F. No. L-21021/49/2020-PH (IH) Government of India Ministry of Health & Family Welfare Directorate General of Health Services Public Health (International Health) Section

Issued on 07.05.2025

ADVISORY FOR STRENGTHENING VECTOR SURVEILLANCE AND CONTROL MEASURES AT POINTS OF ENTRY (POES)

Introduction

In line with India's commitment to the International Health Regulations (IHR), 2005, effective vector surveillance and control at Points of Entry (PoEs) are critical to safeguard the health of travelers and staff. Regular inspections by health units at airports, seaports, and land ports are conducted to identify and eliminate mosquito breeding sites. A routine surveillance plan is in place to assess risks and coordinate timely response and control measures. The Ministry has issued advisories to strengthen these efforts, including the *Health Advisory for Monsoon Preparedness* and the *Health Advisory for Construction Activities* at PoEs. These advisories apply to all PoEs in India and aim to support the implementation of robust vector management programs to reduce vector density & indices specially during the monsoon season. They will be periodically reviewed and updated to address emerging public health needs.

PREVENTIVE MEASURES TO BE UNDERTAKEN IN AND AROUND THE POEs (APHOs/PHOs/LPHOs)

Ideally, surveillance and vector control programs are to be tailored to the local context of each Point of Entry (PoE). As part of monsoon preparedness, mosquito control measures should be implemented during the pre-monsoon, monsoon, and post-monsoon periods. The Health Advisories issued on 05.06.2024 (Monsoon Preparedness) and 12.09.2023 (Construction Activities) must be strictly followed.

1. Guidelines for Monsoon Preparedness at PoE

Follow the Health Advisory for Monsoon Preparedness for Prevention and Control of Vector Borne Diseases at Points of Entry (POE) issued on 05.06.2024 (Annexure I).

Key Points

- I. Conduct pre-monsoon situational analysis and larval habitat surveys.
- II. Monitor and report VBD symptoms in PoE staff/travelers, VBD notification around 400 metres surrounding areas of POE via IDSP-IHIP.

- III. Coordinate with local health authorities to track disease trends.
- IV. Classify zones by VBD risk; prioritize high-risk areas (e.g., schools, parks, industries).
- V. Micro-map mosquito breeding sites for targeted interventions.
- VI. Apply Integrated Vector Management (IVM) strategies.
- VII. Inspect and maintain water-holding structures, drains, and rooftops.
- VIII. Secure/dispose of potential breeding containers (tyres, scrap, etc.).
 - IX. Ensure specific controls at: APHOs: hangars, workshops, disinsection. PHOs: ship fenders, docks, onboard prevention. - LPHOs: terminals, cross-border disease monitoring.

2. Guidelines for Construction Activities at PoE

Follow the Health Advisory for Construction Activities at Points of Entry for Prevention and Control of Vectors and Vector Borne Diseases issued on 12.09.2023 (Annexure II).

Key Points:

- i. Conduct a thorough assessment of the construction site to identify potential breeding grounds and entry points for vectors.
- ii. Identify nearby sources of standing water, such as puddles, ditches, and stagnant ponds, curing tanks which can serve as breeding sites for mosquitoes.
- iii. Remove or drain any standing water sources on the construction site, such as containers, tyres or equipment that can collect rainwater.
- iv. Cover all water storage containers, curing tanks, drums, and Sintex tanks.
- v. Provide a drain hole for easy clearing of stagnant water for e.g. temporary storage tanks were created for construction work.
- vi. Regularly inspect and clean drainage systems, gutters and catch basins to prevent clogging.
- vii. Scrub and clean all the tanks & water storage containers once weekly and dry it before refilling to prevent mosquito eggs collection & breeding.
- viii. Store all the water collection scraps, drums, cement bags, construction wastes materials etc. under the roof or properly covered to prevent rainwater collection.
- ix. All the construction equipment like cement concrete mixtures, which uses water to be kept, dry every day at the end of work/shift.

3. Tyres Advisory

Improper storage and disposal of tyres pose a significant risk for mosquito breeding, as tyres can easily collect and retain rainwater. Their structure and shaded interiors create ideal conditions for mosquito larvae to hatch and develop. The retained heat within tyres further accelerates the larval growth cycle.

To prevent mosquito breeding in tyre storage areas, the following measures must be strictly implemented at all POEs:

Storage Guidelines:

- All tyres must be stored under covered sheds within workshop or designated storage areas.
- If outdoor storage is unavoidable, tyres must be stacked vertically and covered with a rigid flat sheet (e.g., wood or metal).
- A tarpaulin sheet may be used in addition to the flat cover, but it must be securely fastened around the topmost tyre stack. Note: A tarpaulin alone is not sufficient as it may tear or sag, allowing water to collect and stagnate.
- The tyres used as fenders at jetties or on vessels at Seaports to have holes at 3, 6, 9 &12 "o" clock positions to drain out water collections.

Preventive Measures:

- Regularly inspect all stored tyres, especially those kept outdoors, for any accumulated water.
- Remove water promptly and check for mosquito larvae presence. Take necessary vector control measures if larvae are detected.
- Ensure tyres are kept dry at all times to eliminate potential breeding grounds.

Disposal Guidelines:

- Discarded or scrap tyres must be disposed of promptly and safely, in accordance with a recycling and waste management plan.
- Do not allow used tyres to accumulate in open or unprotected areas.

4. Flower Pot Advisory

Flower vases, pots, trays, planter boxes, earthen jars, and decorative water features within Points of Entry (POEs) can serve as breeding grounds for Aedes mosquitoes due to stagnant water accumulation. Regular upkeep and preventive actions are essential to eliminate these hidden breeding sites.

Inspection & Maintenance

- Weekly Cleaning: Empty water from vases, trays, and saucers; scrub thoroughly before reuse.
- Larvae Check: Inspect all water-holding containers for mosquito eggs or larvae.
- Tray Maintenance: Remove excess water, wash trays weekly, and keep surrounding areas clean.

Drainage & Soil Management

- Use well-draining potting mix and avoid water-retentive clay soil.
- Ensure pots have drainage holes and are placed on elevated platforms.
- Cover soil surface with gravel, sand, or mulch to limit water exposure.

