

Government of India
Ministry of Health and Family Welfare
Directorate General of Health Services

Guidelines on Zika Virus Disease following Epidemic in Brazil and other countries of America

Background

Zika virus disease is an emerging viral disease transmitted through the bite of an infected Aedes mosquito. This is the same mosquito that is known to transmit infections like dengue and chikungunya. Zika virus was first identified in Uganda in 1947.

World Health Organization has reported 22 countries and territories in Americas¹ from where local transmission of Zika virus has been reported. Microcephaly in the newborn and other neurological syndromes (Guillain Barre Syndrome) have been found temporally associated with Zika virus infection. However, there are a number of genetic and other causes for microcephaly and neurological syndromes like Guillain Barre Syndrome.

Zika virus disease has the potential for further international spread given the wide geographical distribution of the mosquito vector, a lack of immunity among population in newly affected areas and the high volume of international travel. As of now, the disease has not been reported in India. However, the mosquito that transmits Zika virus, namely Aedes aegypti, that also transmits dengue virus, is widely prevalent in India.

A majority of those infected with Zika virus disease either remain asymptomatic (up to 80%) or show mild symptoms of fever, rash, conjunctivitis, body ache, joint pains. Zika virus infection should be suspected in patients reporting with acute onset of fever, maculo-papular rash and arthralgia, among those individuals who travelled to areas with ongoing transmission during the two weeks preceding the onset of illness.

Based on the available information of previous outbreaks, severe forms of disease requiring hospitalization is uncommon and fatalities are rare. **There is no vaccine or drug available to prevent/ treat Zika virus disease at present.**

World Health Organization has declared Zika virus disease to be a Public Health Emergency of International Concern (PHEIC) on 1st February, 2016.

¹ Zika virus disease has been reported so far in the following countries; Brazil, Barbados, Bolivia, Columbia, Dominican Republic, Ecuador, El Salvador, French Guyana. Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Martinique, Mexico, Panama, Paraguay, Puerto Rico, St Martin, Suriname, Virgin Island and Venezuela. It may be noted that this list is likely to change with time. Hence, updated information should be checked periodically.

In the light of the current disease trend, and its possible association with adverse pregnancy outcomes, the Directorate General of Health Services, Ministry of Health and Family Welfare advises on the following:

1. Enhanced Surveillance

1.1. Community based Surveillance

- Integrated Disease Surveillance Programme (IDSP) through its community and hospital based data gathering mechanism would track clustering of acute febrile illness and seek primary case, if any, among those who travelled to areas with ongoing transmission in the 2 weeks preceding the onset of illness.
- IDSP would also advise its State and District level units to look for clustering of cases of microcephaly among newborns and reporting of Guillian Barre Syndrome.
- The Maternal and Child Health Division (under NHM) would also advise its field units to look for clustering of cases of microcephaly among new borns.

1.2 International Airports/ Ports

- All the International Airports will display billboards/ signage providing information to travelers on Zika virus disease and to report to immigration authorities if they are returning from affected countries and suffering from febrile illness. Immigration officials would be provided orientation on Zika virus disease.
- The Airport / Port Health Organization (APHO / PHO) would have quarantine / isolation facility in identified Airports.
- Directorate General of Civil Aviation, Ministry of Civil Aviation will be asked to instruct all international airlines to follow the recommended aircraft disinsection guidelines
- The APHOs shall circulate guidelines for aircraft disinsection (as per International Health Regulations) to all the international airlines and monitor appropriate vector control measures with the assistance from NVBDCP in airport premises and in the defined perimeter.

1.3 Rapid Response Teams

- Rapid Response Teams (RRTs) shall be activated at Central and State surveillance units. Each team would comprise an epidemiologist / public health specialist, microbiologist and a medical / paediatric specialist and other experts (entomologist etc) to travel at short notice to investigate suspected outbreak.
- National Centre for Disease Control (NCDC), Delhi would be the nodal agency for investigation of outbreak in any part of the country.

1.4 Laboratory Diagnosis

- NCDC, Delhi and National Institute of Virology (NIV), Pune, have the capacity to provide laboratory diagnosis of Zika virus disease in acute febrile stage. These two institutions would be the apex laboratories to support the outbreak investigation and for confirmation of laboratory diagnosis. Ten additional laboratories would be strengthened by ICMR to expand the scope of laboratory diagnosis.
- RT- PCR test would remain the standard test. As of now there is no commercially available test for Zika virus disease. Serological tests are not recommended.

2. Risk Communication

- The States/ UT Administrations would create increased awareness among clinicians including obstetricians, paediatricians and neurologists about Zika virus disease and its possible link with adverse pregnancy outcome (foetal loss, microcephaly etc). There should be enhanced vigilance to take note of travel history to the affected countries in the preceding two weeks.
- The public needs to be reassured that there is no cause for undue concern. The Central/ State Government shall take all necessary steps to address the challenge of this infection working closely with technical institutions, professionals and global health partners.

3. Vector Control

- There would be enhanced integrated vector management. The measures undertaken for control of dengue/ dengue hemorrhagic fever will be further augmented. The guidelines for the integrated vector control will stress on vector surveillance (both for adult and larvae), vector management through environmental modification/ manipulation; personal protection, biological and chemical control at household, community and institutional levels. Details are at Annexure-I.
- States where dengue transmission is going on currently due to conducive weather conditions (Kerala, Tamil Nadu etc) should ensure extra vigil.

4. Travel Advisory

- Non-essential travel to the affected countries to be deferred/ cancelled².
- Pregnant women or women who are trying to become pregnant should defer/ cancel their travel to the affected areas.
- All travelers to the affected countries/ areas should strictly follow individual protective measures, especially during day time, to prevent mosquito bites (use of mosquito repellent cream, electronic mosquito repellents, use of bed nets, and dress that appropriately covers most of the body parts).
- Persons with co-morbid conditions (diabetes, hypertension, chronic respiratory illness, Immune disorders etc) should seek advice from the nearest health facility, prior to travel to an affected country.
- Travelers having febrile illness within two weeks of return from an affected country should report to the nearest health facility.
- Pregnant women who have travelled to areas with Zika virus transmission should mention about their travel during ante-natal visits in order to be assessed and monitored appropriately.

5. Non-Governmental Organizations

- Ministry of Health &FW / State Health Departments would work closely with Non-Governmental organizations such as Indian / State Medical Associations, Professional bodies etc to sensitize clinicians both in Government and private sector about Zika virus disease.
-

² Based on available evidence, World Health Organization is not recommending any travel or trade restrictions.

6. Co-ordination with International Agencies

- National Centre for Disease Control, Delhi, the Focal Point for International Health Regulations (IHR), would seek/ share information with the IHR focal points of the affected countries and be in constant touch with World Health Organization for updates on the evolving epidemic.

7. Research

- Indian Council of Medical Research would identify the research priorities and take appropriate action.

8. Monitoring

- The situation would be monitored by the Joint Monitoring group under Director General of Health Services on regular basis. The guidelines will be updated from time to time as the emerging situation demands.