed cases of Zika virus disease or

(ii) had no sexual exposure to a person travelling from Zika affected area or other known exposure to body fluids of an infected person.

There could be single or multiple foci of local transmission. There may or may not be an epidemiological link to a travel related case. The strategy would be to contain the disease with in a defined geographic area by breaking the chain of transmission and thus preventing its spread to new areas.

The activities shall be similar to those undertaken for managing travel related case but shall be scaled up.

6.1. Deployment of State / District RRT.

On detection of a laboratory confirmed case, The State and the concerned District RRT under IDSP would undertake epidemiological investigation and reconfirm that the case conforms to the definition of 'local transmission'.

[Action : Secretary/ DHS State Health Department]

6.2. Deployment of Central RRT

The Central RRT shall be deployed

[Action : Director, EMR]

6.3. Defining the limits of the affected area

The geographic terrain within 3 km radius shall be declared as the affected area. A mapping of the affected area with the number of blocks/ talukas, villages and their population will be mapped.

[Action: Central/ State RRT]

6.4. Development of Micro-plan

A micro-plan shall be developed as per the framework given in **Annexure-X**. The micro-plan will detail out the surveillance and response activities including the Human Resource (HR) component. The human resource required in large number for epidemiological and entomological surveillance shall be mobilized from the neighboring Districts.

[Action: Central/ State RRT]

6.5. Training of Health care workers

The Healthcare workers will be trained in house to house search for identification of suspect cases. The field workers identified to carry out entomological surveillance and activities pertaining to source reduction shall be trained on such activities. If need be, the required field personnel shall be mobilized from neighboring districts.

[Action: Central/ State RRT; State Health Department]

6.6 Securing Logistics

The State unit of the NVBDCP shall mobilize the required quantity of bednets, temephos, Melathion technical / Pyrethrum etc. If the state requires further assistance in this regard, the NVBDCP shall support the State Government.

NCDC, Delhi / NIV, Pune shall supply adequate quantity of diagnostic kits to the laboratory nearest to the affected district.

[Action: NCDC, Delhi; NIV, Pune, State unit of NVBDCP]

6.7 Implementation of the Micro-plan

6.7.1 Enhanced Surveillance

The district IDSP will intensify fever surveillance within a radius of three kilometer radius as identified and mapped in the micro-plan. All known contacts of the primary case shall be followed up for a period of two weeks. All fever cases within the defined area or febrile cases among the contacts will be tested for Zika virus disease.

There shall be active entomological surveillance in the defined area. ICMR would also test pre determined samples of *Aedes* mosquitoes from this defined area for the presence of Zika virus.

All pregnant women in the defined area will be under surveillance for febrile illness.

Surveillance will also be mounted for acute neurological illnesses with in this defined area. Suspect case, if any, of GBS, shall also be tested for Zika virus disease.

[Action : IDSP; ICMR]

6.7.2. Laboratory support

The identified laboratory, nearest to the affected area, will be further strengthened to test samples. If the number of samples exceeds its surge capacity, samples will be shipped to

other nearby laboratories or to NCDC, Delhi or NIV, Pune depending upon geographic proximity.

[Action : Central RRT; NIV, Pune; NCDC, Delhi]

6.7.3. Hospital facility.

All febrile cases in the defined geographic area will be hospitalized and kept in isolation in a mosquito proofed facility. If mosquito proofed ward is not available, LLIN bed nets will be used. All such cases will also remain hospitalized till such time their clinical samples are reported negative. Persons tested positive for Zika virus disease will remain to be hospitalized for 14 days. For managing the neurological complications, critical care facility shall be required.

[Action : State Health Department; Director, EMR]

6.7.4. Clinical management

The hospitalized cases may require symptomatic treatment for fever. Paracetamol is the drug of choice. Suspect cases with co-morbid conditions, if any, will require appropriate management of co-morbid conditions. The protocols for managing GBS will be implemented. Pregnant mothers, positive for zika virus disease and beyond the period stipulated by the MTP Act will be followed up during ante natal visits and for ultrasonographic evidence of microcephaly.

[Action: State Health Department]

6.7.5. Blood Safety

The Blood Banks in and near the affected area will be alerted not to accept donors from the defined geographic area (covered by the Micro-plan) and defer potential donors who have recently visited areas with ongoing transmission of Zika virus infection for a period of 120 days.

