



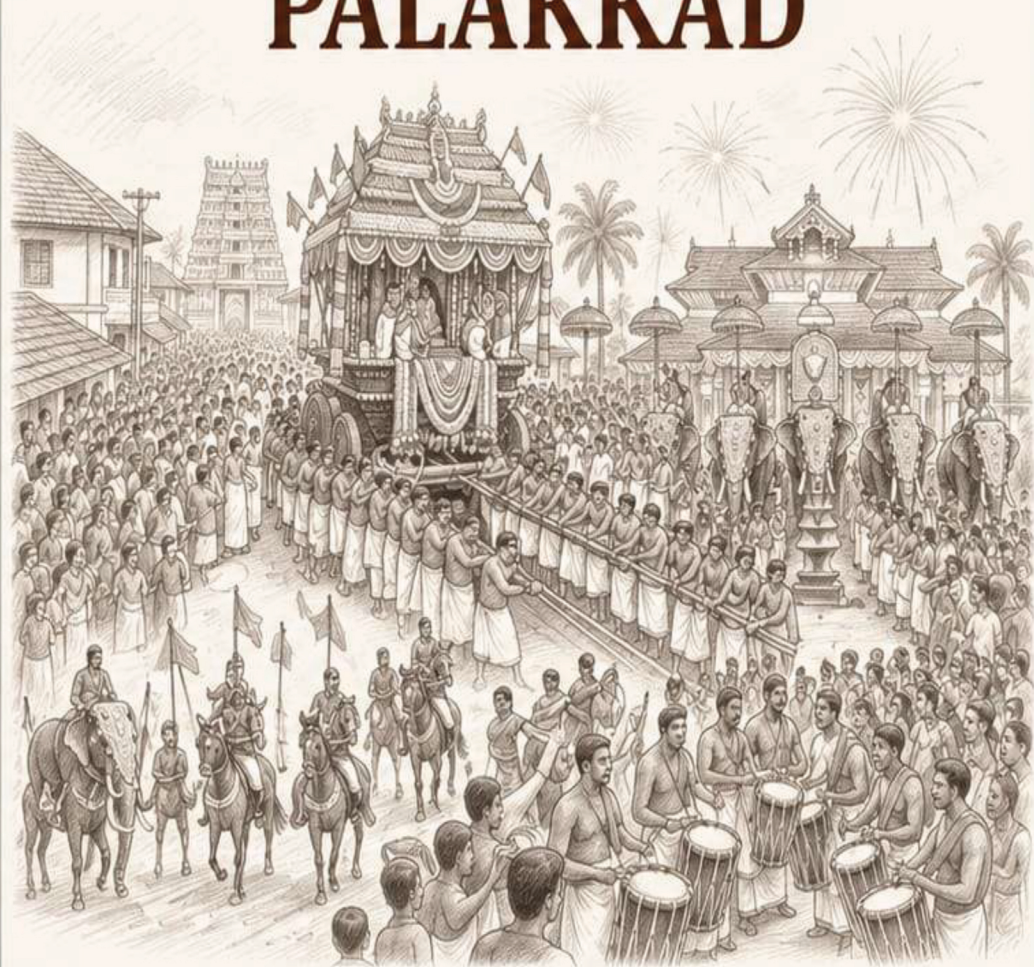
DEPARTMENT OF  
HEALTH AND FAMILY WELFARE  
GOVERNMENT OF KERALA

May 2026



FESTIVAL DISASTER  
PREPAREDNESS PLAN

# PALAKKAD



DEPARTMENT OF HEALTH AND FAMILY WELFARE

**KERALA.HEALTH**

## FOREWARD

Kerala has long stood as a model for responsive, resilient, and people-centred public health systems. Our collective experiences during public health emergencies, infectious disease outbreaks, natural disasters, and mass gathering events have repeatedly reaffirmed one fundamental truth, preparedness at the district level remains the cornerstone of an effective health security framework. It is in this context that the District Festival Preparedness Plan – Kerala assumes profound relevance and strategic importance.

Festivals in Kerala are not merely cultural celebrations; they represent large-scale social congregations involving dynamic population movement, heightened healthcare demands, increased risks of communicable disease transmission, trauma, crowd-related emergencies, environmental hazards, and public health vulnerabilities. A scientifically structured district-level preparedness mechanism therefore becomes indispensable to ensure timely prevention, coordinated response, efficient surveillance, emergency medical readiness, and continuity of essential healthcare services during such events.

This document has been conceived as a practical and operational extension of the State Pandemic Preparedness Framework and the Standard Treatment Guidelines developed by the Health & Family Welfare Department, Government of Kerala. By contextualising preparedness into district-specific operational strategies, the document seeks to strengthen decentralised health governance, interdepartmental coordination, emergency response systems, surveillance architecture, risk communication pathways, referral mechanisms, and rapid mobilisation protocols across all districts of the State.

The Thrissur district team prepared the scientific Thrissur Pooram management Plan. They were asked to prepare a generic framework for preparing Festivals Management Plans. The framework was shared with the district teams and they worked on preparation of Festival Management Plans.

The preparation of this comprehensive framework reflects the spirit of collaborative public health leadership and multidisciplinary teamwork that defines Kerala's healthcare system. I place on record my sincere appreciation to all District Medical Officers (DMOs) for their committed contributions and field-level insights in shaping this important initiative. These tasks would not have been possible without the constant support of the state resource officers team of Dr Mahesh, Dr Ajan, Dr Dileep, Dr Hari and many others. I appreciate their untiring efforts.

I wish to particularly acknowledge the valuable efforts of Dr. Ravindran C for the compilation and academic consolidation of this document. The dedication and intellectual contribution of the entire supportive editorial team, including the enthusiastic participation of medical students from Government Medical College Thrissur, deserve special commendation. Their collective efforts reflect the evolving culture of academic public health engagement and participatory healthcare planning in Kerala.

I sincerely appreciate the efforts of one and all and I am confident that the Kerala Health team is having capability and will to take up any challenges and excel in their endeavours.

I am confident that this document will serve not merely as a preparedness manual, but as a dynamic operational guide capable of strengthening district-level resilience, improving emergency responsiveness, and safeguarding public health during major festivals and mass gathering events across the State. With continued coordination, vigilance, scientific planning, and community participation, Kerala shall continue to advance its commitment towards a safer, healthier, and more prepared society.

**Dr. Rajan N Kobragade IAS**

**Additional Chief Secretary**

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## 1. PREAMBLE

Palakkad district is one of the largest and culturally vibrant regions in Kerala. Known for its deep-rooted traditions, the district is home to numerous festivals that reflect the social and religious fabric of its people. Festivals are an integral part of life in Palakkad, often described as being “in the blood” of its residents. Most of these celebrations are closely associated with religious practices and temple rituals, drawing large gatherings from across the district and beyond.

Among the most prominent festivals are Kalpathy Ratholsavam and Nenmara Vallangi Vela, both of which attract thousands of devotees and visitors. In addition to these large-scale events, many smaller village festivals are conducted throughout the year, contributing to continuous population movement and crowd congregation. While these festivals are culturally significant, they also present substantial challenges in terms of public health management.

Traditionally, festival planning has focused primarily on maintaining law and order, with limited emphasis on health preparedness. Public health measures have often been restricted to routine activities such as D&O (Dangerous and Offensive Trades) inspections, food safety checks, and the establishment of temporary health desks. However, given the scale and density of gatherings, there is a growing need to expand this approach.

From a public health perspective, festivals require comprehensive planning that includes risk assessment, disease surveillance, emergency medical preparedness, sanitation management, and crowd safety strategies. Large gatherings increase the risk of communicable disease transmission, foodborne illnesses, injuries, and other health emergencies. Therefore, the health system must be adequately equipped and proactive, rather than reactive, in addressing these challenges.

An effective festival plan should integrate multi-sectoral coordination involving health departments, local authorities, police, and community organizations. Anticipating potential health risks and ensuring readiness to respond is crucial. Moving beyond basic

inspections, public health planning must evolve to ensure safe and healthy festival environments while preserving the cultural essence of Palakkad's celebrations.

## **2. GOALS OF THE PLAN**

### **1. Ensure Health Safety of Attendees**

To protect the health of all participants by minimizing risks of communicable diseases, foodborne illnesses, injuries, and other health hazards during festivals such as Kalpathy Ratholsavam and Nenmara Vallangi Vela.

### **2. Strengthen Disease Surveillance Systems**

To establish active and real-time disease surveillance mechanisms for early detection, reporting, and control of potential outbreaks during mass gatherings.

### **3. Enhance Emergency Medical Preparedness**

To ensure availability of adequate medical facilities, ambulance services, first aid stations, and trained healthcare personnel to respond promptly to emergencies.

### **4. Improve Sanitation and Hygiene Standards**

To maintain proper waste management, safe drinking water supply, food safety regulations, and sanitation facilities to prevent environmental health risks.

### **5. Promote Intersectoral Coordination**

To facilitate effective collaboration between health departments, local self-governments, police, fire services, and community organizations for efficient festival management.

### **6. Increase Public Awareness and Community Participation**

To educate the public on health precautions, hygiene practices, and emergency response measures, encouraging active community involvement in maintaining a safe festival environment.

### **7. Preparedness for Disease Outbreaks and Pandemics**

To develop contingency plans for managing infectious disease outbreaks and pandemics, including isolation protocols, rapid response teams, vaccination strategies, and crowd control measures in line with public health guidelines.

## **3. KEY COMPONENTS OF THE PREPAREDNESS AND RESPONSE**

## FRAMEWORK

### 1. Pre-Event Preparedness

- ❖ Risk Assessment & Mapping: Identification of high-risk zones (water bodies, narrow Pathways, high-density congregation points), estimation of crowd size, and hazard vulnerability analysis
- ❖ Microplanning: Event-specific action plans detailing roles, resource allocation, emergency pathways, and referral linkages
- ❖ Capacity Building: Training of medical officers, paramedics, volunteers, and field staff in emergency care, triage, CPR, and disaster response  
Interdepartmental Coordination: Joint planning with Police, Fire & Rescue, Transport, Local Self-Government, Health, Irrigation, Tourism, and Disaster Management authorities  
Public Awareness: IEC campaigns on safety measures, hygiene practices, and emergency contacts.

### 2. Medical Preparedness

- ❖ First Aid & Medical Camps: Establishment of strategically located medical aid posts with trained staff and essential medicines
- ❖ Ambulance Deployment: Positioning of Basic and Advanced Life Support ambulances with clear evacuation routes to nearby hospitals
- ❖ Referral System: Identification and preparedness of referral hospitals (public and private), including emergency beds and specialist availability
- ❖ Water Safety Measures: Deployment of rescue teams, lifeguards, boats, and life-saving equipment during water-based events

### 3. Surveillance & Public Health Measures

- ❖ Event-Based Surveillance: Real-time monitoring for unusual health events using systems like IDSP/IHIP
- ❖ Food & Water Safety: Inspection of food vendors, ensuring a safe drinking water supply, and chlorination of water sources

- ❖ Sanitation & Waste Management: Provision of adequate toilets, handwashing facilities, and scientific waste disposal systems
- ❖ Vector Control: Pre-event and during-event measures to prevent mosquito breeding and vector-borne diseases

#### 4. Crowd Management & Safety

- ❖ Crowd Flow Planning: Entry and exit regulation, barricading, signage, and one-way movement systems, along with a separate plan for vehicle parking, which may otherwise hinder rescue measures in the event of calamities.
- ❖ Security & Surveillance: Deployment of police personnel, CCTV monitoring, and control rooms
- ❖ Emergency Response Protocols: Preparedness for stampede control, fire incidents, and evacuation procedures

#### 5. COMMUNICATION & COMMAND SYSTEM

- ❖ Control Room Establishment: Centralized command center for coordination, monitoring, and decision-making
- ❖ Communication Network: Use of wireless systems, mobile communication, and public announcement systems
- ❖ Clear Chain of Command: Defined leadership roles with nodal officers for each sector

#### 6. DURING EVENT RESPONSE

- ❖ On-site Triage & Stabilization: Rapid assessment and prioritization of patients at medical posts
- ❖ Rapid Response Teams (RRTs): Mobile teams for immediate intervention in emergencies
- ❖ Continuous Surveillance: Monitoring of health events, crowd density, and environmental conditions

#### 7. POST-EVENT ACTIVITIES

- ❖ Debriefing & Review: Assessment of response effectiveness and identification of gaps

- ❖ Reporting & Documentation: Compilation of data on medical cases, incidents, and response
- ❖ Follow-up Surveillance: Monitoring for any delayed outbreaks or health issues

#### 4. SUMMARY OF TEMPORAL EVENTS OF GATHERINGS (TIMELINE)

##### A. Major Festivals and Public Gathering Events in Palakkad District

Quarter	Peak Months	Key Large-Scale Events
Q1	Jan – March	Chinakkathoor Pooram, Mannarkkad Pooram, Chittur Konganpada, Manappullikkavu Vela
Q2	April – June	Nemmara Vallangi Vela, Kavassery Pooram
Q3	July – Sept	Ramayanamasam, Sreekrishna Jayanthi, Onam
Q4	Oct – Dec	Vijayadashami, Kalpathi Radholsavam, Mandalakala Ulsavam

##### B. Master List of Localised Festivals

Month	Major Events / Festivals	Location / Taluk
JANUARY	Koduvayur Radholsavam, Makaraponkal	Koduvayur, East Palakkad
FEBRUARY	Kodumbu Radholsavam, Koottanad Nercha, Ambakunnu Nercha, Sivarathri Festival, Kottappuram Bharanivela, Puthanalkkal Kalavela	Kodumbu, Koottanad, Kanjirapuzha, Karipuzha, All Siva Temples, Chepulassery

MARCH	Chinakkathoor Pooram, Chittur Konganpada, Vayillyamkunnu Pooram, Mannarkkad Pooram, Cheathallur Pooram, Thachmapara Pooram, Mundur Kummatty, Kavassery Pooram, Uthrathil Kavubharanivela,	Ottappalam, Chittur, Mannarkkad, Katambazhippuram, Karimbuzha, Thachanattukara, Thachampara, Mundur, Kavassery
APRIL	Nemmara Vallangi Vela, Cherpulassery Pooram, Vishu Vela, Kongad Thirumandhamkunnu Pooram	Nemmara, Cherpulassery, Various LSGIs, Kongad
MAY	Mulayankavu Veala, Pothozhikkavu Pooram, Mudappallur Vela, Kannambra Veala	Kulukkallur, Kumaramputhur, Mudappallur, Kannambra
JULY	Ramayana Masacharanam	Various LSGIs
AUGUST	Karkidaka Vavu Bali, Onam Celebration	Various LSGIs
SEPTEMBER	Sreekrishna Jayanthi Celebrations	Various LSGIs
OCTOBER	Pathiarakunnathu Mana Ayillyam, Rayiranallur, Malakayattam, Vijayadashami, Akhosham	Chalavala, Koppam, Various LSGIs
NOVEMBER	Kalpathi Radholsavam, Pariyanampatta Thrikarthika	Palakkad, Katambazhippuram
DECEMBER	Mandalakala Ulsavam	Various LSGIs

### C. SUMMARY OF MAJOR FESTIVALS IN PALAKKAD DISTRICT

<b>Festival Name</b>	<b>Panchayat</b>	<b>Tentative Month</b>	<b>Approx. Crowd</b>	<b>Major Ceremony</b>
Kalpathy Ratholsavam	Palakkad Municipality	Nov	200,000+	Devaratha Sangamam: Mass chariot pulling through narrow streets.
Nenmara Vallangi Vela	Nenmara / Vallangi	Apr	300,000+	Vedikettu & Pandal: Extreme pyrotechnics and massive light structures.
Chinakkathoor Pooram	Ottapalam / Lakkidi-Perur	Mar	300,000+	Kuthiravela: Massive man-made horse models carried by crowds.
Konganpada	Chittur-Thathamangalam	Feb/Mar	50,000+	War Re-enactment: Mock battles and street processions.
Manapullikavu Vela	Palakkad Municipality	Feb/Mar	100,000+	Chaandh Abhishekam: Night-long percussion and rituals.
Ottappalam Nercha	Ottapalam Municipality	Jan/Feb	40,000+	Jaram Nercha: Inter-communal procession with decorated floats

## 5. COMMAND SYSTEM AND SYSTEM COLLABORATION

### ❖ Incident Command System (ICS):

- District Collector – Overall Incident Commander
- District Medical Officer (DMO) – Health Incident Lead
- Police Superintendent – Law & Order
- Fire & Rescue – Emergency Response
- Local Self-Government – Logistics & sanitation

### ❖ Coordination Platforms:

- District Control Room (24x7 during events)
- Local specific coordination committees
- WhatsApp communication groups
- Daily briefing meetings during events

### ❖ List Of Key People And Contacts

- District Collector
- Police Superintendent
- District Medical Officer
- RTO / Transport Officer
- Fire & Rescue Officer
- Food safety officers
- Officers from PWD & KWA
- District Programme Manager NHM
- Event Coordinators (per festival)
- Panchayat/Municipality Chairs and Secretaries

## **6. DISTRICT COMPREHENSIVE FESTIVAL PLAN**

Palakkad district is home to a diverse array of major festivals, ranging from the massive pyrotechnics of the Nenmara Vallangi Vela to the chariot processions of the Kalpathy Ratholsavam. Because each event presents a unique "shape" of risk driven by varying topography, climate, and the specific nature of the ritual, a standardized, one-size-fits-all approach is insufficient. Consequently, this document presents individualized festival plans, recognizing that crowd management and public health priorities must be tailored to the specific dynamics of each venue.

These plans have been developed through rigorous Risk Stratification, focusing on high-priority hazards such as food and water contamination, heat-related illnesses, and the epidemiological risks posed by massive pilgrim influxes from diverse geographical zones. To ensure operational readiness, each festival's plan is divided into three critical phases: Pre-Event (preventative measures and capacity building), During Event (incident command and real-time response), and Post-Event (evaluation and site restoration

# KALPATHY RATHOLSAVAM



<b>Location:</b>	Kalpathy, Olavakkode, Palakkad
<b>Municipality:</b>	Palakkad
<b>Conducting authority:</b>	Grama Janakshema samiti
<b>Operational framework:</b>	One health Strategy (Human -Animal- Environment)
<b>Authority:</b>	District Medical Officer (Health)

## 1. Preamble

**Kalpathy Ratholsavam** is an annual festival in the village of Kalpathy, Palakkad, Kerala. The festival includes a locus of chariots from 4 different temples in Kalpathy, drawing hundreds of thousands of devotees, pilgrims, and visitors from across multiple districts of the state as well as neighboring states. The event is characterized by high population density, prolonged duration of stay, and extensive interpersonal interactions, all of which create an environment conducive to the rapid transmission of communicable diseases.

Mass gatherings of this magnitude inherently pose substantial public health challenges, particularly in the context of emerging and re-emerging infectious diseases such as COVID-19, influenza-like illness (ILI), acute respiratory infections (ARI), and other water-borne, food-borne, and vector-borne diseases. The convergence of diverse populations with varying health statuses and immunization backgrounds increases the risk of disease importation, amplification, and subsequent dissemination to wider communities following the event.

In addition to infectious disease risks, the gathering also presents challenges related to environmental sanitation, food safety, heat-related illnesses, crowd management, and emergency medical response. Therefore, a comprehensive, multi-sectoral preparedness and response plan is essential to mitigate risks and ensure the safety and well-being of all participants.

This Pandemic Preparedness Plan has been developed with the following core objectives:

To ensure public health safety and prevent outbreaks through proactive risk assessment, surveillance, and implementation of preventive measures.

To establish robust systems for early detection, isolation, and timely management of suspected cases, thereby minimizing morbidity and preventing large-scale transmission.

To strengthen interdepartmental coordination and unified command mechanisms involving Health Services, Police, Fire & Rescue, Local Self Government Institutions, and other stakeholders for efficient response.

To ensure continuity and surge capacity of essential medical services, including on-site medical care, ambulance services, and hospital preparedness for referral and critical care management.