Watering Practices

- Avoid overwatering; water only when soil feels dry.
- Use drip irrigation systems with timers to prevent surface water pooling.
- For self-watering pots, keep reservoirs covered and clean them weekly.
- Use sprinklers or watering hose with sprinkler to prevent water spills.

Additional Measures

- Fill collection trays with coarse sand (1–2 cm thick) to prevent water stagnation; refresh every 2–3 months.
- Discard unused containers and keep surroundings free of debris.
- Position pots for good sunlight and airflow to reduce moisture.
- Apply plant-safe repellents like neem or citronella oil to deter mosquitoes.

5. Tarpaulin Advisory

Tarpaulins are commonly used at Points of Entry (POEs) for temporary shelters, and to protect goods, equipment, or materials. However, improper use can lead to water accumulation and mosquito breeding. The following measures must be taken to prevent this:

Prevent Water Accumulation

- Inspect regularly for trapped water in plastic or canvas tarpaulins, especially those covering machinery, tyres, or scrap.
- Eliminate debris that may collect water under the tarp.
- Arrange tarpaulins with a slight slope to ensure natural drainage and avoid folds or depressions where water can pool.
- Ensure tarpaulins are in good condition, without tears or sagging that can retain water.

Storage & Handling

- All unused tarpaulins should be folded and stored in covered or indoor areas.
- Stakeholders using tarpaulins to cover items inside POEs must be instructed to remove and take back the tarpaulins after use.

Stakeholder Communication

• Stakeholders transporting goods covered with tarpaulins must inform the POE security/operator in advance and confirm that the tarpaulins will be retrieved after delivery or use.

Water Storage Tanks: -

Map all the fresh water storage tanks in POEs-UGT/OHT/Syntex tanks/Fire Safety tanks. The covers are to be kept air tight; overflow and air vent pipes are covered with muslin cloth to prevent entry of adult mosquitoes.

Liquid and Solid Wastes Management plans- Prepare POE specific plan and review them regularly

6. Surveillance and Control Activities at Points of Entry (POEs)

Point of Entry Health Units (APHO/PHO/LPHO) shall conduct routine surveillance to assess vector-borne disease risk factors and supervise the implementation of control measures by the POE operator and designated pest control agencies inside the POE and state/local health authorities for 400m area. The objective is to maintain all POEs as zero vector zones.

Role of Pest Control Agencies:

- All POE operators are required to engage licensed pest control agencies for vector control activities within the POE premises. These agencies must:
- Use only insecticides approved under national public health programs.
- Coordinate with the POE Health Units during surveillance visits and implement necessary control measures as advised.
- Submit an Action Taken Report (ATR) for follow-up and verification of control measures implemented.
- To undertake control activities as deemed appropriate by the APHO/PHO/LPHO for effective control of the vectors.

Scope of Pest Control Activities: POE operators must ensure that pest control services are not limited to terminal buildings or office areas. Control measures must cover the entire POE premises*, including: Airside, Cityside, Terminal buildings, Office spaces, Any other operational areas within the POE. This comprehensive coverage is essential to eliminate potential vector breeding sites and mitigate public health risks effectively.

* A premises refers to any operational zone within the POE boundary — including but not limited to terminals, FBOs, office buildings, fire stations, cargo handling areas, hangars, warehouses, docking sites, container yards, maintenance zones, landscaped areas, and adjacent surroundings. For vector surveillance the Premises are classified based on environmental characteristics (e.g., spatial dimensions, vegetation types, water management practices, and intensity of human activity) to support the evaluation of mosquito breeding risks and the development of targeted vector control strategies. Regular systematic inspections are to be carried out to detect and mitigate breeding habitats such as stagnant water containers, drainage networks, and natural water bodies.

Eg. 1. In Buildings if there are 3 floors and each floor has 5 rooms. See the water storage or collection points or equipments which can be potential breeding points like AC, refrigerator, air coolers or any others with water stagnation points and breeding potential, then those each room can be marked as a premise. The areas surrounding the building with boundary can be a premise. Terrace can be a premise as it also causes breeding potential.

Eg.2 open areas a stretch of Storm water drain in the zone/micro zone can be divided into premise. Open areas with earmarked for stakeholder or an agency it can be made as premise.

Note: - Each POE premise marking is to be done as per their status using these inputs as indicative guidelines. The premise ultimately must denote the habitants with any boundary space or as per zoning/micro zoning in large open areas so actions can be taken for mosquito control measures.

7. Coordination with State and Local Health Authorities for Perimeter Vector Control

To ensure comprehensive vector control around Points of Entry (POEs), coordination with local health authorities—including municipal corporations, panchayats, PHCs, CHCs, and other relevant bodies—is essential for effective surveillance and control measures within a 400-meter perimeter of the POE.

Joint field visits involving POE Health Units and local health authorities will enhance the impact of surveillance, control operations, and Information, Education, and Communication (IEC) campaigns.

Key Actions:

Routine Surveillance Reporting:

Findings from routine surveillance carried out by the POE Health Team within the 400-meter perimeter to be shared with the respective local health authorities for prompt implementation of control measures and necessary follow-up to ensure vector breeding is interrupted.

Inclusion in Local Surveillance Plans:

Local health authorities may treat the 400-meter perimeter surrounding POEs as a priority zone in their routine surveillance and survey programs.

Coordination through Nodal Officer:

The POE Health Unit to coordinate with the designated nodal officer, who is part of the Joint Public Health & Sanitation Committee (JPH&SC), to facilitate effective coordination and implementation of vector control and surveillance activities in the perimeter area.

8. IHIP Monitoring

Point of Entry Health Unit are required to monitor the IHIP portal regularly for risk assessments and reports of any notifications of VBDs. Water borne illness and others of Public Health Risks in the area. POE Health Unit may notify such event alerts.