[Action: State Health Department]

6.7.6. Vector control

The Central and State RRT will assist the district/ local body NVBDCP team to plan and implement intense anti-adult and anti-larval vector control measures in the 3 Km radius geographic area identified in the micro-plan. Special focus would be in and around the house/ apartment where the primary case / other epidemiologically linked cases stayed and the hospital where the suspect, confirmed cases are isolated. The entomologist in the central team shall monitor and report the vector indices in the identified geographic area on daily basis. The guidelines on integrated vector management for *Aedes* mosquito (Annexure VI] shall be followed. Action shall be instituted at household level, community level and institutional level.

[Action: State Health Department ; State units of NVBDCP; Central and State RRT]

6.7.7. Risk communication

The risk communication materials prepared by CHEB will be rolled out in the defined geographical area. Schools, colleges, work place and community dwellings within the geographic area will be targeted. Awareness will be created among the community through miking, distribution of pamphlets, mass SMS etc. During house to house surveillance, ASHAs/ Other community health workers will interact with the community (i) for reporting febrile cases (ii) for source reduction activities for mosquito control and (iii) information on contraception using condoms to reduce risk of sexual transmission.

In the defined area witnessing active Zika virus transmission, it will be ensured that all people in the reproductive age group, having sexual activity receive information about the risks of sexual transmission of Zika virus disease. In particular, The health workers notably ASHAs and the ANMs will visit sexually active men and women and those planning pregnancy and provide them information on contraception to make an informed choice to delay pregnancy and to prevent possible adverse pregnancy outcome.

Men/ women who had tested positive for Zika virus disease will be counseled for safe sex practices to be followed for a period of six months. Any pregnant women reporting positive for zika virus disease will be counseled as to take an informed decision on termination of pregnancy, provided it is within the stipulations laid down under Medical Termination of Pregnancy Act. Pregnant mothers, positive for zika virus disease and beyond the period stipulated by the MTP Act will be followed up for ultrasonographic evidence of microcephaly and counseled accordingly.

[Action: Director, CHEB; State Health Authority, District NHM Society]

6.7.8. Training

Before the micro-plan is implemented, the identified heath functionaries will be briefed and if required, trained on their assigned roles.

[Action : Central/ State RRT]

6.7.9. Information Management

At the operational level, the Control Room at the epi-centre will collect, collate and analyze the epidemiological and entomological surveillance data. Information on the prescribed format [**Annexure-XI**] will be submitted to the Control Rooms of the State and the EMR on daily basis. The Control Room of the EMR will further disseminate information to all concerned including MHA and NDMA.

Cabinet Secretary shall be kept informed of the containment action by Secretary (H).

[Action : Central/ State RRT; Director, EMR]

6.7.10 Co-ordination

Interagency Coordination at National level will be done by EMR Division. Depending upon the situation, the Inter-ministerial Task Force will also meet. The proceedings will be recorded by EMR division.

[Action: Director, EMR]

6.7.11. Monitoring and Documentation

The situation would be monitored and response reviewed on regular basis by the Joint Monitoring Group.

[Action : EMR Division; Dte GHS]

6.7.12. Control Room

The Control Room of Directorate General of Health Services shall be the nodal point to collect and collate information from the States and prepare daily situational reports. These reports will be disseminated to all concerned including Control Room of MHA and NDMA. The Control Room shall also provide information to public.

[Action : EMR Division; Dte GHS]

6.7.13. Media Management

Secretary (H) or representative nominated by him shall address the media. There will be regular press briefings/ press releases to keep media updated on the developments.

[Action : EMR Division; Dte GHS]

6.8. Alert neighbouring districts

The State Government will alert all neighbouring districts. There shall be enhanced surveillance in all such districts for detection of clustering of febrile illnesses and for GBS. Awareness will be created in the community for them to report febrile illness.

[Action : State Health Department]

6.9. Information to WHO under IHR (2005)

The IHR focal point will keep WHO informed about the outbreak.

[Action: Director, NCDC]

6.10. Scaling down of operations

The operations will be scaled down if no secondary laboratory confirmed Zika case is reported in a cluster for atleast two weeks. The closing of the micro-plan for the clusters could be independent of one another provided there is no geographic continuity between clusters.

However the surveillance will continue for GBS and microcephaly in districts where the local transmission clusters have been located.

[Action : Central RRT/ State RRT]