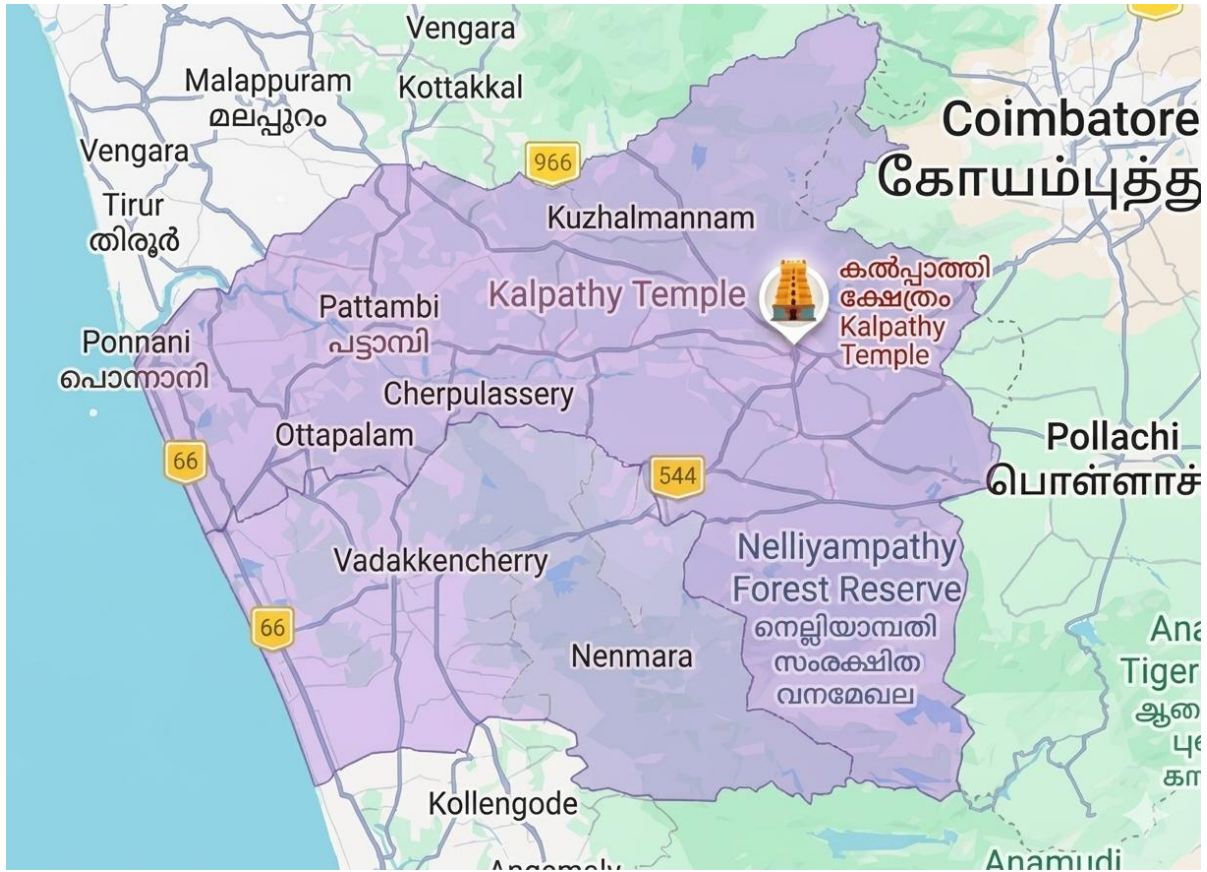
The plan adopts the Incident Command System (ICS) as the operational framework to enable structured leadership, defined roles and responsibilities, and efficient resource management during the event. This ensures a clear chain of command and facilitates rapid decision-making during emergencies.

Further, the plan integrates the Integrated Disease Surveillance Programme (IDSP) for real-time disease surveillance, data collection, analysis, and early warning signals. This integration enables timely identification of unusual health events or clusters and supports prompt public health interventions.

The preparedness strategy emphasizes a multi-layered approach, including:

- Pre-event planning and risk communication
- On-site surveillance and medical preparedness
- Emergency response and referral systems
- Post-event monitoring and follow-up

Overall, this document serves as a comprehensive operational guide for all stakeholders involved in the planning and execution of health and safety measures during the Malik Deenar Uroos, ensuring that the event is conducted in a safe, organized, and resilient manner with minimal public health risk.



## **2. Risk mitigation of gathering**

The Kalpathy Ratholsavam involves large-scale congregation of devotees under conditions that can significantly increase the risk of disease transmission and public health incidents. A systematic identification of risks is essential for targeted mitigation and preparedness planning.

### **1. Overcrowding in Confined Religious Spaces**

During the final three days of the festival, three massive chariots make their way through the narrow streets of Kalpathi, pulled by devotees amidst much fanfare, where space is limited relative to the number of attendees. During peak hours, particularly on main ceremonial occasions, there is:

- High crowd density with minimal physical distancing
- Restricted ventilation in enclosed or semi-enclosed structures
- Limited movement space, increasing contact rates

Such conditions significantly elevate the risk of airborne and droplet transmission of respiratory illnesses such as COVID-19, influenza-like illness (ILI), and other acute respiratory infections (ARI). Additionally, overcrowding increases the likelihood of non-infectious events such as stampedes, suffocation, and delayed access to medical care.

### **2. Close physical interaction during rituals**

Many religious practices associated with the Ratholsavam involve:

1. Physical proximity during prayers and gatherings
2. Shared use of religious spaces and objects
3. Hand-to-hand contact and congregation in queues

These interactions facilitate:

1. Direct person-to-person transmission of infectious agents
2. Indirect transmission through contaminated surfaces (fomites)
3. Increased exposure duration, especially during prolonged rituals

The cumulative effect is a higher probability of cluster formation and rapid spread of communicable diseases within the gathering.

### **3. Food and water contamination risks**

Large-scale preparation and distribution of food (including community meals or offerings) and provision of drinking water introduce multiple public health concerns:

- ❖ Risk of improper food handling and storage
- ❖ Use of contaminated water sources
- ❖ Inadequate cooking or reheating practices
- ❖ Poor personal hygiene among food handlers
- ❖ These factors can lead to outbreaks of:
  - ❖ Food-borne illnesses (e.g., gastroenteritis)
  - ❖ Water-borne diseases (e.g., diarrhea, Viral Hepatitis A cholera-like illness)

In addition, temporary food stalls and informal vendors may operate without strict regulatory oversight, further increasing the risk of contamination.

### **4. Pilgrim Influx from different epidemiological zones**

The Ratholsavam attracts attendees from diverse geographic regions, each with varying disease prevalence and public health profiles. This creates:

- Risk of importation of infectious diseases from high-prevalence areas
- Mixing of populations with different immunity levels
- Potential for introduction of emerging or re-emerging infections

Such population mixing can lead to:

- Amplification of disease transmission within the gathering
- Exportation of infections to home communities after the event

This risk is particularly critical in the context of diseases with incubation periods that allow asymptomatic transmission.

The combination of these risk factors—high crowd density, close interpersonal contact, environmental sanitation challenges, and population mixing—creates a complex public

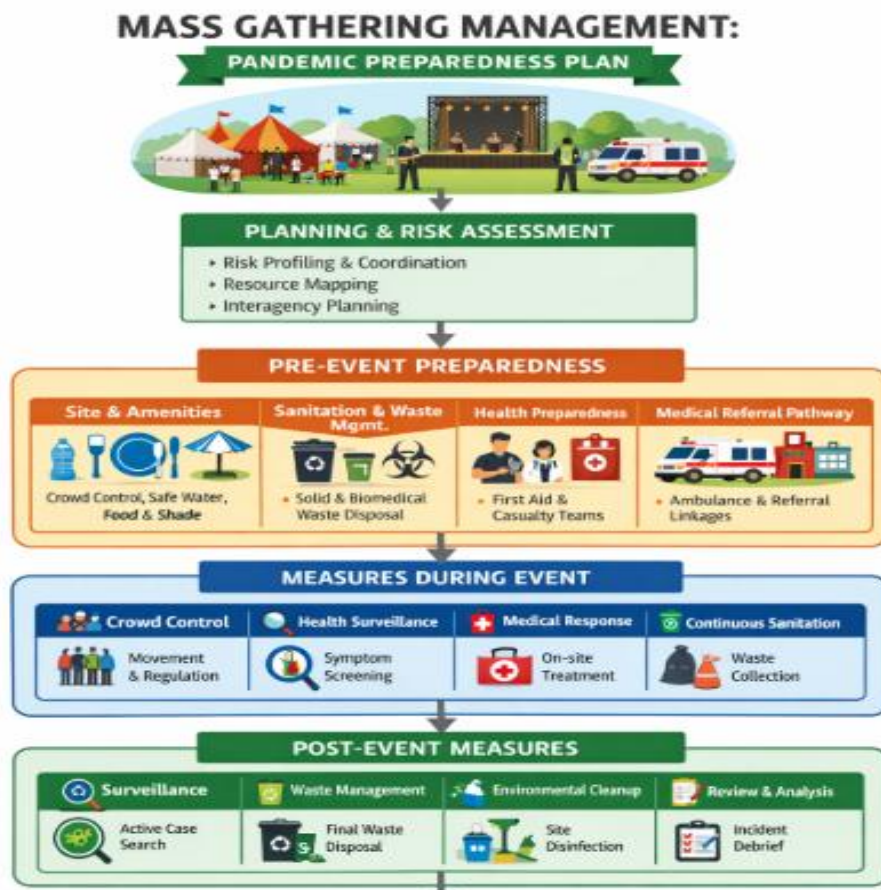
health risk environment. Therefore, targeted mitigation strategies, real-time surveillance, and rapid response mechanisms are essential to prevent and control potential outbreaks during the Kalpathy Ratholsavam.

### **Risk Stratification**

Risk Category	Description	Action
Low	Open spaces, low density	Routine monitoring
Moderate	Medium crowd areas	Active surveillance
High	Shrine interiors, peak events	Strict control measures

### **Mitigation Measures**

Mitigation measures for the Kalpathy Ratholsavam are structured across four key domains: Pre-Event Preparedness, During Event Controls, Environmental Management, and Surveillance Systems. These measures aim to reduce the risk of disease transmission, ensure early detection, and enable rapid response.



## A. Pre-Event Measures

Pre-event interventions are critical in reducing baseline risk before the congregation begins.

### 1. IEC (Information, Education, Communication) Campaigns

Dissemination of health advisories through:

- Temple and religious leaders (Throughout festival, announcements)
- Local television, radio, and newspapers
- Social media platforms (Instagram Pages, WhatsApp groups, district health pages)

Key messages include:

- Personal hygiene practices (handwashing, cough etiquette)
- Early reporting of symptoms
- Avoidance of attendance by sick individuals

## **2. Advisory to Vulnerable Groups**

Targeted communication to:

- Children below 2 years
- Elderly individuals (>60 years)
- Persons with comorbidities (diabetes, hypertension, respiratory illness)
- Pregnant women and immunocompromised individuals

Advisories may include

- Avoiding peak crowd days
- Using protective measures (mask, sanitizer)
- Seeking medical consultation before attending

## **3. Vendor Inspection and Licensing**

- Mandatory registration of all food vendors
- Pre-event inspection by Health Inspectors to ensure:
  - Safe food handling practices
  - Availability of clean water
  - Proper waste disposal
- Issuance of temporary licenses with compliance conditions

## **4. Water Quality Testing**

- Testing of all drinking water sources for:
  - Microbial contamination (coliform count)
  - Chlorine levels
- Certification of potable water sources before event commencement
- Identification and closure of unsafe sources

## **B. During Event Measures**

These measures focus on real-time risk reduction during peak crowd presence.

### **1. Crowd Zoning and Barricading**

Division of the event area into multiple zones:

- Entry zones
- Worship zones
- Exit zones
- Use of barricades to:
  - Prevent overcrowding
  - Regulate flow of people
- Deployment of volunteers and police personnel for enforcement

## **2. One-Way Movement Pathways**

- ❖ Designation of separate entry and exit routes
- ❖ Clear signage indicating direction of movement
- ❖ Continuous monitoring to prevent reverse flow and congestion

## **3. Hand Hygiene Stations**

- Installation of handwashing/sanitizer stations at:
  - Entry points
  - Food distribution areas
  - Toilets
  - Placement at intervals of approximately 100 meters
  - Regular replenishment of soap, water, and sanitizer

## **4. Mask Use (as per prevailing guidelines)**

- ❖ Enforcement based on current government/public health advisories
- ❖ Distribution of masks at entry points (if required)
- ❖ Public announcements reinforcing compliance

## **5. Dedicated Isolation Areas**

Establishment of isolation rooms/tents near main medical posts

Equipped with:

- Beds
- PPE kits
- Basic medical supplies

Immediate segregation of symptomatic individuals (fever, cough, breathlessness)

Facilitation of safe transfer to healthcare facilities

### **C. Post event Measures**

Environmental sanitation plays a key role in preventing both infectious and non-infectious health risks.

#### **1. Chlorination of Water Supply**

- ❖ Maintenance of residual chlorine levels (0.5 mg/L recommended)
- ❖ Regular monitoring by health authorities
- ❖ Immediate corrective measures in case of deviation

#### **2. Waste Management Systems**

- Placement of adequate number of waste bins across the venue
- Segregation of waste (biodegradable/non-biodegradable)
- Scheduled waste collection and disposal
- Engagement of sanitation workers for continuous cleaning

#### **3. Sanitation and Toilet Management**

- ❖ Adequate number of temporary toilets based on crowd estimates
- ❖ Cleaning schedule every 2–3 hours

Availability of:

- Water supply
- Soap/handwash

Special attention to high-use areas to prevent contamination

#### **a) Surveillance Measures**

Surveillance is essential for early detection and containment of outbreaks.

### 1. Daily Reporting of ILI/SARI Cases

All medical aid posts to maintain line listing of:

- Influenza-like illness (ILI)
- Severe Acute Respiratory Infection (SARI)
- Daily submission of reports to district surveillance unit
- Trend analysis for early warning signals

### 2. Rapid Response Team (RRT) Deployment

Constitution of trained RRTs including:

- Medical officers
- Epidemiologists
- Health inspectors

Roles:

- ❖ Investigation of suspected clusters
- ❖ Field response and containment
- ❖ Coordination with laboratories and hospitals

### 3. Syndromic Surveillance Booths

Establishment of dedicated surveillance desks at key locations

Screening for:

- Fever
- Respiratory symptoms
- Gastrointestinal symptoms
- Immediate referral of suspected cases to medical posts

The above mitigation measures form a multi-layered defense system, combining prevention, monitoring, and rapid response. Effective implementation requires strict supervision, interdepartmental coordination, and continuous public cooperation to ensure that the Kalpathy Ratholsavam is conducted safely with minimal public health risk.

### 3. Summary of Temporal Events with Timeline

Phase	Timeline	Key Activities	Health Preparedness
Planning	T-30 to T-15	Meetings, approvals	Resource mapping
Preparation	T-14 to T-1	Training, setup	Mock drills
Early Event	Day 1–4	Pilgrim arrival	Screening
Peak Event	Day 8-10	Main rituals	Max deployment
Closure	Day 10	Dispersal	Emergency standby
Post-event	Day +1 to +14	Follow-up	Surveillance

T = Event Day (Day 0)

T-30 = 30 days before the event

T-15 = 15 days before the event

So, T-30 to T-15 means the planning phase occurs from 30 days before the event up to 15 days before the event.

## 4. Command System and Collaboration

### 4.1 Incident Command Structure

Role	In charge	Contact Number
Incident Commander	District Collector	0491 2505309
Medical Commander	District Medical Officer (DMO)	0491 2505189
Operations	Police Department	9497996977
Logistics	Local Self Government- Palakkad municipality	0491-2534158
Surveillance	IDSP Unit- DSO	0491 2505847

### 4.2 Functional Units

- Medical Response Unit
- Surveillance Unit
- Logistics & Supply Unit
- Communication Unit

### 4.3 Coordination Mechanisms

- Daily review meetings
- Real-time communication via WhatsApp/wireless
- 24x7 Control Room

## 5. List of Key People and Contacts

Designation	Name	Contact Number
District Collector	Madhavikutty.M.S	0491 2505309
District Medical Officer	Dr Rosh T Vijayan	8281660677
Municipality Chairperson	Smithesh P	9847894124
Health standing committee Chairperson	T.S. Meenakshi	9539861580
Police Department	Ajith Kumar	9497996977
Fire & Rescue Officer	K.K shiju	0491 2505701
Ambulance Coordinator	Nisar Alfa	0491 2534524
General Hospital Nodal Officers	Sujatha P	0491 2530411
JPHN	Greeshma	7909193055
ASHA Supervisor		9946105710
Anganwadi Worker		9995349339
Epidemiologist	Dr Anjitha P H	7736291508

## 6. List of Hospitals Directly Involved

A well-defined and tiered hospital network is essential for effective medical response during the Kalpathy Ratholsavam. The hospitals are categorized into Primary, Secondary, Tertiary, and Private Sector facilities, each with clearly defined roles in patient management, referral, and surge capacity handling.

### 6.1 First Referral Facility

#### **District hospital, Palakkad**

The District Hospital, Palakkad functions as the first referral and nodal treatment center for all moderate to severe cases arising from the event.

Roles and Responsibilities:

- Act as the central receiving facility for referred patients from on-site medical posts
- Establish a dedicated triage area for incoming patients from the Uroos
- Maintain isolation wards for suspected infectious diseases
- Ensure availability of:
  - Oxygen-supported beds
  - ICU facilities (minimum reserved capacity)
  - Emergency laboratory services
- Coordinate with district surveillance units for reporting and outbreak detection
- Serve as the command hospital for medical coordination

Preparedness Measures:

- Reservation of beds exclusively for event-related emergencies
- Deployment of additional medical staff during peak days
- 24x7 emergency services with rapid admission protocols

#### **Private Hospitals (Thangam Hospital) (Paalana Hospital) (Laksmi Hospital)**

Private Hospitals act as intermediate care centers.

Functions:

Provide first-level referral support from field sites

Handle:

- Minor trauma cases
- Mild to moderate infections
- Stabilize patients before referral to higher centers
- Maintain ambulance linkage with primary and tertiary facilities

Preparedness Actions:

- Strengthening outpatient and emergency departments
- Ensuring availability of essential drugs and IV fluids
- Maintaining communication with district control room

## **6.2 Second Referral Facilities**

### **MCH Thrissur**

MCH Thrissur serves as secondary referral center

Roles:

- Manage moderate cases and non-critical emergencies
- Provide stabilization of patients before further referral if required
- Maintain isolation and observation wards
- Support overflow from District Hospital

## **6.3 Third Care Backup**

### Roles

- Management of critical and complicated cases, including
- Severe respiratory infections
- Multi-organ complications
- Advanced trauma care

Availability of:

- Advanced ICU care
- Ventilator support
- Specialist services (pulmonology, infectious disease, critical care)

Operational Strategy:

- Activation only when:
- District hospital capacity is exceeded
- Specialized care is required
- Pre-established referral protocols and communication channels

#### **6.4 Private Sector Hospitals (Empaneled)**

Selected private hospitals in the district will be empaneled to augment surge capacity.

##### Roles

Provide additional bed capacity during peak load

Manage:

- Mild to moderate cases
- Non-infectious emergencies
- Participate in referral network coordination

Selection Criteria:

- Availability of emergency services
- Basic ICU or high-dependency units
- Willingness to comply with district protocols

Responsibilities:

- Adherence to infection prevention and control (IPC) guidelines
- Mandatory reporting of notifiable diseases
- Coordination with district health authorities

#### **6.5 Integrated Referral Mechanism**

All hospitals will be connected through a structured referral system:

On-site Medical Post → District Hospital (moderate cases/serious cases)

District Hospital → Medical College (critical/specialized care)

Key Features:

- Predefined referral pathways
- Dedicated ambulance linkage
- Real-time communication between facilities
- Bed availability monitoring system

## 6.6 Coordination and Communication

Each hospital will designate a Nodal Officer

Daily reporting to District Control Room

Use of:

- Telephone hotline
- WhatsApp coordination groups
- Emergency communication systems

## 7. Mandatory Ambulance and Medical Aid Posts on Site

### Human Resource Allocation

#### 1. Staffing Pattern – Main Medical Aid Post

Category	Number per Main Post	Roles & Responsibilities
Doctors	2	- Clinical assessment and triage- Emergency management and stabilization- Decision-making for referral
Nurses	4	- Patient monitoring- Drug administration- Wound care and IV-line management
Paramedics	4	- Basic life support (BLS)- Assisting in procedures- Patient transport within site

Category	Number per Main Post	Roles & Responsibilities
Volunteers	10	- Crowd guidance- Assisting patients- Supporting logistics and communication

## 2. Functional Role Distribution

- Triage Officer (1 Doctor/Nurse): Initial patient categorization
- Treatment Team: Handles clinical care and stabilization
- Observation Team: Monitors patients under short-term observation
- Referral Coordinator: Liaison with ambulance and hospitals

## 3. Shift Management

- 24x7 functioning during peak days
- Staffing divided into 3 shifts (8 hours each)
- Backup reserve team available for surge situations

## 4. Satellite Medical Posts

Located at high-density zones (entry/exit points, parking areas)

Staffing scaled proportionally:

- 1 Doctor
- 2 Nurses
- 2 Paramedics
- 4–5 Volunteers
- 5. Additional Support Teams
- Rapid Response Team (RRT): For outbreak investigation
- Sanitation Staff: For hygiene maintenance
- Data Entry/Record Staff: For surveillance reporting

## Facilities to be Arranged

Each medical aid post must be equipped to function as a mini-emergency care unit capable of handling a wide range of health conditions.