9. The Joint Public Health & Sanitation Committee (JPH&SC) and Micro JPH&SC

The Joint Public Health & Sanitation Committee (JPH&SC) serves as a vital platform for coordinated efforts to reduce public health risks at airports, seaports, and land ports, in line with IHR 2005. Each stakeholder organization, including Operators, Government bodies, PSUs, and PoE users, nominated for regular coordination with APHOs, PHOs, and LPHOs. The JPH&SC is also responsible for planning micro-level rounds, with findings reviewed during quarterly meetings with relevant stakeholders. Details can be seen in DO Letter dated 24.03.2023 & 20.11.2024 (Annexure III)

Updated on 07.05.2025

Dr. S. Senthilnathan

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भारत सरकार स्वास्थ्य सेवा महानिदेशालय स्वास्थ्य एवं परिवार कल्याण मंत्रालय GOVERNMENT OF INDIA DIRECTORATE GENERAL OF HEALTH SERVICES MINISTRY OF HEALTH & FAMILY WELFARE

Dear Colleagues & Stakeholders,

D.O No. L-21021/49/2020-PH(IH) Date: 05th June, 2024

This is regarding health advisory for monsoon preparedness for prevention and control of vector borne diseases at Point of Entry (PoE). As you are aware, India as a signatory to the International Health Regulations 2005 (IHR 2005), is required to establish and implement effective action plans for vector surveillance at all POEs. Annex 5 mandates that competent authorities maintain sanitary conditions at POE facilities, ensuring they remain free from infection and contamination sources, including vectors and reservoirs. This necessitates regular inspections by health units at airports, seaports, and land ports to identify and eliminate potential mosquito and larval habitats.

2. The monsoon and post-monsoon periods are particularly prone to seasonal outbreaks of vector-borne diseases. To address this, the Public Health (International Health) Division formulates policies and guidelines, providing technical assistance to POEs for the prevention and control of these diseases.

3. In this regard, the Public Health (International Health) Division has developed a Health Advisory for Monsoon Preparedness for the Prevention and Control of Vector-Borne Diseases at PoEs (Annexure I). As part of a basic preparedness strategy, these guidelines are to be implemented at all POEs during the pre-monsoon, monsoon, and post-monsoon periods to prevent vector-borne disease outbreaks. Periodic updates to these guidelines may be necessary to adapt to changing situations and establish relevant public health measures.

With Regards

(Yours sincerely), (Dr. S Senthilnathan)05-06

- All APHOs/PHOs/LPHOs
- All relevant stakeholders at POE and local health authority (through APHO/PHO/LPHO)

Copy for information to:

• PSO to DGHS, Dte. GHS





F. No. L-21021/49/2020-PH (IH) Government of India Ministry of Health & Family Welfare Directorate General of Health Services Public Health (International Health) Section

Date: 05.06.2024

<u>HEALTH ADVISORY FOR MONSOON PREPAREDNESS FOR PREVENTION AND</u> <u>CONTROL OF VECTOR BORNE DISEASES AT POINTS OF ENTRY (POE)</u>

Background

Points of Entry (PoE) plays a crucial role in the rapid transmission of vector-borne diseases like Malaria, Dengue, Chikungunya, Zika, and Yellow Fever. To fulfil India's commitment to the International Health Regulations (IHR), 2005 and ensure the well-being of PoE users and staff, it is essential to implement rigorous surveillance and vector control measures. Regular inspections by health units at airports, seaports, and land ports are necessary to identify and eliminate potential mosquito and larval habitats.

Scope

These guidelines are applicable to all Points of Entry (PoE) in India to support the implementation of an effective vector management program, aimed at preventing vector-borne disease outbreaks during the monsoon season. Periodic updates to these guidelines may be necessary to adapt to changing situations and establish relevant public health measures.

PREVENTIVE MEASURES TO BE UNDERTAKEN IN AND AROUND THE POEs (APHOs/PHOs/LPHOs)

Surveillance and vector control programs will vary significantly and must be tailored to the local context of each PoE. As part of the basic preparedness strategy, the following mosquito control measures are to be implemented at all PoEs during the pre-monsoon, monsoon and post monsoon periods.

1. Surveillance at PoE

- a. Conduct a situational analysis of the PoE and its surroundings to assess mosquito-breeding risks, identify issues, for targeted control measures.
- b. Conduct extensive vector surveys to map potential mosquito larval habitats before the onset of the monsoon in the respective regions.

- c. Identify suspected or confirmed cases of Dengue, Chikungunya, Malaria, Zika, and other vector-borne diseases (VBDs) among passengers, PoE staff, and stakeholders for notification in the IHIP portal, facilitating coordinated control measures.
- d. Illness at PoE serves as a proxy indicator for heightened surveillance and public health measures. Monitor the health status and absenteeism due to sickness of all individuals with fever at PoEs to determine if the infection was acquired from vectors at the port or elsewhere.
- e. Monitor the epidemiological situation and disease status around the PoE premises through IHIP portal and local health authorities.

2. Risk Assessment and Preparedness

- a. Stratify the Vector Survey Zones into high, medium, and low-risk categories to focus targeted activities on converting high-risk zones into vector-free areas.
- b. Zones with urban, commercial, and industrial developments, as well as public spaces like schools, parks, and urban wastelands, which serve as breeding grounds for mosquitoes, including facilities such as schools, retirement homes, religious place and railway yards, should be included in vector surveillance.
- c. Micro-map temporary and permanent mosquito breeding habitats for targeted control activities.

3. Vector Control

- a. Implement an Integrated Vector Management (IVM) strategy at POE.
- b. Inspect overhead/underground water tanks, refrigerators, water coolers, water fountains, flowerpots, AC plants, animal water points, open drains, and similar water collection points for potential mosquito larval habitats.
- c. Check rooftops, terraces, and sunshades for clogged drains due to tree debris and other blockages.
- d. Store scrap items such as metal scraps, safety helmets, sanitary flush tanks, troughs, fiberglass containers, buckets, barrels, and drums upside down until its appropriate disposal.
- e. Cover overhead tanks overflow pipes, air vents, and sanitary pipes with muslin cloth.
- f. Ensure water storage tank inlets are covered with a lid and lock, and water tanker pipeline supply inlets have airtight seals with covers and locks.
- g. Prevent waterlogging inside pump rooms.
- h. Ensure storm water drains (SWDs) and network/road intersections are free flowing and take special measures to clean them, avoiding dead ends.
- i. Trucks/Vehicle repair units in PoE areas, container yards to manage the tyre (Ref. Section 5.d), paint cans, scrap wastes and all water-collecting containers.

j. APHOs:

- i. Airline Hangars, repair workshops are to store tyres, damaged parts, metal scraps in storage under shed (Ref. Section 5.d)
- ii. Ensure and monitor Conveyance disinsection closely to prevent introduction/export of invasive vectors from/to other countries.

k. PHOs:

- i. Ensure tyres used as fenders tied along jetties and vessels to prevent vessel damage have holes drilled at 3, 6, 9 and 12 o'clock positions to prevent water collection and mosquito breeding (Ref. Section 5.d).
- ii. Vector control guidelines must be adhered to in ship dry docks and shipbuilding yards.
- iii. Monsoon Preparedness advisory to be shared with all ships and vessels, advising them to keep their conveyances free from mosquito breeding potential on board during their port stay.

l. LPHOs:

- i. Arrival, Departure, Cargo terminals by road, rail or water to be followed up regularly for risk assessment and implementation of control activities.
- ii. Monitor the cross-border vector borne diseases epidemiology and take follow up action on both sides.

4. Guidelines for Construction Activities at PoE

Follow the Health Advisory for Construction Activities at Points of Entry for Prevention and Control of Vectors and Vector Borne Diseases issued on 12.09.2023 (Annexure I).

Key Points:

- i. Conduct a thorough assessment of the construction site to identify potential breeding grounds and entry points for vectors.
- ii. Identify nearby sources of standing water, such as puddles, ditches, and stagnant ponds, curing tanks which can serve as breeding sites for mosquitoes.
- iii. Remove or drain any standing water sources on the construction site, such as containers, tyres or equipment that can collect rainwater.
- iv. Cover all water storage containers, curing tanks, drums, and Sintex tanks.
- v. Provide a drain hole for easy clearing of stagnant water for e.g. temporary storage tanks were created for construction work.
- vi. Regularly inspect and clean drainage systems, gutters and catch basins to prevent clogging.

- vii. Scrub and clean all the tanks & water storage containers once weekly and dry it before refilling to prevent mosquito eggs collection & breeding.
- viii. Store all the water collection scraps, drums, cement bags, construction wastes materials etc. under the roof or properly covered to prevent rainwater collection.
 - ix. All the construction equipment's like cement concrete mixtures, which uses water to be kept, dry every day at the end of work/shift.

5. Waste Management

- a. Implement environmental sanitation measures, including waste removal, proper placement of garbage bins with covers, and regular clearance.
- b. Efficiently organize and safely dispose of scrap generated at PoE service and commercial areas regularly.
- c. Ensure daily disposal of garbage, particularly plastic cups and food packets, by Food Business Operators (FBOs).
- d. Tyres Advisory: -Tyres should be stacked vertically, covered above with a wooden/metal flat sheet and use tarpaulin sheets secured tightly around the topmost tyre stack to prevent water collection and breeding. Therefore, a tarpaulin sheet may not be used alone to cover the tyre stacks as they may be damaged and create holes, leading to water accumulation in all tyres and forming permanent breeding spots. Store tyres under covered sheds within workshop areas at all POEs. Dispose of tyres regularly following a safe recycling and waste management plan.
- e. Conduct periodic Joint Public Health & Safety Committee (JPH&SC) meetings with designated Nodal officers of relevant stakeholders for coordination and implementation of control activities (like disposal of all water collectible wastes).
- f. Establishing recycling units for scraps and bio-waste disposal plant.

6. Vector Control Measures

a. Chemical Control

- i. Implement larval control treatments in drains, gutters, etc., using fastacting larvicides as needed during favorable climatic conditions, based on surveillance data.
- ii. Adulticide treatments are advised only in case of high presence of adults (this should be defined based on surveillance data).
- iii. Use GoI-approved insecticides for chemical control when necessary and ensure availability of biological larvicides, chemical insecticides, spraying equipment, and personal protective equipment.

iv. Utilize larvicidal oils or mineral oils to control mosquito larvae and pupae by evenly applying them over water surfaces to disrupt the air/water interface and suffocate the larvae or pupae.

b. Environmental Management & Source Reduction

- i. For container-breeding mosquitoes continue source removal and intensified control activities until surveillance data confirm no breeding for 4 consecutive weeks in the zone.
- ii. Collaborate with civil engineering departments to make environmental modifications that eliminate water stagnation and mosquito breeding.

c. Biological Control

i. Implement biological control measures such as using *Gambusia affinis* and *Poecilia reticulata* in ponds and freshwater bodies according to local environmental conditions.

d. Prophylactic Measures

- i. Installing window and door screens, air curtains, covering air vents, exhaust fans, etc., to prevent the entry of adult vectors inside the terminals/buildings.
- ii. Use of Personal protective measures such as applying repellents to exposed skin or clothing, and wearing long-sleeve shirts and pants during field visits by all POE staffs.
- iii. All POEs operators to provide rest and refreshment areas ensuring they are mosquito-proof for drivers, truck cleaners, and personnel from other service vehicles.

e. Health Education and IEC

- i. Conduct training sessions for POE stakeholders on ongoing routine vector surveillance and control activities at POE.
- ii. Conduct IEC activities to raise awareness among all stakeholders and service providers at PoE sites about the importance of mosquito control and preventive measures.

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स्वास्थ्य सेवा महानिदेशालय स्वास्थ्य एवं परिवार कल्याण मंत्रालय

GOVERNMENT OF INDIA DIRECTORATE GENERAL OF HEALTH SERVICES MINISTRY OF HEALTH & FAMILY WELFARE

Dated: 12 The September 2023

D.O No. L-21021/43/2023-CIHD

Subject: Health Advisory for Construction Activities at Point of Entry for Prevention and control of Vectors and Vector Borne Diseases: reg

As you are aware that India is a signatory to the International Health Regulations 2005 (IHR 2005), and as stated in Annex 5 must establish and execute effective action plans for vector surveillance at all Points of Entry (POEs) and mandates competent authorities to maintain sanitary conditions at POE facilities, ensuring they remain free of infection and contamination sources, including vectors and reservoirs. These measures are essential for public health protection.