### 1. Examination and Treatment Area

- Minimum 2–4 examination beds per post
- Privacy screens for patient examination
- Adequate lighting and ventilation

### 2. Oxygen Supply System

- Oxygen cylinders/concentrators with backup
- Flow meters and masks (adult & pediatric)
- Continuous monitoring of oxygen stock

### 3. Emergency Drugs and Consumables

- Essential emergency drug kit including:
  - Antipyretics, analgesics
  - IV fluids and ORS
  - Anti-allergic medications
  - Life-saving drugs (adrenaline, atropine)
  - Dressing materials and sterile supplies

### 4. Isolation Facility

Separate isolation room/tent for suspected infectious cases

Equipped with:

- ❖ Bed and basic monitoring equipment
- ❖ PPE kits for staff
- ❖ Restricted access with clear signage

### 5. Personal Protective Equipment (PPE)

Adequate stock of:

- ❖ Masks (surgical/N95 as per need)
- ❖ Gloves
- ❖ Face shields
- ❖ Gowns
- ❖ Designated donning and doffing area

## 6. Basic Diagnostic Support

- ❖ Thermometers (digital/infrared)
- ❖ BP apparatus
- ❖ Pulse oximeter
- ❖ Glucometer

## **Support Accessories**

Support equipment ensures efficient patient handling, emergency response, and operational coordination.

### 1. Patient Transport Equipment

- Stretchers: For transporting critically ill or immobile patients
- Wheelchairs: For non-ambulatory but stable patients
- Clearly marked patient movement pathways

### 2. Emergency Life-Saving Equipment

Defibrillator (AED/Manual):

- Available at main medical post
- Staff trained in its use

Suction Apparatus:

- For airway management
- Portable units preferred

### 3. Communication Systems

- ❖ Mobile phones with dedicated numbers

- ❖ Walkie-talkies for real-time coordination

Direct connectivity with:

- ❖ Control room
- ❖ Ambulance services
- ❖ Hospitals

#### 4. Power and Backup

- ❖ Uninterrupted power supply
- ❖ Backup generators or inverters
- ❖ Emergency lighting for night operations

#### 5. Documentation and Reporting Tools

- ❖ Patient registers
- ❖ Referral forms
- ❖ Surveillance reporting formats

The combination of adequate human resources, well-equipped facilities, and essential support accessories ensures that each medical aid post can function as an effective frontline unit for:

- ❖ Immediate medical care
- ❖ Early detection of infectious diseases
- ❖ Stabilization and referral of critical patients

## **8. Ambulance Plan**

### a. Empaneled Ambulances

- Govt 108 services
- General hospital ambulances

### b. ALS & BLS Distribution

- ALS: 1 (critical care)
- BLS: 2-3

### c. Staffing Pattern

- ALS: Doctor + Nurse + Driver
- BLS: EMT + Driver

### d. Evacuation Routes

- Pre-identified and mapped
- Traffic clearance ensured
- Dry run conducted
- Alternate routes identified



## 10. Temporal Dynamic Plans

### a) Event-Based Planning

Event	Risk	Action
Flag Hoisting	Medium	Standard deployment
Peak Days	Very High	Full deployment
Closing	High	Evacuation readiness

### b) Contact Coordinators

Each event assigned:

- Medical Officer
- Police Officer
- Volunteer Lead

### c) Evacuation & Referral

- Ambulances at strategic points
- Clear route maps
- Hospital linkage predefined

### d) Alert Mechanism

- Tier 1: On-site care
- Tier 2: Ambulance
- Tier 3: Hospital
- Tier 4: District escalation

## **11. Capacity Building & Meetings**

### **a) Meetings**

- District Disaster Meeting
- Health Preparedness Review
- Coordination Meetings

### **b) Timeline**

T-30, T-15, T-7, T-1

### **a) Stakeholders**

- Health, Police, Fire
- Local bodies
- Religious committee
- NGOs

### **c) Training & Mock Drills**

- PPE usage
- Triage simulation
- Ambulance drills
- Outbreak simulation

## **12. SOP for Common Health Hazards**

### **a) Infectious Diseases**

- Isolation & masking
- Testing referral
- Contact tracing

### **b) Heat Illness**

- ORS distribution
- Cooling spaces

**c) Food Poisoning**

- Rapid investigation
- Food sample testing

**d) Trauma/Stampede**

- Triage and stabilization
- Immediate evacuation

**e) Vector-borne Diseases**

- Fogging
- Source reduction

**13. Consolidation Sheets****Support Services Contacts**

Sl. No	Service Type	Phone Number	Function
1	Ambulance Services	0491 2534524	Emergency transport
2	Police Control Room	0491 2522340	Crowd control & security
3	Fire & Rescue	0491 2505701	Fire & disaster response
4	Food Safety Department	0491 2505081	Inspection & enforcement

## Hospital Referral Network

Sl. No	Hospital Name	Location	Type (Govt/Private)	Contact Number
1	District Hospital, Palakkad	Palakkad	Govt	0491 2533327
2	Medical College,	Palakkad	Govt	0491 2974125
3	Thangam Hospital	Palakkad	Private	0491 2515718
4	Lakshmi Hospital	Palakkad	Private	8606048999
5	Paalana Hospital	Palakkad	Private	0491 2520901
6	Rajiv Gandhi Hospital	Palakkad	Private	0491 2509000
7	The Cooperative Hospital	Palakkad	Private	0491 2520391
8	Malabar Hospital	Palakkad	Private	0491 2528200
9	Palakkad Poly clinic	Palakkad	Private	0491 2524153
10	Avitis Hospital	Palakkad	Private	0491 2522879

## Referral Pathway Protocol

Step No	Action	Responsible Person	Time Target	Remarks
1	Identify emergency case	Medical Officer	Immediate	Triage system
2	Stabilize patient	Medical Team	<10 minutes	Basic life support
3	Assign ambulance	Control Room	<5 minutes	Nearest available
4	Inform referral hospital	Control Room	Simultaneous	Pre-arrival alert
5	Transport patient	Ambulance Team	As per distance	Continuous monitoring

# NENMARA VALLANGI VELA



<b>Location: Place:</b>	<b>Nenmara ,Palakkad</b>
<b>Local Body:</b>	Nenmara Gram Panchayat
<b>Conducting authority:</b>	Grama Janakshema samiti
<b>Operational framework:</b>	One health Strategy (Human -Animal- Environment)
<b>Authority:</b>	District Medical Officer(Health)

## Preamble

**Nenmara Vallangi Vela** is a prominent annual temple festival celebrated in Nenmara, under the jurisdiction of Nenmara Gram Panchayat in Palakkad. The festival is at the Nellikulangara Bhagavathy Temple and is marked by the participation of two rival desams, Nenmara and Vallangi, showcasing grand processions, caparisoned elephants, traditional percussion ensembles, and large-scale fireworks displays.

The event attracts hundreds of thousands of devotees, pilgrims, and visitors from across multiple districts of Kerala and neighboring states. The gathering is characterized by extremely high crowd density, prolonged duration of stay, intense interpersonal interactions, and congregation in confined spaces, particularly during major events such as Kettukazhcha, Kudamattam, and Vedikettu. These conditions create an environment conducive to the rapid transmission of communicable diseases.

Mass gatherings of this magnitude inherently pose significant public health challenges, especially in the context of emerging and re-emerging infectious diseases such as COVID-19, influenza-like illness (ILI), acute respiratory infections (ARI), and other water-borne, food-borne, and vector-borne diseases. The convergence of diverse populations with varying health conditions and immunization statuses increases the risk of disease introduction, amplification, and subsequent spread to the wider community after the event.

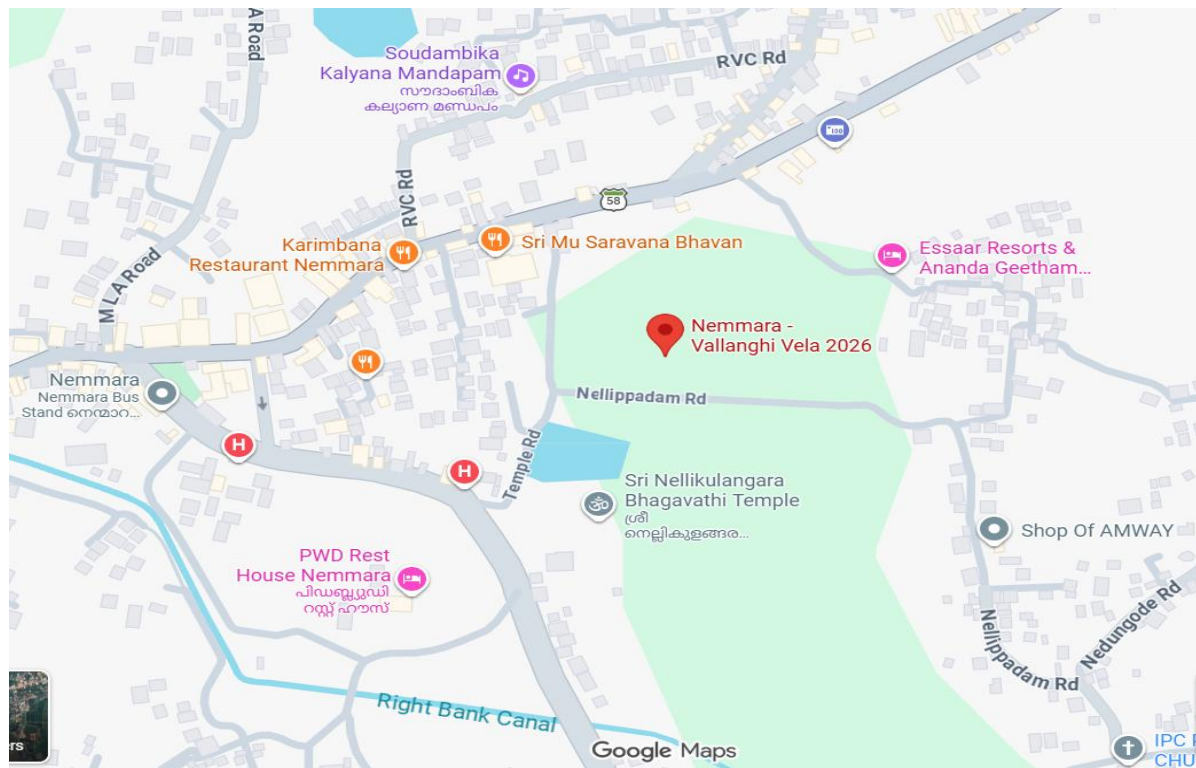
In addition to infectious disease risks, the festival presents multiple public health and safety challenges including crowd surge and stampede risk, fire hazards associated with fireworks, elephant-related safety concerns, environmental sanitation issues, food safety risks, heat-related illnesses, and the need for rapid emergency medical response.

Therefore, a comprehensive, multi-sectoral preparedness and response plan is essential to mitigate risks and ensure the safety, health, and well-being of all participants.

This Pandemic Preparedness Plan has been developed with the following core objectives:

- To ensure public health safety and prevent outbreaks through proactive risk assessment, surveillance, and implementation of preventive measures.
- To establish robust systems for early detection, isolation, and timely management of suspected cases, thereby minimizing morbidity and preventing large-scale transmission.
- To strengthen interdepartmental coordination and unified command mechanisms involving Health Services, Police, Fire & Rescue Services, Local Self Government Institutions, Devaswom/Temple Committee, and other stakeholders for an efficient and coordinated response.
- To ensure continuity and surge capacity of essential medical services, including on-site medical care, ambulance services, and hospital preparedness for referral and critical care management.

The plan adopts the **Incident Command System (ICS)** as the operational framework to ensure structured leadership, clearly defined roles and responsibilities, and efficient resource management during the event. This facilitates a clear chain of command and enables rapid, evidence-based decision-making during emergencies.



## 1. Risk Mitigation of Gathering

**Nemmara Vallangi Vela** involves large-scale congregation of devotees under conditions that significantly increase the risk of disease transmission as well as public health and safety incidents. A systematic identification of risks is essential for targeted mitigation and preparedness planning.

### 1. Overcrowding in High-Density Festival Zones

During the peak days of the festival, particularly around major events at Nellikulangara Bhagavathy Temple, including Kettukazhcha, Kudamattam, and Vedikettu, extremely large crowds gather within limited spatial areas. Unlike linear movement seen in processional routes, crowd accumulation is often static and concentrated.

During peak hours, there is:

- Extremely high crowd density with minimal physical distancing
- Restricted movement due to barricades and controlled pathways
- Limited ventilation in congested areas surrounded by temporary structures and stalls

Such conditions significantly elevate the risk of airborne and droplet transmission of respiratory illnesses such as COVID-19, influenza-like illness (ILI), and acute respiratory infections (ARI). Additionally, high-density crowding increases the risk of stampedes, crowd crush injuries, suffocation, and delayed emergency response access.

## **2. Close Physical Interaction During Rituals and Festival Activities**

Key ritualistic and cultural components of the Vela involve intense crowd participation, including:

- Congregation during temple rituals and ceremonial gatherings
- Proximity during viewing of elephant processions (Kudamattam)
- Mass gatherings during percussion performances (melam) and fireworks displays
- Queue formations and prolonged waiting periods

These conditions facilitate:

- Direct person-to-person transmission of infectious diseases
- Indirect transmission through contaminated surfaces and shared spaces
- Increased exposure duration due to prolonged crowd retention

This significantly raises the likelihood of cluster formation and rapid spread of communicable diseases within the gathering.

## **3. Food and Water Contamination Risks**

The festival setting includes numerous temporary food stalls, local vendors, and informal food distribution systems across Nenmara and surrounding areas. This introduces multiple public health concerns:

- Improper food handling, storage, and preparation practices
- Use of unsafe or non-potable water sources
- Inadequate cooking, reheating, or food preservation
- Poor personal hygiene among food handlers

These factors can lead to outbreaks of:

- Food-borne illnesses (e.g., gastroenteritis)
- Water-borne diseases (e.g., diarrheal diseases, Viral Hepatitis A, cholera-like illness)

Additionally, the temporary and often unregulated nature of food establishments during the festival increases the risk of contamination and outbreak potential.

#### **4. Influx of Population from Diverse Epidemiological Zones**

The Vela attracts many attendees from across Palakkad, other districts of Kerala, and neighboring states. This results in:

- Mixing of populations with varying health statuses and immunity levels
- Risk of introduction of infectious diseases from high-prevalence areas
- Increased likelihood of asymptomatic or pre-symptomatic transmission

#### **5. Fireworks and Burn-Related Hazards**

The large-scale fireworks display (Vedikettu), a major highlight of the festival, presents specific risks:

- Burns and blast injuries
- Fire hazards affecting nearby crowd clusters
- Smoke exposure leading to respiratory distress

These hazards can overwhelm emergency medical services if not adequately planned.

#### **6. Elephant-Related Safety Risks**

The use of caparisoned elephants during ceremonial events introduces additional safety concerns:

- Unpredictable animal behavior in high-noise, high-density environments
- Risk of crowd panic or sudden dispersal
- Potential for injuries in case of loss of control

This necessitates strict crowd control and dedicated safety protocols.

## 7. Heat, Fatigue, and Environmental Stress

Given the timing of the festival during hot climatic conditions:

- Increased risk of dehydration, heat exhaustion, and heat stroke
- Prolonged standing and crowd exposure leading to fatigue-related medical events

### Risk Stratification

Risk Category	Description	Action
Low	Open spaces, low density	Routine monitoring
Moderate	Medium crowd areas	Active surveillance
High	Shrine interiors, peak events	Strict control measures

## A. Pre-Event Measures

Pre-event interventions are critical in reducing baseline risk before the congregation begins.

### 1. IEC (Information, Education, Communication) Campaigns

- Dissemination of health advisories through:
- Temple and religious leaders (Throughout festival, announcements)
- Local television, radio, and newspapers
- Social media platforms (Instagram Pages, WhatsApp groups, district health pages)

Key messages include:

- Personal hygiene practices (handwashing, cough etiquette)
- Early reporting of symptoms
- Avoidance of attendance by sick individuals

### 2. Advisory to Vulnerable Groups

Targeted communication to:

- Children below 2 years
- Elderly individuals (>60 years)
- Persons with comorbidities (diabetes, hypertension, respiratory illness)
- Pregnant women and immunocompromised individuals

Advisories may include:

- Avoiding peak crowd days
- Using protective measures (mask, sanitizer)
- Seeking medical consultation before attending

### 3. Vendor Inspection and Licensing

- Mandatory registration of all food vendors
- Pre-event inspection by Health Inspectors to ensure:
- Safe food handling practices
- Availability of clean water

- Proper waste disposal
- Issuance of temporary licenses with compliance conditions

#### 4. Water Quality Testing

- Testing of all drinking water sources for:
- Microbial contamination (coliform count)
- Chlorine levels
- Certification of potable water sources before event commencement
- Identification and closure of unsafe sources

### **B. During Event Measures**

These measures focus on real-time risk reduction during peak crowd presence.

#### 1. Crowd Zoning and Barricading

Division of the event area into multiple zones:

- Entry zones
- Worship zones
- Exit zones

Use of barricades to:

- Prevent overcrowding
- Regulate flow of people
- Deployment of volunteers and police personnel for enforcement

#### 2. One-Way Movement Pathways

- Designation of separate entry and exit routes
- Clear signage indicating direction of movement
- Continuous monitoring to prevent reverse flow and congestion

#### 3. Hand Hygiene Stations

Installation of handwashing/sanitizer stations at:

- Entry points

- Food distribution areas
- Toilets
- Placement at intervals of approximately 100 meters
- Regular replenishment of soap, water, and sanitizer

#### 4. Mask Use (as per prevailing guidelines)

- Enforcement based on current government/public health advisories
- Distribution of masks at entry points (if required)
- Public announcements reinforcing compliance

#### 5. Dedicated Isolation Areas

Establishment of isolation rooms/tents near main medical posts

Equipped with:

- Beds
- PPE kits
- Basic medical supplies
- Immediate segregation of symptomatic individuals (fever, cough, breathlessness)
- Facilitation of safe transfer to healthcare facilities

### **C. Post event Measures**

Environmental sanitation plays a key role in preventing both infectious and non-infectious health risks.

#### 1. Chlorination of Water Supply

- Maintenance of residual chlorine levels (0.5 mg/L recommended)
- Regular monitoring by health authorities
- Immediate corrective measures in case of deviation

#### 2. Waste Management Systems

- Placement of adequate number of waste bins across the venue
- Segregation of waste (biodegradable/non-biodegradable)
- Scheduled waste collection and disposal

- Engagement of sanitation workers for continuous cleaning

### 3. Sanitation and Toilet Management

- Adequate number of temporary toilets based on crowd estimates
- Cleaning schedule every 2–3 hours

Availability of:

- Water supply
- Soap/handwash
- Special attention to high-use areas to prevent contamination

#### b) Surveillance Measures

Surveillance is essential for early detection and containment of outbreaks.

#### 1. Daily Reporting of ILI/SARI Cases

All medical aid posts to maintain line listing of:

- Influenza-like illness (ILI)
- Severe Acute Respiratory Infection (SARI)
- Daily submission of reports to district surveillance unit
- Trend analysis for early warning signals

#### 2. Rapid Response Team (RRT) Deployment

Constitution of trained RRTs including:

- Medical officers
- Epidemiologists
- Health inspectors

Roles:

- Investigation of suspected clusters
- Field response and containment
- Coordination with laboratories and hospitals

#### 3. Syndromic Surveillance Booths

Establishment of dedicated surveillance desks at key locations

Screening for:

- Fever
- Respiratory symptoms
- Gastrointestinal symptoms

Immediate referral of suspected cases to medical posts

The above mitigation measures form a multi-layered defense system, combining prevention, monitoring, and rapid response. Effective implementation requires strict supervision, interdepartmental coordination, and continuous public cooperation to ensure that the Nenmara vela is conducted safely with minimal public health risk.

### 3. Summary of Temporal Events with Timeline

Phase	Timeline	Key Activities	Health Preparedness
Planning	T-30 to T-15	Meetings, approvals	Resource mapping
Preparation	T-14 to T-1	Training, setup	Mock drills
Early Event	Day 1-2	Pilgrim arrival	Screening
Peak Event	Day 2	Main rituals	Max deployment
Closure	Day 3	Dispersal	Emergency standby

Phase	Timeline	Key Activities	Health Preparedness
Post-event	Day +1 to +14	Follow-up	Surveillance

T = Event Day (Day 0)

T-30 = 30 days before the event

T-15 = 15 days before the event

So, T-30 to T-15 means the planning phase occurs from 30 days before the event up to 15 days before the event.