2. Construction activities at POEs can pose a significant risk of vector-borne diseases. To mitigate this risk, it's crucial to implement preventive measures. This includes regular site inspections to identify breeding grounds for vectors and taking appropriate measures to eliminate them. By taking proactive steps to tackle these issues, we can ensure the protection of the health and welfare of both laborers and the POE users.

3. In this regard, the Central International Health Division has formulated guidelines for Construction Activities at Point of Entry from a health perspective (Annexure I). These guidelines are to be implemented at all POEs for an effective vector management program aimed at preventing vector-borne disease outbreaks. Depending on the changing situation, these guidelines may require periodic updates to establish appropriate public health measures.

With Regards,

Dr. S. Senthi

To,

- All APHO/PHO/LPHO (list attached)
- All relevant stakeholders at POE and local health authority through APHO/PHO/LPHO

Copy for information to:

- PSO to DGHS, Dte.GHS, Nirman Bhawan, Delhi
- TO(VC), CIHD for follow-up





List of POEs

1. APHO Ahmedabad 2. APHO Amritsar 3. APHO Bagdogra 4. APHO Bangalore 5. APHO Bhubaneswar 6. APHO Calicut 7. APHO Chandigarh 8. APHO Chennai 9. APHO Cochin **10.APHO Coimbatore** 11.APHO Delhi 12.APHO Gaya 13.APHO Goa 14.APHO Guwahati 15.APHO Hyderabad **16.APHO Imphal** 17.APHO Indore **18.APHO Jaipur 19.APHO Kannur** 20. APHO Kolkata **21.APHO Kushinagar** 22. APHO Lucknow 23.APHO Madurai 24.APHO Mangalore 25.APHO Mumbai **26.APHO** Nagpur 27. APHO Patna **28.APHO Port Blair** 29. APHO Pune **30.APHO Srinagar 31.APHO Trichy 32.APHO** Trivandrum 33.APHO Varanasi 34. APHO Vijayawada 35.APHO Visakhapatnam **36.LPHO** Agartala **37.LPHO** Attari Amritsar

38.LPHO Dawki **39.LPHO Jaigaon** 40.LPHO Jogbani 41.LPHO Moreh 42.LPHO Petrapole 43.PHO Chennai 44.PHO Cochin **45.PHO JNPT Sheva** 46.PHO Kandla 47.PHO Kolkata **48.PHO Mangalore** 49.PHO Mormugao 50.PHO Mumbai **51.PHO Paradip** 52.PHO Port Blair **53.PHO Tuticorin** 54.PHO Visakhapatnam

Government of India Ministry of Health and Family Welfare Directorate General of Health Services Central International Health Division

Date: 12.09.2023

HEALTH ADVISORY FOR CONSTRUCTION ACTIVITIES AT POINTS OF ENTRY FOR PREVENTION AND CONTROL OF VECTORS AND VECTOR BORNE DISEASES

Background

Surveillance and control of vectors at construction sites are indispensable to safeguard the well-being of both workers and neighboring communities, thereby fostering a work environment conducive to heightened productivity and efficiency.

Furthermore, India's commitment as a signatory to the International Health Regulations 2005 (IHR 2005) underscores the imperative need to establish and implement robust action plans for vector surveillance at all Points of Entry (POEs). This mandate charges competent authorities with the responsibility of maintaining sanitary conditions at POE facilities, ensuring they remain devoid of infection and contamination sources, including vectors and reservoirs. These stringent measures are fundamentally essential for the protection of public health.

Scope

These guidelines apply to all Points of Entry (POEs) in India to support the implementation of an effective vector management program aimed at preventing vector-borne disease outbreaks. Depending on the changing situation, these guidelines may require periodic updates to establish relevant public health measures.

A. GUIDELINES FOR VECTOR SURVEILLANCE AND CONTROL AT CONSTRUCTION SITES

i. POE Operator:

- a. Notification of planned or in-progress construction operations at the Point of Entry (POE) should be conveyed to the APHO/PHO/LPHO, ideally prior to the initiation of said activities.
- b. Information pertaining to the contractor or designated point of contact for the construction site, including their name, mobile number, organization, and job title, should be provided to the APHO/PHO/LPHO.

ii. Construction Contractor/Agency:

- a. Information regarding the nature of the work, project timeline, and the estimated number of personnel involved in the undertaking should be informed to the APHO/PHO/LPHO.
- b. Comprehensive data on all workers, to be shared with APHO/PHO/LPHO as required for the execution of public health responses during vector-borne disease outbreaks or in response to case reports.

iii. Site Assessment:

- a. Conduct a thorough assessment of the construction site to identify potential breeding grounds and entry points for vectors.
- b. Identify nearby sources of standing water, such as puddles, ditches, and stagnant ponds, curing tanks which can serve as breeding sites for mosquitoes.

iv. Develop a Vector Control Plan:

- a. Create a comprehensive vector control plan that outlines specific measures to be taken based on the site assessment findings.
- b. Assign responsibilities to individuals or teams for implementing and monitoring vector control measures.

v. Eliminate Breeding Sites:

- a. Remove or drain any standing water sources on the construction site, such as containers, tires or equipment that can collect rainwater.
- b. All the water storage containers, curing tanks, drums, sintex tanks to be covered.
- c. Provide a drain hole for easy clearing of stagnant water for eg. Temporary storage tanks were created for construction work.
- d. Regularly inspect and clean drainage systems, gutters and catch basins to prevent clogging.
- e. Scrub clean all the tanks & water storage containers once weekly and dry it before refilling to prevent mosquito eggs collection & breeding.
- f. Store all the water collection scraps, drums, cement bags, construction wastes materials etc. under the roof or properly covered to prevent rainwater collection.
- g. All the construction equipment's like cement concrete mixtures, which uses water to be kept, dry every day at the end of work/ shift.
- h. All tyres, tarpaulin sheets to be stored under the roof & they must be kept free of any water collection.

vi. Use Larvicides:

- a. If standing water cannot be eliminated, consider using larvicides to treat water bodies where mosquitoes breed.
- b. Use larvicides approved for vector control by NCVBDC and concurrence from the APHO/PHO/LPHO.

vii. Mosquito Netting, Screens and Personal protection

- a. Install mosquito netting or screens on windows and doors of temporary structures, especially worker accommodations, to prevent mosquitoes from entering.
- b. Provide workers with personal protective equipment (PPE) such as mosquito repellent, long-sleeved clothing and mosquito nets for sleeping.
- c. Worker's accommodation to be provided outside the Point of Entry premises

viii. Waste Management:

- a. Properly manage and dispose of construction waste, as it can attract rodents and other pests.
- b. Use covered containers to store and transport waste materials.
- c. Dispose of all solid waste, cement bags immediately.

ix. Pest Control:

- a. Implement integrated pest management (IPM) practices to control rodents and other pests that may carry diseases.
- b. Professional pest control services (if necessary) to be hired by the contractor/ agency.

x. Education and Training:

- a. Train construction site workers and contractors on the importance of vector control and the proper use of preventive measures.
- b. APHO/PHO/LPHO to conduct an awareness session periodically.

xi. Monitoring and Surveillance:

- a. Conduct regular inspections of the construction site to assess the effectiveness of vector control measures.
- b. Set up traps and monitoring devices to track vector populations and identify potential problem areas.

xii. Disease surveillance and reporting

- a. Urgent medical attention to be provided for any fever cases for workers or their family members.
- b. All suspected/confirmed cases of vector borne diseases (malaria, dengue, chikungunya, zika, scrub typhus, JE etc.), has to be communicated to APHO/PHO/LPHO at the earliest by the concerned agency/contractor/treating physician etc.

xiii. Record Keeping:

- a. The operator/contractor/agency may be advised to maintain detailed records of vector control activities, inspections, and any pest-related incidents.
- b. Details of workers including their visit (during the last 15 days) to be documented before engaging them at the initial stage or after short leaves.

xiv. Reporting and Response:

- a. Establish a reporting system for vector-related issues and encourage workers to report any problems promptly.
- b. Respond quickly to vector-related concerns and take corrective actions as needed.
- c. Weekly report must be submitted to APHO/PHO/LPHO by the agency/contractor on the health status of all the workers engaged in the construction sites at POEs.

xv. Regular Review:

- a. Periodically review and update the vector control plan to adapt to changing conditions and emerging vector-related risks.
- b. Joint visit by APHO/PHO/LPHO, POE Operator, Construction site in-charge to be conducted weekly or as needed earlier also if warranted, but at a minimum of fortnightly basis and a detailed report to be submitted to Central International Health Division, Directorate General of Health Services, Ministry of Health and Family Welfare.

By implementing these guidelines, construction sites can effectively reduce the risks associated with vectors and protect both workers and the surrounding community from vector-borne diseases.

B. WEEKLY MEASURES TO BE UNDERTAKEN IN & AROUND THE CONSTRUCTION SITES.

i. Check for mosquito breeding in the following places:

- a. Unused containers and building wastes in the worksite and site offices.
- b. Building materials, canvas sheets, equipment, and machinery.
- c. Puddles on the ground.
- d. Puddles on the concrete floors of all upper levels and basements
- e. Water storage drums, tanks and containers
- f. Bulk waste containers
- g. Trenches
- h. Lift wells
- i. Safety barriers
- j. Rooftops and water tanks
- k. Treatment plants- (Water, AC, Sewage).
- 1. Sanitary exhaust pipes, Overhead tanks overflow pipes/air vents to be covered with mesh.
- m. Fire safety ponds, wells, tanks.
- n. Any other containers

ii. Application of insecticide or anti-mosquito oil

- a. Apply insecticides or anti-mosquito oil every week to all stagnant water and water-bearing containers at ground level and on upper floors.
- b. Repeat application after rain as the insecticide or oil would have been washed away.
- c. Gambusia fish introduction to any permanent water collection bodies.

iii. Destruction of mosquito breeding

- a. Destroy all mosquito breeding found during the inspection and remove or treat all potential breeding habitats with insecticide.
- b. Report all breeding detected, and potential breeding habitats observed, to the construction site supervisor so that appropriate interim or permanent measures can be taken.

iv. Fogging

- a. It is not mandatory to conduct fogging at construction sites.
- b. Fogging treatment should only be done when there is a mosquito nuisance problem or disease outbreak under direction of APHO/PHO/LPHO.

v. Any incidence/suspected case of VBDs to be reported to APHO/PHO/LPHO.

vi. Any other activity as decided by APHO/PHO/LPHO.

Dr. S. Senthilnathan

CMO (SAG)-International Health

Room No. 543, A Wing, Nirman Bhawan, New Delhi - 110011 Tel – 91 (11) 23063850



भारत सरकार

स्वास्थ्य सेवा महानिदेशालय स्वास्थ्य एवं परिवार कल्याण मंत्रालय **GOVERNMENT OF INDIA** DIRECTORATE GENERAL OF HEALTH SERVICES **MINISTRY OF HEALTH & FAMILY WELFARE**

Dated: 24 th March 2023

D.O. No. L-21021/19/2023-CIHD

Subject: Constitution of Joint Public Health & Sanitation Committee for Vector Control at all POE- reg.

Dear Colleagues,

As you are aware that, India is a signatory to the International Health Regulations (IHR) 2005, it is a legal requirement to implement public health measures at all international Points of Entry (POE), including airports, ports, and land border crossings as per Art. 22, Annex 1 B (1) & (2). And in accordance with the IHR (2005), all POEs must establish and effectively execute action plans for vector surveillance to manage vectors that act as carriers of infectious agents that pose a public health risk to a minimum distance of 400 meters from POE facilities to prevent, protect against, control, and respond to the international spread of vector-borne diseases, and also on safe environment for travellers, general sanitation, eating establishments, potable water supply, public wash rooms facilities, solid & liquid wastes disposal services and other potential risk areas.