## 4. Command System and Collaboration

### 4.1 Incident Command Structure

Role	In charge	Contact Number
Incident Commander	District Collector	0491 2505309
Medical Commander	District Medical Officer (DMO)	0491 2505189
Operations	Police Department	9497996977
Logistics	Local Self Government- Palakkad municipality	0491-2534158
Surveillance	IDSP Unit- DSO	0491 2505847

### 4.2 Functional Units

- Medical Response Unit

- Surveillance Unit
- Logistics & Supply Unit
- Communication Unit

### 4.3 Coordination Mechanisms

- Daily review meetings
- Real-time communication via WhatsApp/wireless
- 24x7 Control Room

## 5. List of Key People and Contacts

Designation	Contact Number
District Collector	0491 2505309
District Medical Officer	8281660677
Municipality Chairperson	9847894124
Health standing committee Chairperson	9539861580
Police Department	9497996977
Fire & Rescue Officer	0491 2505701
Ambulance Coordinator	0491 2534524
General Hospital Nodal Officers	0491 2530411
JPHN	7909193055
ASHA Supervisor	9946105710
Anganwadi Worker	9995349339
Epidemiologist	7736291508

## 6. List of Hospitals Directly Involved

A well-defined and tiered hospital network is essential for effective medical response during the Malik Deenar Uroos. The hospitals are categorized into Primary, Secondary, Tertiary, and Private Sector facilities, each with clearly defined roles in patient management, referral, and surge capacity handling.

## **6.1 First Referral Facility**

### **DH Palakkad**

The General Hospital functions as the first referral and nodal treatment center for all moderate to severe cases arising from the event.

Roles and Responsibilities:

- Act as the central receiving facility for referred patients from on-site medical posts
- Establish a dedicated triage area for incoming patients from the Uroos
- Maintain isolation wards for suspected infectious diseases

Ensure availability of:

- Oxygen-supported beds
- ICU facilities (minimum reserved capacity)
- Emergency laboratory services
- Coordinate with district surveillance units for reporting and outbreak detection
- Serve as the command hospital for medical coordination

Preparedness Measures:

- Reservation of beds exclusively for event-related emergencies
- Deployment of additional medical staff during peak days
- 24x7 emergency services with rapid admission protocols

### **Private Hospitals: Avitis Nenmara, Paalana hospital, Meditrina**

Private Hospitals act as intermediate care centers.

Functions:

Provide first-level referral support from field sites

Handle:

- Minor trauma cases
- Mild to moderate infections
- Stabilize patients before referral to higher centers
- Maintain ambulance linkage with primary and tertiary facilities

Preparedness Actions:

- Strengthening outpatient and emergency departments
- Ensuring availability of essential drugs and IV fluids
- Maintaining communication with district control room

## **6.2 Second Referral Facilities**

### **MCH Thrissur**

This hospital serves as the secondary referral center, supporting the district hospital and medical college hospital by sharing patient load.

#### Roles

- Manage moderate cases and non-critical emergencies
- Provide stabilization of patients before further referral if required
- Maintain isolation and observation wards
- Support overflow from District Hospital

## **6.3 Third Care Backup**

#### Roles

- Management of critical and complicated cases, including:
- Severe respiratory infections
- Multi-organ complications
- Advanced trauma care

Availability of:

- Advanced ICU care
- Ventilator support
- Specialist services (pulmonology, infectious disease, critical care)
- Operational Strategy

#### **6.4 Private Sector Hospitals (Empaneled)**

Selected private hospitals in the district will be empaneled to augment surge capacity.

Roles:

- Provide additional bed capacity during peak load

Manage:

- Mild to moderate cases
- Non-infectious emergencies
- Participate in referral network coordination

Selection Criteria:

- Availability of emergency services
- Basic ICU or high-dependency units
- Willingness to comply with district protocols

Responsibilities:

- Adherence to infection prevention and control (IPC) guidelines
- Mandatory reporting of notifiable diseases
- Coordination with district health authorities

#### **6.5 Integrated Referral Mechanism**

All hospitals will be connected through a structured referral system:

On-site Medical Post → District hospital (mild/moderate cases)

District Hospital → Medical College (critical/specialized care)

Key Features:

- Predefined referral pathways

- Dedicated ambulance linkage
- Real-time communication between facilities
- Bed availability monitoring system

## 6.6 Coordination and Communication

Each hospital will designate a Nodal Officer

Daily reporting to District Control Room

Use of:

- Telephone hotline
- WhatsApp coordination groups
- Emergency communication systems

The tiered hospital involvement ensures a robust, scalable, and responsive healthcare system capable of managing routine cases, handling emergencies, and responding to potential outbreaks during the Malik Deenar Uroos. Proper coordination among these facilities is critical to ensure timely treatment, efficient patient flow, and optimal utilization of healthcare resources.

## 7. Mandatory Ambulance and Medical Aid Posts on Site

### Human Resource Allocation

Adequate and well-distributed human resources are critical to ensure efficient triage, timely treatment, and rapid response during the Malik Deenar Uroos.

#### 1. Staffing Pattern – Main Medical Aid Post

Category	Number per Main Post	Roles & Responsibilities
Doctors	2	- Clinical assessment and triage- Emergency management and stabilization- Decision-making for referral

Category	Number per Main Post	Roles & Responsibilities
Nurses	4	- Patient monitoring- Drug administration- Wound care and IV-line management
Paramedics	4	- Basic life support (BLS)- Assisting in procedures- Patient transport within site
Volunteers	10	- Crowd guidance- Assisting patients- Supporting logistics and communication

## 2. Functional Role Distribution

- ❖ Triage Officer (1 Doctor/Nurse): Initial patient categorization
- ❖ Treatment Team: Handles clinical care and stabilization
- ❖ Observation Team: Monitors patients under short-term observation
- ❖ Referral Coordinator: Liaison with ambulance and hospitals

## 3. Shift Management

- ❖ 24x7 functioning during peak days
- ❖ Staffing divided into 3 shifts (8 hours each)
- ❖ Backup reserve team available for surge situations

## 4. Satellite Medical Posts

Located at high-density zones (entry/exit points, parking areas)

Staffing scaled proportionally:

- 1 Doctor
- 2 Nurses
- 2 Paramedics
- 4–5 Volunteers

- 5. Additional Support Teams
- Rapid Response Team (RRT): For outbreak investigation
- Sanitation Staff: For hygiene maintenance
- Data Entry/Record Staff: For surveillance reporting

## **Facilities to be Arranged**

Each medical aid post must be equipped to function as a mini-emergency care unit capable of handling a wide range of health conditions.

### 1. Examination and Treatment Area

- Minimum 2–4 examination beds per post
- Privacy screens for patient examination
- Adequate lighting and ventilation

### 2. Oxygen Supply System

- Oxygen cylinders/concentrators with backup
- Flow meters and masks (adult & pediatric)
- Continuous monitoring of oxygen stock

### 3. Emergency Drugs and Consumables

- Essential emergency drug kit including:
- Antipyretics, analgesics
- IV fluids and ORS
- Anti-allergic medications
- Life-saving drugs (adrenaline, atropine)
- Dressing materials and sterile supplies

### 4. Isolation Facility

Separate isolation room/tent for suspected infectious cases

Equipped with:

- Bed and basic monitoring equipment
- PPE kits for staff

- Restricted access with clear signage

## 5. Personal Protective Equipment (PPE)

Adequate stock of:

- Masks (surgical/N95 as per need)
- Gloves
- Face shields
- Gowns

Designated donning and doffing area

## 6. Basic Diagnostic Support

- Thermometers (digital/infrared)
- BP apparatus
- Pulse oximeter
- Glucometer

## **Support Accessories**

Support equipment ensures efficient patient handling, emergency response, and operational coordination.

### 1. Patient Transport Equipment

- Stretchers: For transporting critically ill or immobile patients
- Wheelchairs: For non-ambulatory but stable patients
- Clearly marked patient movement pathways

### 2. Emergency Life-Saving Equipment

Defibrillator (AED/Manual):

- Available at main medical post
- Staff trained in its use

Suction Apparatus:

- For airway management

- Portable units preferred

### 3. Communication Systems

- Mobile phones with dedicated numbers
- Walkie-talkies for real-time coordination

Direct connectivity with:

- Control room
- Ambulance services
- Hospitals

### 4. Power and Backup

- Uninterrupted power supply
- Backup generators or inverters
- Emergency lighting for night operations

### 5. Documentation and Reporting Tools

- Patient registers
- Referral forms
- Surveillance reporting formats

The combination of adequate human resources, well-equipped facilities, and essential support accessories ensures that each medical aid post can function as an effective frontline unit for:

- Immediate medical care
- Early detection of infectious diseases
- Stabilization and referral of critical patients

## **8. Ambulance Plan**

### a. Empaneled Ambulances

- Govt 108 services
- District hospital ambulances

b. ALS & BLS Distribution

- ALS: 1 (critical care)
- BLS: 2-3

c. Staffing Pattern

- ALS: Doctor + Nurse + Driver
- BLS: EMT + Driver

d. Evacuation Routes

- Pre-identified and mapped
- Traffic clearance ensured
- Dry run conducted
- Alternate routes identified

## 9. Hospital Preparedness

This section presents an overview of the healthcare infrastructure within the municipality. It highlights the distribution and baseline capacity of health facilities that serve as the foundation for service delivery during the public health emergencies.

Table 5. Health Facility Resource Summary								
Sl. no.	Health Facility	Type of Facility (MCH/GH/CHC/FHC/SC etc.)	Contact Number	Total beds	ICU Beds	Oxygen - Supported Beds	No. of Ventilator Support Beds	No. of ambulances
Government Healthcare Facilities								
1	CHC Nemmara	CHC	04923 242677	66	0	0	0	1
2	Govt Rural Dispensary Pothundi	Dispensary	984628810 3	0	0	0	0	0
3	HWC Vallangy	SC	815702209 3	0	0	0	0	0
4	HWC Pothundy	SC	807501184 1	0	0	0	0	0
5	HWC Kombankallu	SC	954443075 9	0	0	0	0	0

Table 5. Health Facility Resource Summary

Sl. no.	Health Facility	Type of Facility (MCH/GH/CHC/FHC/SC etc.)	Contact Number	Total beds	ICU Beds	Oxygen - Supported Beds	No. of Ventilator Support Beds	No. of ambulances
6	HWC Chathamangalam	SC	9544430759	0	0	0	0	0
7	Kaippancherry	SC	9656366116	0	0	0	0	0
8	PP Unit Nenmara	SC	9656366316	0	0	0	0	0
9	Veterinary Hospital Nenmara		9447483172	0	0	0	0	0
10	Veterinary Dispensary Pothundi		9400343671	0	0	0	0	0
<b>Private Healthcare Facilities</b>								
1	Avitis		04923225500	152	23	152	13	4
2	Health Vision	1		5	0	0	0	0

Table 5. Health Facility Resource Summary

Sl. no.	Health Facility	Type of Facility (MCH/GH/CHC/FHC/SC etc.)	Contact Number	Total beds	ICU Beds	Oxygen - Supported Beds	No. of Ventilator Support Beds	No. of ambulances
	Clinic							
AYUSH Healthcare Facilities								
1	Govt Homeopathic Hospital Nenmara	1		3	0	0	0	0
2	Govt Ayurveda Hospital, Kaippencherry	1	996199332 3	2	0	0	0	0
3	NRHM Homeo Dispensary Vithanaserry	1	940097106 9	0	0	0	0	0

### Key Control Room Team

Role	Name	Designation	Contact Number	Responsibility
In-charge/Nodal Officer	Dr Jayanandhan CV	MO (CHC Nenmara)	9447088730	Overall coordination, decision-making, and reporting to the District level.

Infection control Officer	Fareedha	Nursing Officer (CHC Nenmara)	9847086997	Case management
Data Entry Operator	Vincy	Data Entry Operator (CHC Nenmara)	7356970666	Managing the line list, updating dashboards, and tracking testing results.
Communication Officer	Prathap Chandran	HI (CHC Nenmara)	9745292857	Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls.
Logistics Coordinator	Shaheera	Clerk (CHC Nenmara)	8075405784	Clerical works
Technical Support (IT/Data)	Arun Kumar	JHI (CHC Nenmara)	7907824712	Handling data

#### a. Hospital Nodal System

Each hospital appoints:

- ❖ Incident Commander
- ❖ Emergency Officer
- ❖ Infection Control Nurse

#### b. Protocol Preparation

- ❖ Triage system (Red/Yellow/Green)
- ❖ Isolation wards
- ❖ PPE protocols

- ❖ Referral pathways

### c. Crisis Teams

- ❖ 24x7 emergency teams
- ❖ ICU standby
- ❖ Lab support

### d. Base Referral Hospital

District Hospital:

- ❖ Isolation beds
- ❖ ICU readiness
- ❖ Testing facilities

## 10. Temporal Dynamic Plans

### e) Event-Based Planning

Event	Risk	Action
Flag Hoisting	Medium	Standard deployment
Peak Days	Very High	Full deployment
Closing	High	Evacuation readiness

### f) Contact Coordinators

Each event assigned:

- Medical Officer
- Police Officer
- Volunteer Lead

### **g) Evacuation & Referral**

- Ambulances at strategic points
- Clear route maps
- Hospital linkage predefined

### **h) Alert Mechanism**

- Tier 1: On-site care
- Tier 2: Ambulance
- Tier 3: Hospital
- Tier 4: District escalation

## **11. Capacity Building & Meetings**

### **d) Meetings**

- District Disaster Meeting
- Health Preparedness Review
- Coordination Meetings

### **e) Timeline**

T-30, T-15, T-7, T-1

### **b) Stakeholders**

- Health, Police, Fire
- Local bodies
- Religious committee
- NGOs

### **f) Training & Mock Drills**

- PPE usage
- Triage simulation
- Ambulance drills
- Outbreak simulation

## 12. SOP for Common Health Hazards

### f) Infectious Diseases

- Isolation & masking
- Testing referral
- Contact tracing

### g) Heat Illness

- ORS distribution
- Cooling spaces

### h) Food Poisoning

- Rapid investigation
- Food sample testing

### i) Trauma/Stampede

- Triage and stabilization
- Immediate evacuation

### j) Vector-borne Diseases

- Fogging
- Source reduction

### Support Services Contacts

Sl. No	Service Type	Phone Number	Function
1	Ambulance Services	0491 2534524	Emergency transport
2	Police Control Room	0491 2522340	Crowd control & security

3	Fire & Rescue	0491 2505701	Fire & disaster response
4	Food Safety Department	0491 2505081	Inspection & enforcement

### Hospital Referral Network

Sl. No	Hospital Name	Location	Type (Govt/Private)	Contact Number
1	Avitis hospital,Nenmara	Nenmara	Private	04923 225500
2	District Hospital, Palakkad	Palakkad	Govt	0491 2533327
3	Medical College,	Palakkad	Govt	0491 2974125
4	Thangam Hospital	Palakkad	Private	0491 2515718
5	Laksmi Hospital	Palakkad	Private	8606048999
6	Paalana Hospital	Palakkad	Private	0491 2520901
7	Rajiv Gandhi Hospital	Palakkad	Private	0491 2509000
8	The CooperativeHospital	Palakkad	Private	0491 2520391

### Referral Pathway Protocol

Step No	Action	Responsible Person	Time Target	Remarks
1	Identify emergency case	Medical Officer	Immediate	Triage system
2	Stabilize patient	Medical Team	<10 minutes	Basic life support

3	Assign ambulance	Control Room	<5 minutes	Nearest available
4	Inform referral hospital	Control Room	Simultaneous	Pre-arrival alert
5	Transport patient	Ambulance Team	As per distance	Continuous monitoring

# CHINAKKATHOOR POORAM



**Location: Place:**

**Palapuram**

**Local Body:**

Ottapalam Municipality

**Conducting authority:**

Chinakkathur Bhagawathi pooram committee

**Operational framework:**

One health Strategy (Human -Animal- Environment)

**Authority:**

District Medical Officer (Health)

## Preamble

Chinakathoor Pooram is celebrated at Chinakkathoor Bhagavathy Temple, located in Ottapalam Municipality in Palakkad district, Kerala. This festival is conducted on the Makam day of Kumbham (February–March). Its origins date back to the 18th century, when the Zamorin king directed local landlords to begin the celebrations at Chinakkathoor. The famous horseplay performed during the festival symbolizes the authority of the Zamorin dynasty and reflects the legacy of the historic Mamankam. The two-day festival draws nearly 30,000 people and features a grand procession of 27 decorated elephants accompanied by panchavadyam and pandimelam. Traditional art forms like Poothan, Thira, Pulikali, Kumbhakali, Kudakkali, Theru, and Thattinmelkooth add color and energy to the celebrations. Seven desams, including Ottapalam and nearby regions, actively participate, making the event a grand cultural gathering. After the Pooram, rituals such as Poothan and Thira performances and Parayeduppu continue in households, preserving the rich cultural heritage of Valluvanad.

Mass gatherings of this magnitude inherently pose significant public health challenges, especially in the context of emerging and re-emerging infectious diseases such as COVID-19, influenza-like illness (ILI), acute respiratory infections (ARI), and other water-borne, food-borne, and vector-borne diseases. The convergence of diverse populations with varying health conditions and immunization statuses increases the risk of disease introduction, amplification, and subsequent spread to the wider community after the event.

In addition to infectious disease risks, the festival presents multiple public health and safety challenges including crowd surge and stampede risk, fire hazards associated with fireworks, elephant-related safety concerns, environmental sanitation issues, food safety risks, heat-related illnesses, and the need for rapid emergency medical response. Therefore, a comprehensive, multi-sectoral preparedness and response plan is essential to mitigate risks and ensure the safety, health, and well-being of all participants.

This festival Preparedness Plan has been developed with the following core objectives:

- To ensure public health safety and prevent outbreaks through proactive risk assessment, surveillance, and implementation of preventive measures.
- To establish robust systems for early detection, isolation, and timely management of suspected cases, thereby minimizing morbidity and preventing large-scale transmission.
- To strengthen interdepartmental coordination and unified command mechanisms involving Health Services, Police, Fire & Rescue Services, Local Self Government Institutions, Devaswom/Temple Committee, and other stakeholders for an efficient and coordinated response.
- To ensure continuity and surge capacity of essential medical services, including on-site medical care, ambulance services, and hospital preparedness for referral and critical care management.

The plan adopts the **Incident Command System (ICS)** as the operational framework to ensure structured leadership, clearly defined roles and responsibilities, and efficient resource management during the event. This facilitates a clear chain of command and enables rapid, evidence-based decision-making during emergencies.

## 1. Risk Mitigation of Gathering

**Chinakathur pooram** involves large-scale congregation of devotees under conditions that significantly increase the risk of disease transmission as well as public health and safety incidents. A systematic identification of risks is essential for targeted mitigation and preparedness planning.

### 1. Overcrowding in High-Density Festival Zones

During peak hours, there is:

- Extremely high crowd density with minimal physical distancing

- Restricted movement due to barricades and controlled pathways
- Limited ventilation in congested areas surrounded by temporary structures and stalls

Such conditions significantly elevate the risk of airborne and droplet transmission of respiratory illnesses such as COVID-19, influenza-like illness (ILI), and acute respiratory infections (ARI). Additionally, high-density crowding increases the risk of stampedes, crowd crush injuries, suffocation, and delayed emergency response access.

## **2. Close Physical Interaction During Rituals and Festival Activities**

Key ritualistic and cultural components of the pooram involve intense crowd participation, including:

- Congregation during temple rituals and ceremonial gatherings
- Close proximity during viewing of elephant processions (Kudamattam)
- Mass gatherings during percussion performances (melam) and fireworks displays
- Queue formations and prolonged waiting periods

These conditions facilitate:

- Direct person-to-person transmission of infectious diseases
- Indirect transmission through contaminated surfaces and shared spaces
- Increased exposure duration due to prolonged crowd retention

This significantly raises the likelihood of cluster formation and rapid spread of communicable diseases within the gathering.

## **3. Food and Water Contamination Risks**

The festival setting includes numerous temporary food stalls, local vendors, and informal food distribution systems across Nenmara and surrounding areas. This introduces multiple public health concerns:

- Improper food handling, storage, and preparation practices

- Use of unsafe or non-potable water sources
- Inadequate cooking, reheating, or food preservation
- Poor personal hygiene among food handlers

These factors can lead to outbreaks of:

- Food-borne illnesses (e.g., gastroenteritis)
- Water-borne diseases (e.g., diarrheal diseases, Viral Hepatitis A, cholera-like illness)

Additionally, the temporary and often unregulated nature of food establishments during the festival increases the risk of contamination and outbreak potential.

#### **4. Influx of Population from Diverse Epidemiological Zones**

The Vela attracts a large number of attendees from across Palakkad, other districts of Kerala, and neighboring states. This results in:

- Mixing of populations with varying health statuses and immunity levels
- Risk of introduction of infectious diseases from high-prevalence areas
- Increased likelihood of asymptomatic or pre-symptomatic transmission

#### **5. Fireworks and Burn-Related Hazards**

The large-scale fireworks display (Vedikettu), a major highlight of the festival, presents specific risks:

- Burns and blast injuries
- Fire hazards affecting nearby crowd clusters
- Smoke exposure leading to respiratory distress

These hazards can overwhelm emergency medical services if not adequately planned.

#### **6. Elephant-Related Safety Risks**

The use of caparisoned elephants during ceremonial events introduces additional safety concerns:

- Unpredictable animal behavior in high-noise, high-density environments
- Risk of crowd panic or sudden dispersal
- Potential for injuries in case of loss of control

This necessitates strict crowd control and dedicated safety protocols.

## 7. Heat, Fatigue, and Environmental Stress

Given the timing of the festival during hot climatic conditions:

- Increased risk of dehydration, heat exhaustion, and heat stroke
- Prolonged standing and crowd exposure leading to fatigue-related medical events

### Risk Stratification

Risk Category	Description	Action
Low	Open spaces, low density	Routine monitoring
Moderate	Medium crowd areas	Active surveillance
High	Shrine interiors, peak events	Strict control measures

#### A. Pre-Event Measures

Pre-event interventions are critical in reducing baseline risk before the congregation begins.

##### 1. IEC (Information, Education, Communication) Campaigns

Dissemination of health advisories through:

- Temple and religious leaders (Throughout festival, announcements)
- Local television, radio, and newspapers
- Social media platforms (Instagram Pages, WhatsApp groups, district health pages)

Key messages include:

- Personal hygiene practices (handwashing, cough etiquette)
- Early reporting of symptoms
- Avoidance of attendance by sick individuals

## 2. Advisory to Vulnerable Groups

Targeted communication to:

- Children below 2 years
- Elderly individuals (>60 years)
- Persons with comorbidities (diabetes, hypertension, respiratory illness)
- Pregnant women and immunocompromised individuals

Advisories may include:

- Avoiding peak crowd days
- Using protective measures (mask, sanitizer)
- Seeking medical consultation before attending

## 3. Vendor Inspection and Licensing

- ❖ Mandatory registration of all food vendors
- ❖ Pre-event inspection by Health Inspectors to ensure:
- ❖ Safe food handling practices
  - Availability of clean water
  - Proper waste disposal
  - Issuance of temporary licenses with compliance conditions

## 4. Water Quality Testing

Testing of all drinking water sources for:

- Microbial contamination (coliform count)
- Chlorine levels
- Certification of potable water sources before event commencement
- Identification and closure of unsafe sources

## **B. During Event Measures**

These measures focus on real-time risk reduction during peak crowd presence.

### 1. Crowd Zoning and Barricading

Division of the event area into multiple zones:

- Entry zones
- Worship zones
- Exit zones

Use of barricades to:

- Prevent overcrowding
- Regulate flow of people
- Deployment of volunteers and police personnel for enforcement

### 2. One-Way Movement Pathways

- Designation of separate entry and exit routes
- Clear signage indicating direction of movement
- Continuous monitoring to prevent reverse flow and congestion

### 3. Hand Hygiene Stations

Installation of handwashing/sanitizer stations at:

- Entry points
- Food distribution areas
- Toilets
- Placement at intervals of approximately 100 meters
- Regular replenishment of soap, water, and sanitizer

#### 4. Mask Use (as per prevailing guidelines)

- ❖ Enforcement based on current government/public health advisories
- ❖ Distribution of masks at entry points (if required)
- ❖ Public announcements reinforcing compliance

#### 5. Dedicated Isolation Areas

Establishment of isolation rooms/tents near main medical posts

Equipped with:

- ❖ Beds
- ❖ PPE kits
- ❖ Basic medical supplies

Immediate segregation of symptomatic individuals (fever, cough, breathlessness)

Facilitation of safe transfer to healthcare facilities

### **C. Post event Measures**

Environmental sanitation plays a key role in preventing both infectious and non-infectious health risks.

#### 1. Chlorination of Water Supply

- ❖ Maintenance of residual chlorine levels (0.5 mg/L recommended)
- ❖ Regular monitoring by health authorities
- ❖ Immediate corrective measures in case of deviation

#### 2. Waste Management Systems

- ❖ Placement of adequate number of waste bins across the venue
- ❖ Segregation of waste (biodegradable/non-biodegradable)
- ❖ Scheduled waste collection and disposal
- ❖ Engagement of sanitation workers for continuous cleaning

#### 3. Sanitation and Toilet Management

- ❖ Adequate number of temporary toilets based on crowd estimates
- ❖ Cleaning schedule every 2–3 hours

Availability of:

- Water supply
- Soap/handwash
- ❖ Special attention to high-use areas to prevent contamination

### c) Surveillance Measures

Surveillance is essential for early detection and containment of outbreaks.

#### 1. Daily Reporting of ILI/SARI Cases

All medical aid posts to maintain line listing of:

- Influenza-like illness (ILI)
- Severe Acute Respiratory Infection (SARI)
- Daily submission of reports to district surveillance unit
- Trend analysis for early warning signals

#### 2. Rapid Response Team (RRT) Deployment

Constitution of trained RRTs including:

- Medical officers
- Epidemiologists
- Health inspectors

Roles:

- Investigation of suspected clusters
- Field response and containment
- Coordination with laboratories and hospitals

#### 3. Syndromic Surveillance Booths

Establishment of dedicated surveillance desks at key locations

Screening for:

- Fever
- Respiratory symptoms
- Gastrointestinal symptoms

Immediate referral of suspected cases to medical posts

The above mitigation measures form a multi-layered defense system, combining prevention, monitoring, and rapid response. Effective implementation requires strict supervision, interdepartmental coordination, and continuous public cooperation to ensure that the Nenmara vela is conducted safely with minimal public health risk.

### 3. Summary of Temporal Events with Timeline

Phase	Timeline	Key Activities	Health Preparedness
Planning	T-30 to T-15	Meetings, approvals	Resource mapping
Preparation	T-14 to T-1	Training, setup	Mock drills
Early Event	Day 1–4	Pilgrim arrival	Screening
Peak Event	Day 8-10	Main rituals	Max deployment
Closure	Day 10	Dispersal	Emergency standby
Post-event	Day +1 to +14	Follow-up	Surveillance

T = Event Day (Day 0)

T-30 = 30 days before the event

T-15 = 15 days before the event

So, T-30 to T-15 means the planning phase occurs from 30 days before the event up to 15 days before the event.

## 4. Command System and Collaboration

### 4.1 Incident Command Structure

Role	In charge	Contact Number
Incident Commander	District Collector	0491 2505309
Medical Commander	District Medical Officer (DMO)	0491 2505189
Operations	Police Department	9497996977
Logistics	Local Self Government- Palakkad municipality	0491-2534158
Surveillance	IDSP Unit- DSO	0491 2505847

### 4.2 Functional Units

- Medical Response Unit
- Surveillance Unit
- Logistics & Supply Unit
- Communication Unit

### 4.3 Coordination Mechanisms

- Daily review meetings
- Real-time communication via WhatsApp/wireless
- 24x7 Control Room

## 5. List of Key People and Contacts

Designation	Name	Contact Number
District Collector	Madhavikutty.M.S	0491 2505309
District Medical Officer	Dr Rosh T Vijayan	8281660677
Municipality Chairperson	Jayasudha	9567920836
Police Department	Subash	9497980621
Fire & Rescue Officer	Ottapalam	04662222501
Ambulance Coordinator	Mohan	8943072982
General Hospital Nodal Officers	DR Ahammed Afsal K P	9446031336
PHN	Smt Bindhurani	8592024831
ASHA Supervisor	SmtVasanthy	9847444896
ICDS Supervisor	Divya	9961559252
Epidemiologist	Dr Anjitha P H	7736291508

## 6. List of Hospitals Directly Involved

A well-defined and tiered hospital network is essential for effective medical response during the Malik Deenar Uroos. The hospitals are categorized into Primary, Secondary, Tertiary, and Private Sector facilities, each with clearly defined roles in patient management, referral, and surge capacity handling.

### 6.1 First Referral Facility

#### Govt.Taluk hospital Ottapalam

The General Hospital functions as the first referral and nodal treatment center for all moderate to severe cases arising from the event.

Roles and Responsibilities:

- Act as the central receiving facility for referred patients from on-site medical posts
- Establish a dedicated triage area for incoming patients from the Uroos
- Maintain isolation wards for suspected infectious diseases

Ensure availability of:

- Oxygen-supported beds
- ICU facilities (minimum reserved capacity)
- Emergency laboratory services
- Coordinate with district surveillance units for reporting and outbreak detection
- Serve as the command hospital for medical coordination

Preparedness Measures:

- Reservation of beds exclusively for event-related emergencies
- Deployment of additional medical staff during peak days
- 24x7 emergency services with rapid admission protocols

**Private Hospitals: Modern Semalk, Aswini Hospital, Seventh Day, Valluvanadu Hosp.**

Functions:

Provide first-level referral support from field sites

Handle:

- Minor trauma cases
- Mild to moderate infections
- Stabilize patients before referral to higher centers
- Maintain ambulance linkage with primary and tertiary facilities

Preparedness Actions:

- Strengthening outpatient and emergency departments
- Ensuring availability of essential drugs and IV fluids
- Maintaining communication with district control room

## **6.2 Second Referral Facilities**

### **District Hospital Palakkad**

This hospital serves as the secondary referral center, supporting the district hospital and medical college hospital by sharing patient load.

Roles:

- Manage moderate cases and non-critical emergencies
- Provide stabilization of patients before further referral if required
- Maintain isolation and observation wards
- Support overflow from District Hospital

## **6.3 Third Care Backup**

### **Medical College Hospital Thrissur**

A nearby Government Medical College Hospital (e.g., Pariyaram/other regional medical colleges) will function as the tertiary backup facility.

Roles:

- Management of critical and complicated cases, including:
- Severe respiratory infections
- Multi-organ complications
- Advanced trauma care

Availability of:

- Advanced ICU care
- Ventilator support
- Specialist services (pulmonology, infectious disease, critical care)

Operational Strategy:

Activation only when:

- District hospital capacity is exceeded
- Specialized care is required

- Pre-established referral protocols and communication channels

#### **6.4 Private Sector Hospitals (Empaneled)**

Selected private hospitals in the district will be empaneled to augment surge capacity.

Roles:

- Provide additional bed capacity during peak load

Manage:

- Mild to moderate cases
- Non-infectious emergencies
- Participate in referral network coordination

Selection Criteria:

- Availability of emergency services
- Basic ICU or high-dependency units
- Willingness to comply with district protocols

Responsibilities:

- Adherence to infection prevention and control (IPC) guidelines
- Mandatory reporting of notifiable diseases
- Coordination with district health authorities

#### **6.5 Integrated Referral Mechanism**

All hospitals will be connected through a structured referral system:

On-site Medical Post → District hospital (mild/moderate cases)

District Hospital → Medical College (critical/specialized care)

Key Features:

- Predefined referral pathways
- Dedicated ambulance linkage
- Real-time communication between facilities
- Bed availability monitoring system

## 6.6 Coordination and Communication

Each hospital will designate a Nodal Officer

Daily reporting to District Control Room

Use of:

- Telephone hotline
- WhatsApp coordination groups
- Emergency communication systems

The tiered hospital involvement ensures a robust, scalable, and responsive healthcare system capable of managing routine cases, handling emergencies, and responding to potential outbreaks during the Malik Deenar Uroos. Proper coordination among these facilities is critical to ensure timely treatment, efficient patient flow, and optimal utilization of healthcare resources.

## 7. Mandatory Ambulance and Medical Aid Posts on Site

### Human Resource Allocation

Adequate and well-distributed human resources are critical to ensure efficient triage, timely treatment, and rapid response during the Malik Deenar Uroos.

#### 1. Staffing Pattern – Main Medical Aid Post

Category	Number per Main Post	Roles & Responsibilities
Doctors	2	- Clinical assessment and triage- Emergency management and stabilization- Decision-making for referral
Nurses	4	- Patient monitoring- Drug administration- Wound care and IV-line management

Category	Number per Main Post	Roles & Responsibilities
Paramedics	4	- Basic life support (BLS)- Assisting in procedures- Patient transport within site
Volunteers	10	- Crowd guidance- Assisting patients- Supporting logistics and communication

## 2. Functional Role Distribution

- ❖ Triage Officer (1 Doctor/Nurse): Initial patient categorization
- ❖ Treatment Team: Handles clinical care and stabilization
- ❖ Observation Team: Monitors patients under short-term observation
- ❖ Referral Coordinator: Liaison with ambulance and hospitals

## 3. Shift Management

- ❖ 24x7 functioning during peak days
- ❖ Staffing divided into 3 shifts (8 hours each)
- ❖ Backup reserve team available for surge situations

## 4. Satellite Medical Posts

Located at high-density zones (entry/exit points, parking areas)

Staffing scaled proportionally:

- 1 Doctor
- 2 Nurses
- 2 Paramedics
- 4–5 Volunteers
- 5. Additional Support Teams
- Rapid Response Team (RRT): For outbreak investigation
- Sanitation Staff: For hygiene maintenance

- Data Entry/Record Staff: For surveillance reporting

## **Facilities to be Arranged**

Each medical aid post must be equipped to function as a mini-emergency care unit capable of handling a wide range of health conditions.

### 1. Examination and Treatment Area

- Minimum 2–4 examination beds per post
- Privacy screens for patient examination
- Adequate lighting and ventilation

### 2. Oxygen Supply System

- Oxygen cylinders/concentrators with backup
- Flow meters and masks (adult & pediatric)
- Continuous monitoring of oxygen stock

### 3. Emergency Drugs and Consumables

Essential emergency drug kit including:

- Antipyretics, analgesics
- IV fluids and ORS
- Anti-allergic medications
- Life-saving drugs (adrenaline, atropine)
- Dressing materials and sterile supplies

### 4. Isolation Facility

Separate isolation room/tent for suspected infectious cases

Equipped with:

- Bed and basic monitoring equipment
- PPE kits for staff
- Restricted access with clear signage

### 5. Personal Protective Equipment (PPE)

Adequate stock of:

- ❖ Masks (surgical/N95 as per need)
- ❖ Gloves
- ❖ Face shields
- ❖ Gowns

Designated donning and doffing area

#### 6. Basic Diagnostic Support

- ❖ Thermometers (digital/infrared)
- ❖ BP apparatus
- ❖ Pulse oximeter
- ❖ Glucometer

### **Support Accessories**

Support equipment ensures efficient patient handling, emergency response, and operational coordination.

#### 1. Patient Transport Equipment

- Stretchers: For transporting critically ill or immobile patients
- Wheelchairs: For non-ambulatory but stable patients
- Clearly marked patient movement pathways

#### 2. Emergency Life-Saving Equipment

Defibrillator (AED/Manual):

- Available at main medical post
- Staff trained in its use

Suction Apparatus:

- For airway management
- Portable units preferred

### 3. Communication Systems

- Mobile phones with dedicated numbers
- Walkie-talkies for real-time coordination

Direct connectivity with:

- Control room
- Ambulance services
- Hospitals

### 4. Power and Backup

- Uninterrupted power supply
- Backup generators or inverters
- Emergency lighting for night operations

### 5. Documentation and Reporting Tools

- Patient registers
- Referral forms
- Surveillance reporting formats

The combination of adequate human resources, well-equipped facilities, and essential support accessories ensures that each medical aid post can function as an effective frontline unit for:

- Immediate medical care
- Early detection of infectious diseases
- Stabilization and referral of critical patients

## **8. Ambulance Plan**

### a. Empaneled Ambulances

- Govt 108 services
- District hospital ambulances

### b. ALS & BLS Distribution

- ALS: 1 (critical care)
- BLS: 2-3

#### c. Staffing Pattern

- ALS: Doctor + Nurse + Driver
- BLS: EMT + Driver

#### d. Evacuation Routes

- Pre-identified and mapped
- Traffic clearance ensured
- Dry run conducted
- Alternate routes identified

## 9. Hospital Preparedness

This section presents an overview of the healthcare infrastructure within the municipality. It highlights the distribution and baseline capacity of health facilities that serve as the foundation for service delivery during the public health emergencies.

Table 5. Health Facility Resource Summary

Sl.no.	Health Facility	Type of Facility (MCH/GH/CHC/FHC/SC etc.)	Contact Number	Total beds	ICU Beds	Oxygen-Supported Beds	No. of Ventilator or Support Beds	No. of ambulances
<b>Government Healthcare Facilities</b>								
1	THQH Ottapalam	GH	9446031336	104	0	5	5	2
2	East ottapalam SC	SC	8330817657	0	0	0	0	0

3	Palappuram SC	SC	97780696 04	0	0	0	0	0
4	Thottakkara SC	SC	97452179 94	0	0	0	0	0
5	VARODE SC	SC	94977879 81	0	0	0	0	0
<b>Private Healthcare Facilities</b>								
1	MODERN SEMALK	Hospital	04662246 438	35	2	0	0	1
2	ASWINI HOSPITAL	Hospital	99955310 12	45	8	0	0	1
3	SEVENTH DAY	Hospital	04662244 201	50	7	2	2	3
4	VALLUVANADU HOSP.	Hospital	81297081 34	50	3	2	2	2
<b>AYUSH Healthcare Facilities</b>								
	Ayurveda Hospital	Hospital	94467632 94	0	0	0	0	0
	Homeo	Hospital	97446739 65	0	0	0	0	0

## Key Control Room Team

Role	Name	Designation	Contact Number	Responsibility
In-charge/Nodal Officer	Dr.JISHA	MO	9497368559	Overall coordination, decision-making, and reporting to the District level.
Infection control Officer	Ambili Yeshodharan	Nursing Officer	8921720475	Case management
Data Entry Operator	SOUMYA	DEO	9072901722	Managing the line list, updating dashboards, and tracking testing results.
Communication Officer	SINI	HI	89544072265	Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls.
Logistics Coordinator	Fousiya	Clerk	9746447793	Clerikal works
Technical Support (IT/Data)	Arum	Data Manager	7736763406	Handling data

### a. Hospital Nodal System

Each hospital appoints:

- Incident Commander
- Emergency Officer

- Infection Control Nurse

#### **b. Protocol Preparation**

- Triage system (Red/Yellow/Green)
- Isolation wards
- PPE protocols
- Referral pathways

#### **c. Crisis Teams**

- 24x7 emergency teams
- ICU standby
- Lab support

#### **d. Base Referral Hospital**

District Hospital:

- Isolation beds
- ICU readiness
- Testing facilities

## **10. Temporal Dynamic Plans**

### **i) Event-Based Planning**

<b>Event</b>	<b>Risk</b>	<b>Action</b>
Flag Hoisting	Medium	Standard deployment
Peak Days	Very High	Full deployment
Closing	High	Evacuation readiness

## **j) Contact Coordinators**

Each event assigned:

- Medical Officer
- Police Officer
- Volunteer Lead

## **k) Evacuation & Referral**

- Ambulances at strategic points
- Clear route maps
- Hospital linkage predefined

## **l) Alert Mechanism**

- Tier 1: On-site care
- Tier 2: Ambulance
- Tier 3: Hospital
- Tier 4: District escalation

# **11. Capacity Building & Meetings**

## **g) Meetings**

- District Disaster Meeting
- Health Preparedness Review
- Coordination Meetings

## **h) Timeline**

T-30, T-15, T-7, T-1

## **c) Stakeholders**

- Health, Police, Fire
- Local bodies

- Religious committee
- NGOs

**i) Training & Mock Drills**

- PPE usage
- Triage simulation
- Ambulance drills
- Outbreak simulation

## **12. SOP for Common Health Hazards**

**k) Infectious Diseases**

- Isolation & masking
- Testing referral
- Contact tracing

**l) Heat Illness**

- ORS distribution
- Cooling spaces

**m) Food Poisoning**

- Rapid investigation
- Food sample testing

**n) Trauma/Stampede**

- Triage and stabilization
- Immediate evacuation

**o) Vector-borne Diseases**

- Fogging
- Source reduction

## 13. Consolidation Sheets

### Support Services Contacts

Sl. No	Service Type	Phone Number	Function
1	Ambulance Services	8943072982	Emergency transport
2	Police Control Room	094979 34004	Crowd control & security
3	Fire & Rescue	04662222501	Fire & disaster response
4	Food Safety Department	0471 23228332	Inspection & enforcement

### Hospital Referral Network

Sl. No	Hospital Name	Location	Type (Govt/Private)	Contact Number
1	Taluk hospital, Ottapalam	Ottapalam	Govt	9446031336
2	PK Das Hospital	Ottapalam	Pvt	0466 234 4500
	MODERN SEMALK	Ottapalam	Pvt	04662246438
	ASWINI HOSPITAL	Ottapalam	Pvt	9995531012

	SEVENTH DAY	Ottapalam	Pvt	04662244201
	VALLUVANADU HOSP.	Ottapalam	Pvt	8129708134
2	Medical College,	Palakkad	Govt	0491 2974125
3	Thangam Hospital	Palakkad	Private	0491 2515718
4	Laksmi Hospital	Palakkad	Private	8606048999
5	Paalana Hospital	Palakkad	Private	0491 2520901
6	Rajiv Gandhi Hospital	Palakkad	Private	0491 2509000
7	The Cooperative Hospital	Palakkad	Private	0491 2520391

### Referral Pathway Protocol

Step No	Action	Responsible Person	Time Target	Remarks
1	Identify emergency case	Medical Officer	Immediate	Triage system
2	Stabilize patient	Medical Team	<10 minutes	Basic life support
3	Assign ambulance	Control Room	<5 minutes	Nearest available

4	Inform referral hospital	Control Room	Simultaneous	Pre-arrival alert
5	Transport patient	Ambulance Team	As per distance	Continuous monitoring

# MANAPULLIKAVU VELA



<b>Location:</b>	Kadamkode, Palakkad
<b>Municipality:</b>	Palakkad
<b>Conducting authority:</b>	Vela Committee
<b>Operational framework:</b>	One health Strategy (Human -Animal- Environment)
<b>Authority:</b>	District Medical Officer (Health)

## Preamble

**Manapullikavu vela** is an annual festival with a week full of pooja ceremonies and evenings with colourful cultural programmes , drawing Hundreds of thousands of devotees, pilgrims, and visitors from across multiple districts of the state as well as neighboring states. The event is characterized by high population density, prolonged duration of stay, and extensive interpersonal interactions, all of which create an environment conducive to the rapid transmission of communicable diseases.