Regular inspections are conducted at Points of Entry Health Units to detect mosquitoes or other disease 2. vectors and supervise the public health control activities. However, due to the vast and complex nature of POE areas, with multiple stakeholders involved, it has become apparent that for an effective vector surveillance and control program at POEs and public health activities as per regulations, it has to be ensured that all relevant stakeholders work together to prevent the introduction and spread of vectors and vector-borne diseases.

To address the complexity of POEs and establish effective vector surveillance and control program, public 3. health activities, it is proposed that a multi-sectoral "Joint Public Health and Sanitation Committee" (JPHSC) has to be constituted at all Points of Entry with representatives from all the relevant stakeholders in the POEs, to monitor and support the vector surveillance and public health control activities at the POEs. The TOR for the committee is attached in Annexure I.

In view of the above, all APHOs/PHOs/LPHOs are requested to constitute the Joint Public Health and Sanitation Committee at your POEs promptly, including members from all the relevant stakeholders, and share the report on the constitution of the JPHSC details for your POE to the Central International Health Division by 15th April 2023.

With Warm Regards,

Dr. S Senthilr

Encl. as above

To,

- All APHOs/PHOs/LPHOs (List attached)
- All relevant stakeholders at POE and local health authority (through concerned APHOs/PHOs/LPHOs)

Copy for information to:

- PSO to DGHS, Dte.GHS, Nirman Bhawan, Delhi
- PPS to Addl. DGHS, Dte.GHS, Nirman Bhawan, Delhi







TOR for the Joint Public Health and Sanitation Committee

- To monitor the vector control activities inside and outside (400m) of the POE
- To assess the safe environment for travellers, general sanitation, eating establishments, potable water supply, public wash room's facilities, solid & liquid wastes disposal services and other potential risk areas.
- To support and coordinate the removal/ clearing of potential vector breeding habitats/ areas in the POE
- To assist the vector survey teams to conduct surveillance in the target areas.
- Monitor and evaluate the implementation of public health programs and services.
- Advise and make recommendations to relevant stakeholders for effective implementation of the vector control programs at POE.
- Develop and implement emergency response plans for vector surveillance and control at individual POE.
- Assist in implementing training programs for staff at POEs and stakeholders.
- Monitor and evaluate the impact of vector surveillance and control programs.
- Any other as deemed appropriate by APHO/PHO/LPHO

Frequency of meetings/ inspections under the Joint Public Health and Sanitation Committee

 Quarterly meetings to evaluate the vector surveillance and control activities at the Point of entry

During Exceptional circumstance:

- As an when required based on the entomological/epidemiological situation and any Public Health action on emergency basis at the PoE
- As desired by the APHO/PHO/LPHO based on the risk assessment

Constitution of Committee:

- 1. The committee to be constituted under
 - APHO/PHO/LPHO Co Chair
 - APD/CAO/POE operator Co-chair
- 2. The committee may include the following Nodal officers from all the stakeholders as Members, such as:
 - POE operator
 - Private/ Government Organisations Nodal Officers inside the Airport/Port/Land port
 - Indian Cost Guard/Navy/BSF (Defence Organisation Nodal officer)
 - Customs, immigration, CISF, Border security and other agencies
 - Pest control agency
 - Local health authority
 - Municipalities/ Corporations
 - Railway
 - FSSAI
 - Construction agency
 - Airline operators
 - Engineering departments of POE
 - Civil departments of POE

- Fire and safety department
- Safety Officer
- Dock Safety Officer (Port)
- City Health Officer
- District Vector Control Unit
- District /State/ Zonal entomology team
- Regional/State/ District Entomologist/ Biologist

*APHO/PHO/LPHO may include any additional relevant stakeholders from their POEs

List of Airport Health Organizations, Port Health Organizations and Land Port Health Organizations

- 1. APHO Ahmedabad
- 2. APHO Amritsar
- 3. APHO Bagdogra
- 4. APHO Bangalore
- 5. APHO Bhubaneswar
- 6. APHO Calicut
- 7. APHO Chandigarh
- 8. APHO Chennai
- 9. APHO Cochin
- 10. APHO Coimbatore
- 11. APHO Delhi
- 12. APHO Gaya
- 13. APHO Goa
- 14. APHO Guwahati
- 15. APHO Hyderabad
- 16. APHO Jaipur
- 17. APHO Kannur
- 18. APHO Kolkata
- 19. APHO Kushinagar
- 20. APHO Lucknow
- 21. APHO Madurai
- 22. APHO Mangalore
- 23. APHO Mumbai
- 24. APHO Nagpur
- 25. APHO Patna
- 26. APHO Port Blair
- 27. APHO Pune
- 28. APHO Srinagar
- 29. APHO Surat
- 30. APHO Trichy
- 31. APHO Trivandrum
- 32. APHO Varanasi
- 33. APHO Vijayawada
- 34. APHO Visakhapatnam
- 35. LPHO Agarthala
- 36. LPHO Amritsar
- 37. LPHO Dawki
- 38. LPHO Moreh
- 39. LPHO Petrapole
- 40. LPHO Srimantpur
- 41. LPHO Sutarkandi
- 42. PHO Chennai
- 43. PHO Cochin
- 44. PHO JNPT Sheva

- 45. PHO Kandla
- 46. PHO Kolkata
- 47. PHO Mangalore
- 48. PHO Mormugoa
- 49. PHO Mumbai
- 50. PHO Paradeep
- 51. PHO Port Blair
- 52. PHO Tuticorin
- 53. PHO Visakhapatnam

4184958/2025/PH(IH)-DGHS

Dr. S. Senthilnathan

CMO (SAG)-International Health Room No. 550A-II, A Wing, Nirman Bhawan, New Delhi - 110011 Tel - 91 (11) 23062653 E-mail:- ddg.cihd-mohfw@gov.in



भारत सरकार स्वास्थ्य सेवा महानिदेशालय स्वास्थ्य एवं परिवार कल्याण मंत्रालय GOVERNMENT OF INDIA DIRECTORATE GENERAL OF HEALTH SERVICES MINISTRY OF HEALTH & FAMILY WELFARE

Dated.....