Mass gatherings of this magnitude inherently pose substantial public health challenges, particularly in the context of emerging and re-emerging infectious diseases such as COVID-19, influenza-like illness (ILI), acute respiratory infections (ARI), and other water-borne, food-borne, and vector-borne diseases. The convergence of diverse populations with varying health statuses and immunization backgrounds increases the risk of disease importation, amplification, and subsequent dissemination to wider communities following the event.

In addition to infectious disease risks, the gathering also presents challenges related to environmental sanitation, food safety, heat-related illnesses, crowd management, and emergency medical response. Therefore, a comprehensive, multi-sectoral preparedness and response plan is essential to mitigate risks and ensure the safety and well-being of all participants.

This Pandemic Preparedness Plan has been developed with the following core objectives:

To ensure public health safety and prevent outbreaks through proactive risk assessment, surveillance, and implementation of preventive measures.

To establish robust systems for early detection, isolation, and timely management of suspected cases, thereby minimizing morbidity and preventing large-scale transmission.

To strengthen interdepartmental coordination and unified command mechanisms involving Health Services, Police, Fire & Rescue, Local Self Government Institutions, and other stakeholders for efficient response.

To ensure continuity and surge capacity of essential medical services, including on-site medical care, ambulance services, and hospital preparedness for referral and critical care management.

The plan adopts the Incident Command System (ICS) as the operational framework to enable structured leadership, defined roles and responsibilities, and efficient resource management during the event. This ensures a clear chain of command and facilitates rapid decision-making during emergencies.

Further, the plan integrates the Integrated Disease Surveillance Programme (IDSP) for real-time disease surveillance, data collection, analysis, and early warning signals. This integration enables timely identification of unusual health events or clusters and supports prompt public health interventions.

The preparedness strategy emphasizes a multi-layered approach, including:

- ❖ Pre-event planning and risk communication
- ❖ On-site surveillance and medical preparedness
- ❖ Emergency response and referral systems
- ❖ Post-event monitoring and follow-up

Overall, this document serves as a comprehensive operational guide for all stakeholders involved in the planning and execution of health and safety measures during the Malik Deenar Uroos, ensuring that the event is conducted in a safe, organized, and resilient manner with minimal public health risk.



### **3. Risk mitigation of gathering**

The Manapullikavu vela involves large-scale congregation of devotees under conditions that can significantly increase the risk of disease transmission and public health incidents. A systematic identification of risks is essential for targeted mitigation and preparedness planning.

### **5. Overcrowding in Confined Religious Spaces**

During the final day of the vela, The Chaandh Abishekam, one of the important pooja during the day and 'Vedikettu' (Firework) is also an important attractive element of the festival. During peak hours, particularly on main ceremonial occasions, there is:

- High crowd density with minimal physical distancing
- Restricted ventilation in enclosed or semi-enclosed structures
- Limited movement space, increasing contact rates

Such conditions significantly elevate the risk of airborne and droplet transmission of respiratory illnesses such as COVID-19, influenza-like illness (ILI), and other acute respiratory infections (ARI). Additionally, overcrowding increases the likelihood of non-infectious events such as stampedes, suffocation, and delayed access to medical care.

### **6. Close Physical Interaction During Rituals**

Many religious practices associated with the Vela involve:

- Physical proximity during prayers and gatherings
- Shared use of religious spaces and objects
- Hand-to-hand contact and congregation in queues

These interactions facilitate:

- Direct person-to-person transmission of infectious agents
- Indirect transmission through contaminated surfaces (fomites)
- Increased exposure duration, especially during prolonged rituals

The cumulative effect is a higher probability of cluster formation and rapid spread of communicable diseases within the gathering.

## 7. Food and Water Contamination Risks

Large-scale preparation and distribution of food (including community meals or offerings) and provision of drinking water introduce multiple public health concerns:

- Risk of improper food handling and storage
- Use of contaminated water sources
- Inadequate cooking or reheating practices
- Poor personal hygiene among food handlers

These factors can lead to outbreaks of:

- Food-borne illnesses (e.g., gastroenteritis)
- Water-borne diseases (e.g., diarrhea, Viral Hepatitis A, cholera-like illness)

In addition, temporary food stalls and informal vendors may operate without strict regulatory oversight, further increasing the risk of contamination.

## 8. Pilgrim Influx from Different Epidemiological Zones

The Manapullikavu vela attracts attendees from diverse geographic regions, each with varying disease prevalence and public health profiles. This creates:

- Risk of importation of infectious diseases from high-prevalence areas
- Mixing of populations with different immunity levels
- Potential for introduction of emerging or re-emerging infections

Such population mixing can lead to:

- Amplification of disease transmission within the gathering
- Exportation of infections to home communities after the event

This risk is particularly critical in the context of diseases with incubation periods that allow asymptomatic transmission.

The combination of these risk factors—high crowd density, close interpersonal contact, environmental sanitation challenges, and population mixing—creates a complex public health risk environment. Therefore, targeted mitigation strategies, real-time surveillance,

and rapid response mechanisms are essential to prevent and control potential outbreaks during the Manapullikavu vela.

### **Risk Stratification**

Risk Category	Description	Action
Low	Open spaces, low density	Routine monitoring
Moderate	Medium crowd areas	Active surveillance
High	Shrine interiors, peak events	Strict control measures

### **Mitigation Measures**

Mitigation measures for the Manapullikavu vela are structured across four key domains: Pre-Event Preparedness, During Event Controls, Environmental Management, and Surveillance Systems. These measures aim to reduce the risk of disease transmission, ensure early detection, and enable rapid response.



## A. Pre-Event Measures

Pre-event interventions are critical in reducing baseline risk before the congregation begins.

### 1. IEC (Information, Education, Communication) Campaigns

- Dissemination of health advisories through:
  - Temple and religious leaders (Throughout festival, announcements)
  - Local television, radio, and newspapers
  - Social media platforms (Instagram Pages, WhatsApp groups, district health pages)

Key messages include:

- Personal hygiene practices (handwashing, cough etiquette)
- Early reporting of symptoms

- Avoidance of attendance by sick individuals

## 2. Advisory to Vulnerable Groups

Targeted communication to:

- Children below 2 years
- Elderly individuals (>60 years)
- Persons with comorbidities (diabetes, hypertension, respiratory illness)
- Pregnant women and immunocompromised individuals

Advisories may include:

- Avoiding peak crowd days
- Using protective measures (mask, sanitizer)
- Seeking medical consultation before attending

## 3. Vendor Inspection and Licensing

- ❖ Mandatory registration of all food vendors
- ❖ Pre-event inspection by Health Inspectors to ensure:
  - Safe food handling practices
  - Availability of clean water
  - Proper waste disposal
- ❖ Issuance of temporary licenses with compliance conditions

## 4. Water Quality Testing

Testing of all drinking water sources for:

- Microbial contamination (coliform count)
- Chlorine levels
- Certification of potable water sources before event commencement
- Identification and closure of unsafe sources

## **B. During Event Measures**

These measures focus on real-time risk reduction during peak crowd presence.

## 1. Crowd Zoning and Barricading

Division of the event area into multiple zones:

- Entry zones
- Worship zones
- Exit zones

Use of barricades to:

- Prevent overcrowding
- Regulate flow of people
- Deployment of volunteers and police personnel for enforcement

## 2. One-Way Movement Pathways

- Designation of separate entry and exit routes
- Clear signage indicating direction of movement
- Continuous monitoring to prevent reverse flow and congestion

## 3. Hand Hygiene Stations

Installation of handwashing/sanitizer stations at:

- Entry points
- Food distribution areas
- Toilets
- Placement at intervals of approximately 100 meters
- Regular replenishment of soap, water, and sanitizer

## 4. Mask Use (as per prevailing guidelines)

- Enforcement based on current government/public health advisories
- Distribution of masks at entry points (if required)
- Public announcements reinforcing compliance

## 5. Dedicated Isolation Areas

- ❖ Establishment of isolation rooms/tents near main medical posts

- ❖ Equipped with:
  - Beds
  - PPE kits
  - Basic medical supplies
- ❖ Immediate segregation of symptomatic individuals (fever, cough, breathlessness)
- ❖ Facilitation of safe transfer to healthcare facilities

### **C. Post event Measures**

Environmental sanitation plays a key role in preventing both infectious and non-infectious health risks.

#### 1. Chlorination of Water Supply

- Maintenance of residual chlorine levels (0.5 mg/L recommended)
- Regular monitoring by health authorities
- Immediate corrective measures in case of deviation

#### 2. Waste Management Systems

- Placement of adequate number of waste bins across the venue
- Segregation of waste (biodegradable/non-biodegradable)
- Scheduled waste collection and disposal
- Engagement of sanitation workers for continuous cleaning

#### 3. Sanitation and Toilet Management

- ❖ Adequate number of temporary toilets based on crowd estimates
- ❖ Cleaning schedule every 2–3 hours
- ❖ Availability of:
  - Water supply
  - Soap/handwash
- ❖ Special attention to high-use areas to prevent contamination

#### d) Surveillance Measures

Surveillance is essential for early detection and containment of outbreaks.

### 1. Daily Reporting of ILI/SARI Cases

All medical aid posts to maintain line listing of:

- Influenza-like illness (ILI)
- Severe Acute Respiratory Infection (SARI)
- Daily submission of reports to district surveillance unit
- Trend analysis for early warning signals

### 2. Rapid Response Team (RRT) Deployment

Constitution of trained RRTs including:

- Medical officers
- Epidemiologists
- Health inspectors

Roles:

- Investigation of suspected clusters
- Field response and containment
- Coordination with laboratories and hospitals

### 3. Syndromic Surveillance Booths

Establishment of dedicated surveillance desks at key locations

Screening for:

- Fever
- Respiratory symptoms
- Gastrointestinal symptoms

Immediate referral of suspected cases to medical posts

The above mitigation measures form a multi-layered defense system, combining prevention, monitoring, and rapid response. Effective implementation requires strict supervision, interdepartmental coordination, and continuous public cooperation to ensure that the Vela is conducted safely with minimal public health risk.

### 3. Summary of Temporal Events with Timeline

Phase	Timeline	Key Activities	Health Preparedness
Planning	T-30 to T-15	Meetings, approvals	Resource mapping
Preparation	T-14 to T-1	Training, setup	Mock drills
Early Event	Day 1-3	Pilgrim arrival	Screening
Peak Event	Day 7	Main rituals	Max deployment
Closure	Day 7	Dispersal	Emergency standby
Post-event	Day +1 to +14	Follow-up	Surveillance

T = Event Day (Day 0)

T-30 = 30 days before the event

T-15 = 15 days before the event

So, T-30 to T-15 means the planning phase occurs from 30 days before the event up to 15 days before the event.

## 4. Command System and Collaboration

### 4.1 Incident Command Structure

Role	In charge	Contact Number
Incident Commander	District Collector	0491 2505309
Medical Commander	District Medical Officer (DMO)	0491 2505189
Operations	Police Department	9497996977
Logistics	Local Self Government- Palakkad municipality	0491-2534158
Surveillance	IDSP Unit- DSO	0491 2505847

### 4.2 Functional Units

- Medical Response Unit
- Surveillance Unit
- Logistics & Supply Unit
- Communication Unit

### 4.3 Coordination Mechanisms

- Daily review meetings
- Real-time communication via WhatsApp/wireless
- 24x7 Control Room

## 5. List of Key People and Contacts

Designation	Contact Number
District Collector	0491 2505309
District Medical Officer	8281660677
Municipality Chairperson	9847894124
Health standing committee Chairperson	9539861580
Police Department	9497996977
Fire & Rescue Officer	0491 2505701
Ambulance Coordinator	0491 2534524
General Hospital Nodal Officers	0491 2530411
JPHN	7909193055
ASHA Supervisor	
Anganwadi Worker	
Epidemiologist	7736291508

## 6. List of Hospitals Directly Involved

A well-defined and tiered hospital network is essential for effective medical response during the Kalpathy Ratholsavam. The hospitals are categorized into Primary, Secondary, Tertiary, and Private Sector facilities, each with clearly defined roles in patient management, referral, and surge capacity handling.

### 6.1 First Referral Facility

#### District Hospital

The District Hospital functions as the first referral and nodal treatment center for all moderate to severe cases arising from the event.

Roles and Responsibilities:

- Act as the central receiving facility for referred patients from on-site medical posts
- Establish a dedicated triage area for incoming patients from the Uroos
- Maintain isolation wards for suspected infectious diseases

Ensure availability of:

- Oxygen-supported beds
- ICU facilities (minimum reserved capacity)
- Emergency laboratory services
- Coordinate with district surveillance units for reporting and outbreak detection
- Serve as the command hospital for medical coordination

Preparedness Measures:

- Reservation of beds exclusively for event-related emergencies
- Deployment of additional medical staff during peak days
- 24x7 emergency services with rapid admission protocols

#### Private Hospitals (Thangam Hospital) (Paalana Hospital) (Lakshmi Hospital)

Private Hospitals act as intermediate care centers.

Functions:

- Provide first-level referral support from field sites

Handle:

- Minor trauma cases
- Mild to moderate infections
- Stabilize patients before referral to higher centers
- Maintain ambulance linkage with primary and tertiary facilities

Preparedness Actions:

- Strengthening outpatient and emergency departments
- Ensuring availability of essential drugs and IV fluids
- Maintaining communication with district control room

## **6.2 Second Referral Facilities**

### **Medical College hospital, Thrissur**

This hospital serves as the secondary referral center, supporting the district hospital and medical college hospital by sharing patient load.

Roles:

- Manage moderate cases and non-critical emergencies
- Provide stabilization of patients before further referral if required
- Maintain isolation and observation wards
- Support overflow from District Hospital

## **6.3 Third Care Backup**

Roles:

- Management of critical and complicated cases, including:
- Severe respiratory infections
- Multi-organ complications
- Advanced trauma care

Availability of:

- Advanced ICU care
- Ventilator support
- Specialist services (pulmonology, infectious disease, critical care)

Operational Strategy:

#### **6.4 Private Sector Hospitals (Empaneled)**

Selected private hospitals in the district will be empaneled to augment surge capacity.

Roles:

- Provide additional bed capacity during peak load

Manage:

- Mild to moderate cases
- Non-infectious emergencies
- Participate in referral network coordination

Selection Criteria:

- Availability of emergency services
- Basic ICU or high-dependency units
- Willingness to comply with district protocols

Responsibilities:

- Adherence to infection prevention and control (IPC) guidelines
- Mandatory reporting of notifiable diseases
- Coordination with district health authorities

#### **6.5 Integrated Referral Mechanism**

All hospitals will be connected through a structured referral system:

On-site Medical Post → District Hospital (moderate cases/serious cases)

District Hospital → Medical College (critical/specialized care)

### Key Features:

- Predefined referral pathways
- Dedicated ambulance linkage
- Real-time communication between facilities
- Bed availability monitoring system

## 6.6 Coordination and Communication

Each hospital will designate a Nodal Officer

Daily reporting to District Control Room

Use of:

- Telephone hotline
- WhatsApp coordination groups
- Emergency communication systems

## 7. Mandatory Ambulance and Medical Aid Posts on Site

### Human Resource Allocation

#### 1. Staffing Pattern – Main Medical Aid Post

Category	Number per Main Post	Roles & Responsibilities
Doctors	2	- Clinical assessment and triage- Emergency management and stabilization- Decision-making for referral
Nurses	4	- Patient monitoring- Drug administration- Wound care and IV-line management
Paramedics	4	- Basic life support (BLS)- Assisting in procedures- Patient transport within site

Category	Number per Main Post	Roles & Responsibilities
Volunteers	10	- Crowd guidance- Assisting patients- Supporting logistics and communication

## 2. Functional Role Distribution

- Triage Officer (1 Doctor/Nurse): Initial patient categorization
- Treatment Team: Handles clinical care and stabilization
- Observation Team: Monitors patients under short-term observation
- Referral Coordinator: Liaison with ambulance and hospitals

## 3. Shift Management

- 24x7 functioning during peak days
- Staffing divided into 3 shifts (8 hours each)
- Backup reserve team available for surge situations

## 4. Satellite Medical Posts

Located at high-density zones (entry/exit points, parking areas)

Staffing scaled proportionally:

- 1 Doctor
- 2 Nurses
- 2 Paramedics
- 4 – 5 Volunteers
- 5. Additional Support Teams
- Rapid Response Team (RRT): For outbreak investigation
- Sanitation Staff: For hygiene maintenance
- Data Entry/Record Staff: For surveillance reporting

## Facilities to be Arranged

Each medical aid post must be equipped to function as a mini-emergency care unit capable of handling a wide range of health conditions.

### 1. Examination and Treatment Area

- Minimum 2–4 examination beds per post
- Privacy screens for patient examination
- Adequate lighting and ventilation

### 2. Oxygen Supply System

- Oxygen cylinders/concentrators with backup
- Flow meters and masks (adult & pediatric)
- Continuous monitoring of oxygen stock

### 3. Emergency Drugs and Consumables

Essential emergency drug kit including:

- Antipyretics, analgesics
- IV fluids and ORS
- Anti-allergic medications
- Life-saving drugs (adrenaline, atropine)
- Dressing materials and sterile supplies

### 4. Isolation Facility

- ❖ Separate isolation room/tent for suspected infectious cases
- ❖ Equipped with:
  - Bed and basic monitoring equipment
  - PPE kits for staff
- ❖ Restricted access with clear signage

### 5. Personal Protective Equipment (PPE)

Adequate stock of:

- ❖ Masks (surgical/N95 as per need)
- ❖ Gloves
- ❖ Face shields
- ❖ Gowns

Designated donning and doffing area

## 6. Basic Diagnostic Support

- Thermometers (digital/infrared)
- BP apparatus
- Pulse oximeter
- Glucometer

## **Support Accessories**

Support equipment ensures efficient patient handling, emergency response, and operational coordination.

### 1. Patient Transport Equipment

- Stretchers: For transporting critically ill or immobile patients
- Wheelchairs: For non-ambulatory but stable patients
- Clearly marked patient movement pathways

### 2. Emergency Life-Saving Equipment

Defibrillator (AED/Manual):

- Available at main medical post
- Staff trained in its use

Suction Apparatus:

- For airway management
- Portable units preferred

### 3. Communication Systems

- Mobile phones with dedicated numbers

- Walkie-talkies for real-time coordination

Direct connectivity with:

- Control room
- Ambulance services
- Hospitals

#### 4. Power and Backup

- Uninterrupted power supply
- Backup generators or inverters
- Emergency lighting for night operations

#### 5. Documentation and Reporting Tools

- Patient registers
- Referral forms
- Surveillance reporting formats

The combination of adequate human resources, well-equipped facilities, and essential support accessories ensures that each medical aid post can function as an effective frontline unit for:

- Immediate medical care
- Early detection of infectious diseases
- Stabilization and referral of critical patients

## **8. Ambulance Plan**

### a. Empaneled Ambulances

- Govt 108 services
- General hospital ambulances

### b. ALS & BLS Distribution

- ALS: 1 (critical care)
- BLS: 2-3

### c. Staffing Pattern

- ALS: Doctor + Nurse + Driver
- BLS: EMT + Driver

### d. Evacuation Routes

- Pre-identified and mapped
- Traffic clearance ensured
- Dry run conducted
- Alternate routes identified



## Key Control Room Team

Role	Designation	Responsibility
In-charge/Nodal Officer	MO(UPHC Diara Street)	Overall coordination, decision-making, and reporting to the District level.
Infection control Officer	Health Supervisor	Case management
Data Entry Operator	DEO-Cum-Clerk	Managing the line list, updating dashboards, and tracking testing results.
Communication Officer	JHI	Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls.
Logistics Coordinator	JHI	Clerical works
Technical Support (IT/Data)	Epidemiologist	Handling data

### a. Hospital Nodal System

Each hospital appoints:

- Incident Commander
- Emergency Officer
- Infection Control Nurse

**b. Protocol Preparation**

- Triage system (Red/Yellow/Green)
- Isolation wards
- PPE protocols
- Referral pathways

**c. Crisis Teams**

- 24x7 emergency teams
- ICU standby
- Lab support

**d. Base Referral Hospital**

District Hospital:

- Isolation beds
- ICU readiness
- Testing facilities

**10. Temporal Dynamic Plans****m)Event-Based Planning**

Event	Risk	Action
Flag Hoisting	Medium	Standard deployment
Peak Days	Very High	Full deployment
Closing	High	Evacuation readiness

## **n) Contact Coordinators**

Each event assigned:

- Medical Officer
- Police Officer
- Volunteer Lead

## **o) Evacuation & Referral**

- Ambulances at strategic points
- Clear route maps
- Hospital linkage predefined

## **p) Alert Mechanism**

- Tier 1: On-site care
- Tier 2: Ambulance
- Tier 3: Hospital
- Tier 4: District escalation

# **11. Capacity Building & Meetings**

## **j) Meetings**

- District Disaster Meeting
- Health Preparedness Review
- Coordination Meetings

## **k) Timeline**

T-30, T-15, T-7, T-1

## **d) Stakeholders**

- Health, Police, Fire
- Local bodies
- Religious committee
- NGOs

**l) Training & Mock Drills**

- PPE usage
- Triage simulation
- Ambulance drills
- Outbreak simulation

**12. SOP for Common Health Hazards****p) Infectious Diseases**

- Isolation & masking
- Testing referral
- Contact tracing

**q) Heat Illness**

- ORS distribution
- Cooling spaces

**r) Food Poisoning**

- Rapid investigation
- Food sample testing

**s) Trauma/Stampede**

- Triage and stabilization
- Immediate evacuation

**t) Vector-borne Diseases**

- Fogging
- Source reduction

## 13. Consolidation Sheets

### Support Services Contacts

Sl. No	Service Type	Phone Number	Function
1	Ambulance Services	0491 2534524	Emergency transport
2	Police Control Room	0491 2522340	Crowd control & security
3	Fire & Rescue	0491 2505701	Fire & disaster response
4	Food Safety Department	0491 2505081	Inspection & enforcement

### Hospital Referral Network

Sl. No	Hospital Name	Location	Type (Govt/Private)	Contact Number
1	District Hospital, Palakkad	Palakkad	Govt	0491 2533327
2	Medical College,	Palakkad	Govt	0491 2974125

3	Thangam Hospital	Palakkad	Private	0491 2515718
4	Lakshmi Hospital	Palakkad	Private	8606048999
5	Paalana Hospital	Palakkad	Private	0491 2520901
6	Rajiv Gandhi Hospital	Palakkad	Private	0491 2509000
7	The Cooperative Hospital	Palakkad	Private	0491 2520391
8	Malabar Hospital	Palakkad	Private	0491 2528200
9	Palakkad Poly clinic	Palakkad	Private	0491 2524153
10	Avitis Hospital	Palakkad	Private	0491 2522879

### Referral Pathway Protocol

Step No	Action	Responsible Person	Time Target	Remarks
1	Identify emergency case	Medical Officer	Immediate	Triage system
2	Stabilize patient	Medical Team	<10 minutes	Basic life support
3	Assign ambulance	Control Room	<5 minutes	Nearest available
4	Inform referral hospital	Control Room	Simultaneous	Pre-arrival alert
5	Transport patient	Ambulance Team	As per distance	Continuous monitoring

## PARIYANAMPATTA POORAM



<b>Location: Place:</b>	Sreekrishnapuram
<b>Local Body:</b>	Sreekrishnapuram
<b>Conducting authority:</b>	Pariyanampetta poora commiteee
<b>Operational framework:</b>	One health Strategy (Human -Animal- Environment)
<b>Authority:</b>	District Medical Officer(Health)

## Preamble

Pariyanam Petta Pooram is celebrated at Sree Pariyanam petta Bhagavathy Temple, located in Sreekrishnapuram Panachayth , Ottapalam Taluk in Palakkad district, Kerala. The Pariyanampatta Pooram is a vibrant 7-day annual festival at the Pariyanampetta Bhagavathy Temple in Palakkad, Kerala, typically held in February/March (Kumbham month). It is a celebration of cultural and spiritual heritage, featuring 21 caparisoned elephants, traditional Melam, Kathakali, shadow puppetry (Tholpavakoothu), and Kalamezhuthu Pattu.

Mass gatherings of this magnitude inherently pose significant public health challenges, especially in the context of emerging and re-emerging infectious diseases such as COVID-19, influenza-like illness (ILI), acute respiratory infections (ARI), and other water-borne, food-borne, and vector-borne diseases. The convergence of diverse populations with varying health conditions and immunization statuses increases the risk of disease introduction, amplification, and subsequent spread to the wider community after the event.

In addition to infectious disease risks, the festival presents multiple public health and safety challenges including crowd surge and stampede risk, fire hazards associated with fireworks, elephant-related safety concerns, environmental sanitation issues, food safety risks, heat-related illnesses, and the need for rapid emergency medical response. Therefore, a comprehensive, multi-sectoral preparedness and response plan is essential to mitigate risks and ensure the safety, health, and well-being of all participants.

This festival Preparedness Plan has been developed with the following core objectives:

- To ensure public health safety and prevent outbreaks through proactive risk assessment, surveillance, and implementation of preventive measures.
- To establish robust systems for early detection, isolation, and timely management of suspected cases, thereby minimizing morbidity and preventing large-scale transmission.

- To strengthen interdepartmental coordination and unified command mechanisms involving Health Services, Police, Fire & Rescue Services, Local Self Government Institutions, Devaswom/Temple Committee, and other stakeholders for an efficient and coordinated response.
- To ensure continuity and surge capacity of essential medical services, including on-site medical care, ambulance services, and hospital preparedness for referral and critical care management.

The plan adopts the **Incident Command System (ICS)** as the operational framework to ensure structured leadership, clearly defined roles and responsibilities, and efficient resource management during the event. This facilitates a clear chain of command and enables rapid, evidence-based decision-making during emergencies.

## 1. Risk Mitigation of Gathering

**Pariyanampetta pooram** involves large-scale congregation of devotees under conditions that significantly increase the risk of disease transmission as well as public health and safety incidents. A systematic identification of risks is essential for targeted mitigation and preparedness planning.

### 1. Overcrowding in High-Density Festival Zones

During peak hours, there is:

- Extremely high crowd density with minimal physical distancing
- Restricted movement due to barricades and controlled pathways
- Limited ventilation in congested areas surrounded by temporary structures and stalls

Such conditions significantly elevate the risk of airborne and droplet transmission of respiratory illnesses such as COVID-19, influenza-like illness (ILI), and acute respiratory infections (ARI). Additionally, high-density crowding increases the risk of stampedes, crowd crush injuries, suffocation, and delayed emergency response access.

## 2. Close Physical Interaction During Rituals and Festival Activities

Key ritualistic and cultural components of the pooram involve intense crowd participation, including:

- Congregation during temple rituals and ceremonial gatherings
- Close proximity during viewing of elephant processions (Kudamattam)
- Mass gatherings during percussion performances (melam) and fireworks displays
- Queue formations and prolonged waiting periods

These conditions facilitate:

- Direct person-to-person transmission of infectious diseases
- Indirect transmission through contaminated surfaces and shared spaces
- Increased exposure duration due to prolonged crowd retention

This significantly raises the likelihood of cluster formation and rapid spread of communicable diseases within the gathering.

## 3. Food and Water Contamination Risks

The festival setting includes numerous temporary food stalls, local vendors, and informal food distribution systems across Nenmara and surrounding areas. This introduces multiple public health concerns:

- Improper food handling, storage, and preparation practices
- Use of unsafe or non-potable water sources
- Inadequate cooking, reheating, or food preservation
- Poor personal hygiene among food handlers

These factors can lead to outbreaks of:

- Food-borne illnesses (e.g., gastroenteritis)
- Water-borne diseases (e.g., diarrheal diseases, Viral Hepatitis A, cholera-like illness)

Additionally, the temporary and often unregulated nature of food establishments during the festival increases the risk of contamination and outbreak potential.

#### **4. Influx of Population from Diverse Epidemiological Zones**

The Vela attracts a large number of attendees from across Palakkad, other districts of Kerala, and neighboring states. This results in:

- Mixing of populations with varying health statuses and immunity levels
- Risk of introduction of infectious diseases from high-prevalence areas
- Increased likelihood of asymptomatic or pre-symptomatic transmission

#### **5. Fireworks and Burn-Related Hazards**

The large-scale fireworks display (Vedikettu), a major highlight of the festival, presents specific risks:

- Burns and blast injuries
- Fire hazards affecting nearby crowd clusters
- Smoke exposure leading to respiratory distress

These hazards can overwhelm emergency medical services if not adequately planned.

#### **6. Elephant-Related Safety Risks**

The use of caparisoned elephants during ceremonial events introduces additional safety concerns:

- Unpredictable animal behavior in high-noise, high-density environments
- Risk of crowd panic or sudden dispersal
- Potential for injuries in case of loss of control

This necessitates strict crowd control and dedicated safety protocols.

## 7. Heat, Fatigue, and Environmental Stress

Given the timing of the festival during hot climatic conditions:

- Increased risk of dehydration, heat exhaustion, and heat stroke
- Prolonged standing and crowd exposure leading to fatigue-related medical events

### Risk Stratification

Risk Category	Description	Action
Low	Open spaces, low density	Routine monitoring
Moderate	Medium crowd areas	Active surveillance
High	Shrine interiors, peak events	Strict control measures

#### A. Pre-Event Measures

Pre-event interventions are critical in reducing baseline risk before the congregation begins.

##### 1. IEC (Information, Education, Communication) Campaigns

Dissemination of health advisories through:

- Temple and religious leaders (Throughout festival, announcements)

- Local television, radio, and newspapers
- Social media platforms (Instagram Pages, WhatsApp groups, district health pages)

Key messages include:

- Personal hygiene practices (handwashing, cough etiquette)
- Early reporting of symptoms
- Avoidance of attendance by sick individuals

## 2. Advisory to Vulnerable Groups

Targeted communication to:

- Children below 2 years
- Elderly individuals (>60 years)
- Persons with comorbidities (diabetes, hypertension, respiratory illness)
- Pregnant women and immunocompromised individuals

Advisories may include:

- Avoiding peak crowd days
- Using protective measures (mask, sanitizer)
- Seeking medical consultation before attending

## 3. Vendor Inspection and Licensing

- Mandatory registration of all food vendors
- Pre-event inspection by Health Inspectors to ensure:
  - Safe food handling practices
  - Availability of clean water
  - Proper waste disposal
- Issuance of temporary licenses with compliance conditions

## 4. Water Quality Testing

Testing of all drinking water sources for:

- Microbial contamination (coliform count)
- Chlorine levels

- Certification of potable water sources before event commencement
- Identification and closure of unsafe sources

## **B. During Event Measures**

These measures focus on real-time risk reduction during peak crowd presence.

### 1. Crowd Zoning and Barricading

Division of the event area into multiple zones:

- Entry zones
- Worship zones
- Exit zones

Use of barricades to:

- Prevent overcrowding
- Regulate flow of people
- Deployment of volunteers and police personnel for enforcement

### 2. One-Way Movement Pathways

- Designation of separate entry and exit routes
- Clear signage indicating direction of movement
- Continuous monitoring to prevent reverse flow and congestion

### 3. Hand Hygiene Stations

- Installation of handwashing/sanitizer stations at:
  - Entry points
  - Food distribution areas
  - Toilets
  - Placement at intervals of approximately 100 meters
  - Regular replenishment of soap, water, and sanitizer

### 4. Mask Use (as per prevailing guidelines)

- Enforcement based on current government/public health advisories
- Distribution of masks at entry points (if required)

- Public announcements reinforcing compliance

## 5. Dedicated Isolation Areas

- Establishment of isolation rooms/tents near main medical posts
- Equipped with:
  - Beds
  - PPE kits
  - Basic medical supplies
- Immediate segregation of symptomatic individuals (fever, cough, breathlessness)
- Facilitation of safe transfer to healthcare facilities

## C. Post event Measures

Environmental sanitation plays a key role in preventing both infectious and non-infectious health risks.

### 1. Chlorination of Water Supply

- Maintenance of residual chlorine levels (0.5 mg/L recommended)
- Regular monitoring by health authorities
- Immediate corrective measures in case of deviation

### 2. Waste Management Systems

- Placement of adequate number of waste bins across the venue
- Segregation of waste (biodegradable/non-biodegradable)
- Scheduled waste collection and disposal
- Engagement of sanitation workers for continuous cleaning

### 3. Sanitation and Toilet Management

- Adequate number of temporary toilets based on crowd estimates
- Cleaning schedule every 2–3 hours

Availability of:

- Water supply
- Soap/handwash

Special attention to high-use areas to prevent contamination

#### e) Surveillance Measures

Surveillance is essential for early detection and containment of outbreaks.

##### 1. Daily Reporting of ILI/SARI Cases

All medical aid posts to maintain line listing of:

- Influenza-like illness (ILI)
- Severe Acute Respiratory Infection (SARI)
- Daily submission of reports to district surveillance unit
- Trend analysis for early warning signals

##### 2. Rapid Response Team (RRT) Deployment

Constitution of trained RRTs including:

- Medical officers
- Epidemiologists
- Health inspectors

Roles:

- Investigation of suspected clusters
- Field response and containment
- Coordination with laboratories and hospitals

##### 3. Syndromic Surveillance Booths

Establishment of dedicated surveillance desks at key locations

Screening for:

- Fever
- Respiratory symptoms
- Gastrointestinal symptoms

Immediate referral of suspected cases to medical posts

The above mitigation measures form a multi-layered defense system, combining prevention, monitoring, and rapid response. Effective implementation requires strict supervision, interdepartmental coordination, and continuous public cooperation to ensure that the Nenmara vela is conducted safely with minimal public health risk.

### 3. Summary of Temporal Events with Timeline

Phase	Timeline	Key Activities	Health Preparedness
Planning	T-30 to T-15	Meetings, approvals	Resource mapping
Preparation	T-14 to T-1	Training, setup	Mock drills
Early Event	Day 1–4	Pilgrim arrival	Screening
Peak Event	Day 8-10	Main rituals	Max deployment
Closure	Day 10	Dispersal	Emergency standby
Post-event	Day +1 to +14	Follow-up	Surveillance

T = Event Day (Day 0)

T-30 = 30 days before the event

T-15 = 15 days before the event

So, T-30 to T-15 means the planning phase occurs from 30 days before the event up to 15 days before the event.

## 4. Command System and Collaboration

### 4.1 Incident Command Structure

Role	In charge	Contact Number
Incident Commander	District Collector	0491 2505309
Medical Commander	District Medical Officer (DMO)	0491 2505189
Operations	Police Department	9497996977
Logistics	Local Self Government- Palakkad municipality	0491-2534158
Surveillance	IDSP Unit- DSO	0491 2505847

### 4.2 Functional Units

- Medical Response Unit
- Surveillance Unit
- Logistics & Supply Unit
- Communication Unit

### 4.3 Coordination Mechanisms

- Daily review meetings
- Real-time communication via WhatsApp/wireless
- 24x7 Control Room

## 6. List of Hospitals Directly Involved

A well-defined and tiered hospital network is essential for effective medical response during the Malik Deenar Uroos. The hospitals are categorized into Primary, Secondary, Tertiary, and Private Sector facilities, each with clearly defined roles in patient management, referral, and surge capacity handling.

### 6.1 First Referral Facility

#### Govt. Taluk hospital Ottapalam

The Hospital functions as the first referral and nodal treatment center for all moderate to severe cases arising from the event.

Roles and Responsibilities:

- Act as the central receiving facility for referred patients from on-site medical posts
- Establish a dedicated triage area for incoming patients from the Uroos
- Maintain isolation wards for suspected infectious diseases

Ensure availability of:

- Oxygen-supported beds
- ICU facilities (minimum reserved capacity)
- Emergency laboratory services
- Coordinate with district surveillance units for reporting and outbreak detection
- Serve as the command hospital for medical coordination

Preparedness Measures:

- Reservation of beds exclusively for event-related emergencies
- Deployment of additional medical staff during peak days
- 24x7 emergency services with rapid admission protocols

**Private Hospitals: Modern Semalk, Aswini Hospital, Seventh Day, Valluvanadu Hosp.**

Functions:

- Provide first-level referral support from field sites

Handle:

- Minor trauma cases
- Mild to moderate infections
- Stabilize patients before referral to higher centers
- Maintain ambulance linkage with primary and tertiary facilities

Preparedness Actions:

- Strengthening outpatient and emergency departments
- Ensuring availability of essential drugs and IV fluids
- Maintaining communication with district control room

## **6.2 Second Referral Facilities**

### **District Hospital Palakkad**

This hospital serves as the secondary referral center, supporting the district hospital and medical college hospital by sharing patient load.

Roles:

- Manage moderate cases and non-critical emergencies
- Provide stabilization of patients before further referral if required
- Maintain isolation and observation wards
- Support overflow from District Hospital

## **6.3 Third Care Backup**

### **Medical College Hospital Thrissur**

A nearby Government Medical College Hospital (e.g., Pariyaram/other regional medical colleges) will function as the tertiary backup facility.

Roles:

Management of critical and complicated cases, including:

- Severe respiratory infections
- Multi-organ complications

- Advanced trauma care

Availability of:

- Advanced ICU care
- Ventilator support

Specialist services (pulmonology, infectious disease, critical care)

Operational Strategy:

Activation only when:

- District hospital capacity is exceeded
- Specialized care is required
- Pre-established referral protocols and communication channels

#### **6.4 Private Sector Hospitals (Empaneled)**

Selected private hospitals in the district will be empaneled to augment surge capacity.

Roles:

- Provide additional bed capacity during peak load

Manage:

- Mild to moderate cases
- Non-infectious emergencies
- Participate in referral network coordination

Selection Criteria:

- Availability of emergency services
- Basic ICU or high-dependency units
- Willingness to comply with district protocols

Responsibilities:

- Adherence to infection prevention and control (IPC) guidelines
- Mandatory reporting of notifiable diseases

- Coordination with district health authorities

## **6.5 Integrated Referral Mechanism**

All hospitals will be connected through a structured referral system:

On-site Medical Post → District hospital (mild/moderate cases)

District Hospital → Medical College (critical/specialized care)

Key Features:

- Predefined referral pathways
- Dedicated ambulance linkage
- Real-time communication between facilities
- Bed availability monitoring system

## **6.6 Coordination and Communication**

Each hospital will designate a Nodal Officer

Daily reporting to District Control Room

Use of:

- Telephone hotline
- WhatsApp coordination groups
- Emergency communication systems

The tiered hospital involvement ensures a robust, scalable, and responsive healthcare system capable of managing routine cases, handling emergencies, and responding to potential outbreaks during the Malik Deenar Uroos. Proper coordination among these facilities is critical to ensure timely treatment, efficient patient flow, and optimal utilization of healthcare resources.

# **7. Mandatory Ambulance and Medical Aid Posts on Site**

## **Human Resource Allocation**

Adequate and well-distributed human resources are critical to ensure efficient triage, timely treatment, and rapid response during the Malik Deenar Uroos.

### 1. Staffing Pattern – Main Medical Aid Post

Category	Number per Main Post	Roles & Responsibilities
Doctors	2	- Clinical assessment and triage- Emergency management and stabilization- Decision-making for referral
Nurses	4	- Patient monitoring- Drug administration- Wound care and IV-line management
Paramedics	4	- Basic life support (BLS)- Assisting in procedures- Patient transport within site
Volunteers	10	- Crowd guidance- Assisting patients- Supporting logistics and communication

### 2. Functional Role Distribution

- Triage Officer (1 Doctor/Nurse): Initial patient categorization
- Treatment Team: Handles clinical care and stabilization
- Observation Team: Monitors patients under short-term observation
- Referral Coordinator: Liaison with ambulance and hospitals

### 3. Shift Management

- 24x7 functioning during peak days
- Staffing divided into 3 shifts (8 hours each)
- Backup reserve team available for surge situations

### 4. Satellite Medical Posts

Located at high-density zones (entry/exit points, parking areas)

Staffing scaled proportionally:

- 1 Doctor
- 2 Nurses
- 2 Paramedics
- 4–5 Volunteers
- 5. Additional Support Teams
- Rapid Response Team (RRT): For outbreak investigation
- Sanitation Staff: For hygiene maintenance
- Data Entry/Record Staff: For surveillance reporting

### **Facilities to be Arranged**

Each medical aid post must be equipped to function as a mini-emergency care unit capable of handling a wide range of health conditions.