Dear Colleagues,

D.O No. L-21021/19/2023-CIHD Dated 20th November, 2024

This is in continuation to our D.O. Letter No. L-21021/19/2023-CIHD dated 24.03.2023 and 30.08.2023, regarding the formation of a multi-sectoral "Joint Public Health and Sanitation Committee" (JPHSC) at all Points of Entry (POEs). As previously communicated, the JPHSC, comprising representatives from all relevant stakeholders, plays an essential role in monitoring and supporting the implementation of public health response measures at POEs.

2. It has come to our attention that some POEs have yet to form the JPHSC or have not conducted the required meetings and joint sanitary rounds. Such lapses hinder the objectives of the JPHSC, which is to enhance surveillance and strengthen response capabilities at POEs, thereby ensuring conveyances, goods, traveller health and safety.

3. I would like to emphasize the importance of establishing the JPHSC at each POE, as it is critical for the effective implementation of public health measures. Given the complexity and extensive coverage of POE areas, their direct linkage with international points of entries, the active participation and cooperation of all stakeholders are crucial to ensuring the health and safety of conveyances, goods and travellers. Summary of the requirement for JPH&SC in addition to the TOR as communicated vide DO dated 24.03.2023 is attached at Annexure I for your reference.

4. In light of the above, you are kindly requested to expedite the formation of the JPHSC at your respective POE and ensure that quarterly meetings, micro-meetings, and joint sanitary rounds are conducted regularly. A report on these activities may be shared with the PH(IH) Section of this Directorate for follow-up and coordination.

5. To monitor compliance, a report from all POEs on the formation and activities of the JPHSC is to be submitted by 05% December 2024.

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To,

- APHOs/PHOs/LPHOs (List attached)
- All relevant stakeholders at POE and local health authority (through concerned APHOs/PHOs/LPHOs)

Copy for information to:

• PSO to DGHS, Dte.GHS, Nirman Bhawan, New Delhi.

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Revised TORs

Joint Public Health and Sanitation Committee

The Joint Public Health & Sanitation Committee (JPH&SC) is a crucial forum for maintaining efficient and effective coordination between various stakeholders in order to mitigate the public health risk that exists at airports, seaports, and land ports as per IHR 2005.

To have a productive committee, it is suggested that nodal officers from various departments, including Operator, Government organizations, PSUs, and PoE users, must be nominated in order to provide regular coordination with the APHOs, PHOs, and LPHOs. The committee members include one senior official and one field officer from the concerned organization.

The JPH&SC mandate is also to plan micro JPH&SC rounds (as & when required) and the summary of these reports discussed in the Quarterly meetings with concerned stakeholders.

Micro JPH&SC rounds and meetings:

Multiple micro JPH&SC rounds and meetings must be convened within the 3 months duration in between the quarterly meetings. This round should be taken up by the APHO/PHO/LPHO along with the concerned PoE operators and other relevant stakeholders, in order to do the routine surveillance and also follow up decisions taken in the quarterly meeting. The following activities must be carried out in the micro JPH&SC rounds and meetings:

- 1. PoEs to map the specific zones based on the public health risk such as
- PoE operator administrator area to look for sanitary measures
- PoE user administered area public health related measures
- PoE Operator services given to users viz. water supply, sewage disposal, garbage disposal, fire safety, Vector Control services etc.
- Vector surveillance control activities within the PoEs and its surrounding 400m perimeter.
- Mapping of zones, temporary and permanent breeding places, micro mapping of the premises to be done and documented.
- To follow Pre-monsoon preparedness, Construction work guidelines, flower pot advisory and Post monsoon preparedness.
- Weekly vector surveillance activity must be carried out in the PoEs and reports shared to all stakeholders along with pictures.
- Prepare PoE specific vector surveillance plan.

Page 2 of 3

- Assist vector survey teams in conducting surveillance in designated areas.
- Facilitate and coordinate efforts to eliminate or clear potential vector breeding habitats within the POE.
- The Vector Control (Pest) Team to have an Entomologist for technical supervision, coordination and have adequate manpower for covering the whole POEs areas and constantly reviewed based on the POEs expansions, field reports and requirements.
- 3. To create/ review the action plan for the co-ordination of activities.
- 4. The following activities to be carried out
- Water safety:
- Mapping of whole water supply, disinfection, testing of water sample, to ensure and maintain water quality during natural disasters.
- The SOP for collection, testing of water samples must be ensured. The document on water safety plan must be available with the PoEs.
- Liquid and Solid Waste management:
- Collection, transport, processing or disposal, managing and monitoring of waste materials to be followed up.
- The plan for the liquid and solid waste management must be available.
- To ensure clean and safe environment by ensuring regular waste collection system and colour coded disposal bin placed in the premises.
- Storm Water Drains, Sewage Treatment Plan, networking with municipal corporation.
- Conduct regular JPHSC sanitary rounds and reports on action taken to be followed up.
- Food Safety:
- Issue of FSSAI license to the food outlets.
- Regular inspection of food outlets.
- Investigation in case of suspicion of food related outbreak.
- 5. To assess the public health risk, follow up, compliance to be monitored and it should be presented in the quarterly meeting.
- 6. Support and assist in the implementation of training programs for POE staff and stakeholders.
- 7. Undertake any other tasks/activities as deemed appropriate by the APHO/PHO/LPHO and the committee.

Page 3 of 3

Quarterly Meetings of JPH&SC

The quarterly JPH&SC meeting to be attended by the senior officials to review the ongoing activities, non – compliance by various stakeholders, the progress of the action taken and challenges for the compliance and discuss the way forward.

 Presentation of the action taken in the last 3 months in the micro JPH&SC rounds, meetings, follow up will be given by the APHO/PHO/LPHO as Co-Chair.

Action taken reports and Minutes of the JPH&SC meetings (Quarterly & Micro meeting) to be shared with PH(IH) Section of Dte. GHS for follow-up.