#### 1. Examination and Treatment Area

- Minimum 2–4 examination beds per post
- Privacy screens for patient examination
- Adequate lighting and ventilation

#### 2. Oxygen Supply System

- Oxygen cylinders/concentrators with backup
- Flow meters and masks (adult & pediatric)
- Continuous monitoring of oxygen stock

#### 3. Emergency Drugs and Consumables

Essential emergency drug kit including:

- Antipyretics, analgesics
- IV fluids and ORS
- Anti-allergic medications
- Life-saving drugs (adrenaline, atropine)
- Dressing materials and sterile supplies

#### 4. Isolation Facility

Separate isolation room/tent for suspected infectious cases

Equipped with:

- Bed and basic monitoring equipment
- PPE kits for staff
- Restricted access with clear signage

## 5. Personal Protective Equipment (PPE)

Adequate stock of:

- Masks (surgical/N95 as per need)
- Gloves
- Face shields
- Gowns

Designated donning and doffing area

## 6. Basic Diagnostic Support

- Thermometers (digital/infrared)
- BP apparatus
- Pulse oximeter
- Glucometer

## **Support Accessories**

Support equipment ensures efficient patient handling, emergency response, and operational coordination.

### 1. Patient Transport Equipment

- Stretchers: For transporting critically ill or immobile patients
- Wheelchairs: For non-ambulatory but stable patients
- Clearly marked patient movement pathways

### 2. Emergency Life-Saving Equipment

#### Defibrillator (AED/Manual):

- Available at main medical post
- Staff trained in its use

#### Suction Apparatus:

- For airway management
- Portable units preferred

### 3. Communication Systems

- Mobile phones with dedicated numbers
- Walkie-talkies for real-time coordination

#### Direct connectivity with:

- Control room
- Ambulance services
- Hospitals

### 4. Power and Backup

- Uninterrupted power supply
- Backup generators or inverters
- Emergency lighting for night operations

### 5. Documentation and Reporting Tools

- Patient registers
- Referral forms
- Surveillance reporting formats

The combination of adequate human resources, well-equipped facilities, and essential support accessories ensures that each medical aid post can function as an effective frontline unit for:

- Immediate medical care
- Early detection of infectious diseases

- Stabilization and referral of critical patients

## 8. Ambulance Plan

### a. Empaneled Ambulances

- Govt 108 services
- District hospital ambulances

### b. ALS & BLS Distribution

- ALS: 1 (critical care)
- BLS: 2-3

### c. Staffing Pattern

- ALS: Doctor + Nurse + Driver
- BLS: EMT + Driver

### d. Evacuation Routes

- Pre-identified and mapped
- Traffic clearance ensured
- Dry run conducted
- Alternate routes identified

## 9. Hospital Preparedness

This section presents an overview of the healthcare infrastructure within the municipality. It highlights the distribution and baseline capacity of health facilities that serve as the foundation for service delivery during the public health emergencies.

Table 5. Health Facility Resource Summary

Sl.no.	Health Facility	Type of Facility (MCH/GH/CHC/FHC/SC etc.)	Contact Number	Total beds	ICU Beds	Oxygen - Support ed Beds	No. of Ventilator Support Beds	No. of ambulances
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Government Healthcare Facilities								
1.	Fhc sreekrishnapuram	FHC	989504033 47	8	0	0	0	1
Private Healthcare Facilities								
1	ELITE HOSPITAL	PVT	906154843 2	7	0	1	0	-
2	VALLUVANAD HOSPITAL	PVT	790770902 6	0	0	0	0	0
AYUSH Healthcare Facilities								
1	Gov. Ayurveda Dispensary sreekrishnapuram	GOVT	949587406 3	0	0	0	0	
2	Gov. Homeo Dispensary Sreekrishnapuram	GOVT	924989030 9	0	0	0	0	-
3	Pvt. PKM Ayurveda Hospital , Sreekrishnapuram	PVT	944711314 7	6				

### Key Control Room Team

Role	Name	Designation	Contact Number	Responsibility
In-charge/Nodal Officer	DR SANDHYA	MO	7306692052	Overall coordination, decision-making, and reporting to the District level.

Infection control Officer		Staff nurse	9447924118	Case management
Data Entry Operator	RAGHU	CLERK	9746923299	Managing the line list, updating dashboards, and tracking testing results.
Communication Officer	SHMNA	HI	9113591952	Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls.
Logistics Coordinator	NARAYANA N	A.S	9495036171	Clerikal works
Technical Support (IT/Data)	SHMNA	HI	9113591952	Handling data

### a. Hospital Nodal System

Each hospital appoints:

- Incident Commander
- Emergency Officer
- Infection Control Nurse

### b. Protocol Preparation

- Triage system (Red/Yellow/Green)
- Isolation wards

- PPE protocols
- Referral pathways

### c. Crisis Teams

- 24x7 emergency teams
- ICU standby
- Lab support

### d. Base Referral Hospital

District Hospital:

- Isolation beds
- ICU readiness
- Testing facilities

## 10. Temporal Dynamic Plans

### q) Event-Based Planning

Event	Risk	Action
Flag Hoisting	Medium	Standard deployment
Peak Days	Very High	Full deployment
Closing	High	Evacuation readiness

### r) Contact Coordinators

Each event assigned:

- ❖ Medical Officer
- ❖ Police Officer
- ❖ Volunteer Lead

**s) Evacuation & Referral**

- ❖ Ambulances at strategic points
- ❖ Clear route maps
- ❖ Hospital linkage predefined

**t) Alert Mechanism**

- ❖ Tier 1: On-site care
- ❖ Tier 2: Ambulance
- ❖ Tier 3: Hospital
- ❖ Tier 4: District escalation

**11. Capacity Building & Meetings****m) Meetings**

- District Disaster Meeting
- Health Preparedness Review
- Coordination Meetings

**n) Timeline**

T-30, T-15, T-7, T-1

**e) Stakeholders**

- Health, Police, Fire
- Local bodies
- Religious committee
- NGOs

**o) Training & Mock Drills**

- PPE usage
- Triage simulation
- Ambulance drills
- Outbreak simulation

## 12. SOP for Common Health Hazards

### u) Infectious Diseases

- Isolation & masking
- Testing referral
- Contact tracing

### v) Heat Illness

- ORS distribution
- Cooling spaces

### w) Food Poisoning

- Rapid investigation
- Food sample testing

### x) Trauma/Stampede

- Triage and stabilization
- Immediate evacuation

### y) Vector-borne Diseases

- Fogging
- Source reduction

## 13. Consolidation Sheets

### Support Services Contacts

Sl. No	Service Type	Phone Number	Function
1	Ambulance Services	04662267276	Emergency transport

2	Police Control Room	9497941923	Crowd control & security
3	Fire & Rescue	04924230303	Fire & disaster response
4	Food Safety Department	0471 23228332	Inspection & enforcement

### Hospital Referral Network

Sl. No	Hospital Name	Location	Type (Govt/Private)	Contact Number
1	Taluk hospital, Ottapalam	Ottapalam	Govt	9446031336
2	PK Das Hospital	Ottapalam	Pvt	0466 234 4500
3	ELITE HOSPITAL	Ottapalam	PVT	9061548432
4	VALLUVANAD HOSPITAL	Ottapalam	Pvt	7907709026
5	MODERN SEMALK	Ottapalam	Pvt	04662246438
6	ASWINI HOSPITAL	Ottapalam	Pvt	9995531012

7	SEVENTH DAY	Ottapalam	Pvt	04662244201
8	VALLUVANADU HOSP.	Ottapalam	Pvt	8129708134
9	Medical College,	Palakkad	Govt	0491 2974125
10	Thangam Hospital	Palakkad	Private	0491 2515718
11	Laksmi Hospital	Palakkad	Private	8606048999
12	Paalana Hospital	Palakkad	Private	0491 2520901
13	Rajiv Gandhi Hospital	Palakkad	Private	0491 2509000
14	The Cooperative Hospital	Palakkad	Private	0491 2520391

### Referral Pathway Protocol

Step No	Action	Responsible Person	Time Target	Remarks
1	Identify emergency case	Medical Officer	Immediate	Triage system
2	Stabilize patient	Medical Team	<10 minutes	Basic life support

3	Assign ambulance	Control Room	<5 minutes	Nearest available
4	Inform referral hospital	Control Room	Simultaneous	Pre-arrival alert
5	Transport patient	Ambulance Team	As per distance	Continuous monitoring

## CONCLUSION

The major temple festivals of Palakkad, including Kalpathy Ratholsavam, Manappullikavu Vela, Nenmara Vallangi Vela, and Chinakkathoor Pooram and Pariyanampatta Pooram represent large-scale mass gatherings that are deeply rooted in cultural and religious traditions, while simultaneously posing complex public health and safety challenges.

This Festival Preparedness Plan provides a comprehensive, multi-sectoral framework aimed at ensuring the safe and efficient conduct of these events through coordinated efforts of all stakeholders. By integrating risk assessment, surveillance mechanisms, medical preparedness, and emergency response systems, the plan seeks to minimize the potential for communicable disease outbreaks, prevent injuries and fatalities, and ensure timely management of health emergencies.

The adoption of structured systems such as the Incident Command System (ICS) ensures clarity in leadership, defined roles and responsibilities, and effective resource utilization. The integration of surveillance platforms like the Integrated Disease Surveillance Programme (IDSP) further strengthens the capacity for early detection, reporting, and response to public health threats.

Successful implementation of this plan relies on strong interdepartmental coordination among Health Services, Police, Fire & Rescue Services, Local Self Government Institutions, and festival organizing committees, along with active participation of trained volunteers and the public. Continuous risk communication, adherence to safety protocols, and community cooperation are critical to achieving the desired outcomes.

Ultimately, this preparedness plan aims not only to safeguard public health during these festivals but also to build a resilient system capable of responding effectively to future mass gatherings. With diligent execution, monitoring, and post-event evaluation, Palakkad can ensure that its renowned festivals are conducted in a safe, organized, and sustainable manner, preserving their cultural significance while prioritizing the well-being of all participants.

### 1. Strong Coordination

Effective implementation requires seamless coordination among all stakeholders, including:

- Health Department
- Police and Traffic authorities
- Fire and Rescue Services

- Local Self Government Institutions
- Event organizing committees
- Volunteer groups and NGOs

A clearly defined Incident Command System (ICS) ensures:

- Well-defined roles and responsibilities
- Unified command and decision-making
- Efficient allocation and utilization of resources
- Regular interdepartmental meetings, shared communication platforms, and a functional control room are essential to maintain operational coherence throughout the event.

## **2. Real-Time Monitoring**

Continuous monitoring is critical to identify risks early and respond promptly.

This includes:

- Health surveillance: Real-time tracking of ILI/SARI cases and other syndromic indicators
- Crowd monitoring: Assessment of crowd density and movement patterns
- Resource tracking: Availability of hospital beds, ambulances, oxygen, and medical staff
- Environmental monitoring: Water quality, sanitation status, and waste management

The integration of surveillance systems such as the Integrated Disease Surveillance Programme (IDSP) enables timely detection of unusual trends or clusters, facilitating early intervention and containment.

## **3. Community Cooperation**

Active participation and cooperation of the public are vital for the success of all preventive measures.

Key aspects include:

- Adherence to public health advisories
- Early reporting of symptoms to medical teams
- Compliance with crowd management measures and movement restrictions
- Cooperation with screening and surveillance activities

Engagement of religious leaders, community representatives, and volunteers plays a crucial role in:

- Building trust
- Enhancing awareness
- Promoting responsible behavior among pilgrims

#### **4. Rapid Response Systems**

A robust and responsive emergency system ensures timely management of any incident.

This includes:

- On-site medical response: Immediate triage, treatment, and stabilization
- Efficient ambulance services: Quick evacuation through pre-defined routes
- Hospital preparedness: Availability of beds, ICU facilities, and trained personnel
- Outbreak response: Rapid Response Teams (RRTs) for investigation and containment

Clearly defined escalation protocols ensure that cases are managed at the appropriate level without delay, reducing morbidity and preventing escalation into larger public health emergencies.

#### **Overall Outcome**

By combining strong coordination, real-time monitoring, community engagement, and rapid response mechanisms, this plan creates a resilient system capable of:

- Preventing outbreaks
- Managing medical emergencies efficiently
- Ensuring continuity of essential services

Ultimately, this integrated approach ensures that the Malik Deenar Uroos is conducted in a safe, organized, and public health–secure manner, safeguarding both participants and the wider community.

## ANNEXURES

### 1. Festival Details



Event Name:	Kalpathy ratholsavam
Location:	Kalpathy, Palakkad
Significance:	Traditional chariot festival of devotion and cultural unity in Palakkad
Duration:	Typically, 10 days (varies annually)
Footfall:	Hundreds of thousands of devotees daily
Peak Days:	Last 3 days
Key Activities:	<ul style="list-style-type: none"> <li>● Religious gatherings &amp; prayers</li> <li>● Elephant Processions</li> <li>● Food distribution (Annadanam)</li> <li>● Night programs</li> </ul>



## 2. Nemmara Vela



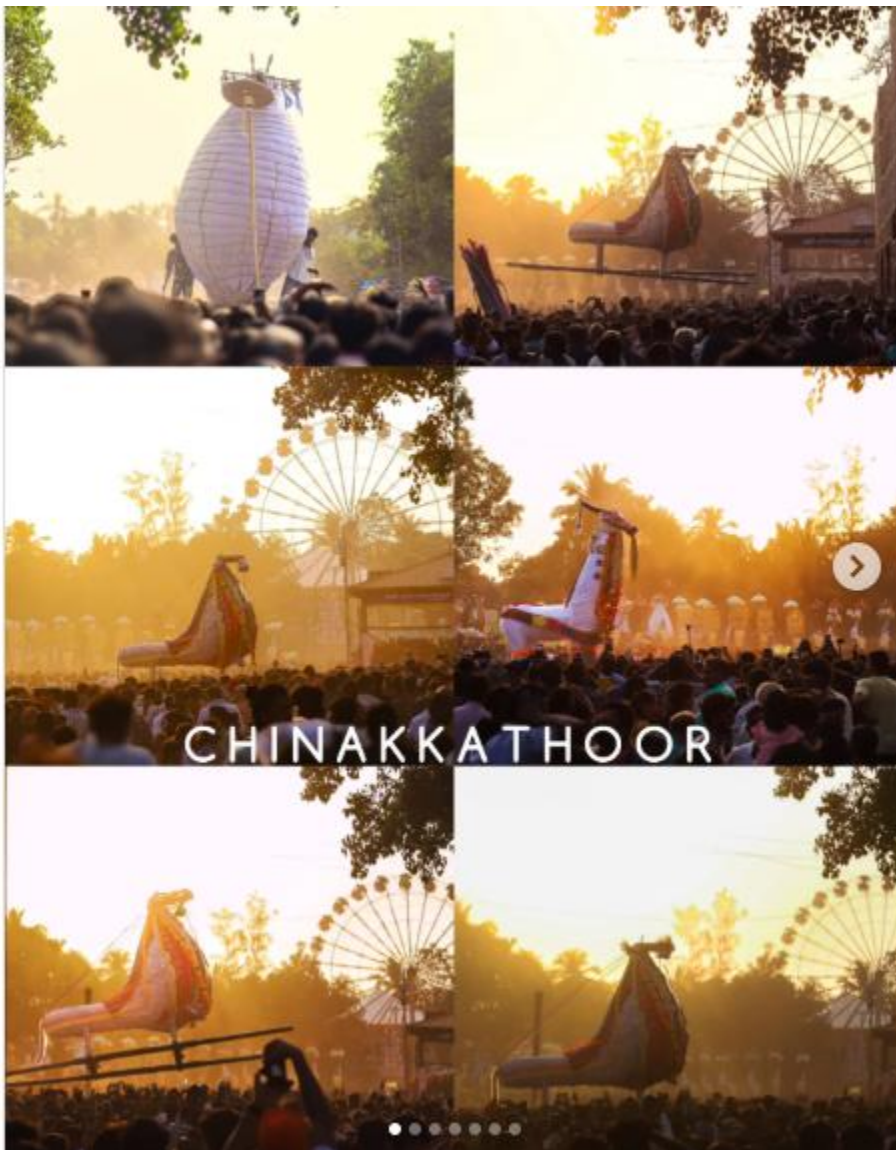
Event Name:	Nemmara Vallangi Vela
Location:	Nemmara, Palakkad
Significance:	Marks the birthday of the goddess, symbolizing community unity, prosperity, and cultural pride
Duration:	Typically, 2 days
Footfall:	Hundreds of thousands of devotees daily
Peak Days:	Last day
Key Activities:	<ul style="list-style-type: none"> <li>● Religious gatherings &amp; prayers</li> <li>● Elephant Processions</li> <li>● Food distribution (Annadanam)</li> <li>● Night programs</li> <li>● Fire Works</li> </ul>

## Geospatial Mapping (Event Medical Planning)

### GEOSPATIAL EVENT MAP: NEMMARA-VALLANGI VELA (HERITAGE ZONE)



### 3. CHINAKATHUR POORAM



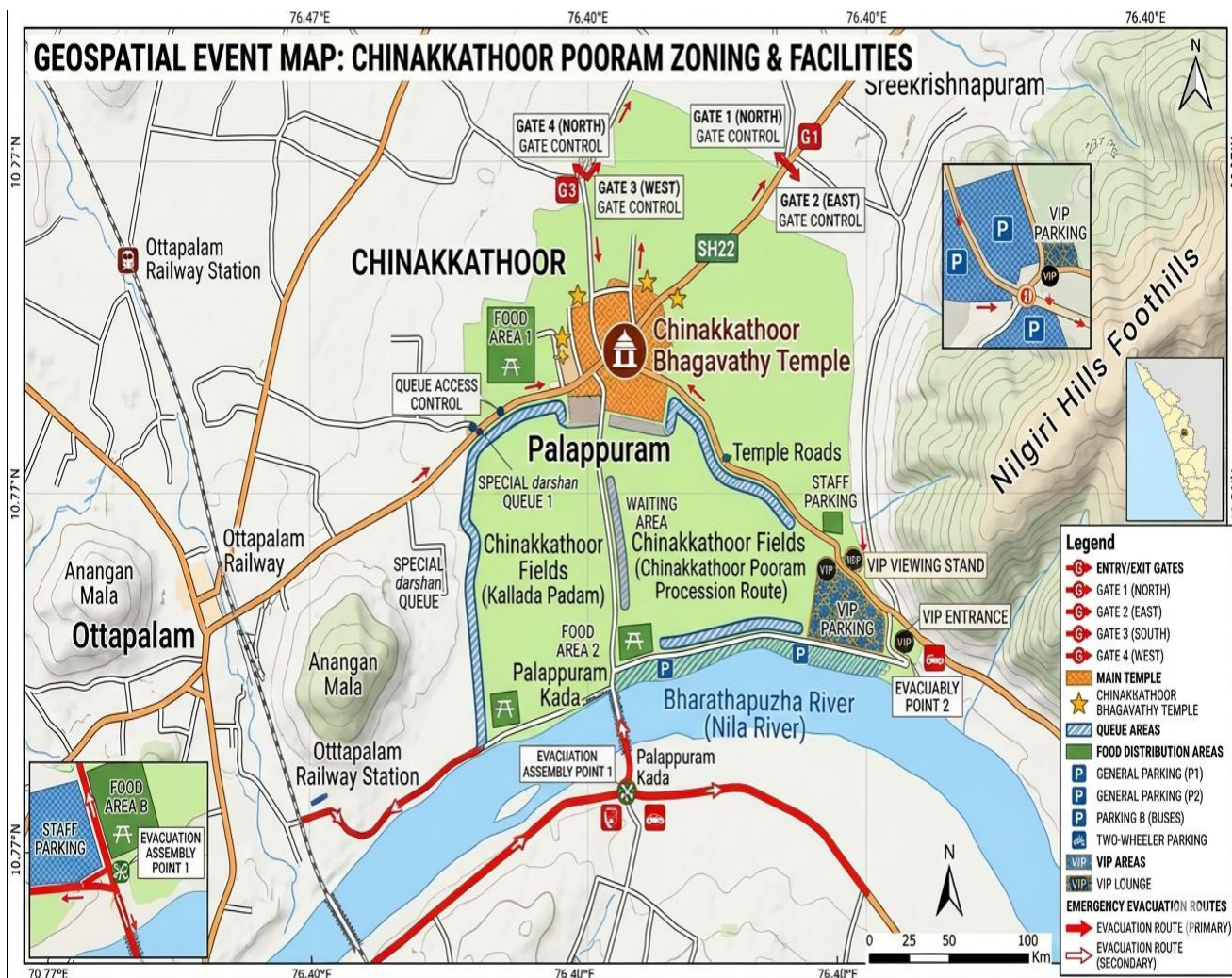
Event Name:	Chinakkathur	Pooram
Location:	Ottapalam (Chinakkathur Temple,	Palappuram)
Significance:	Celebrated at the Chinakkathur Bhagavathy Temple, the festival honors the goddess and reflects Kerala's rich temple traditions, emphasizing devotion, heritage, and community harmony.	
Duration:	Typically	2–3 days
Footfall:	Thousands to lakhs of devotees and visitors	

Peak Days: Main Pooram day (final day)

Key Activities:

- Traditional temple rituals & pujas
- Majestic elephant processions with caparisoned elephants
- Panchavadyam & Chenda melam performances
- Cultural programs and folk arts
- Fireworks display
- Annadanam (free food distribution)

### Geospatial Mapping (Event Medical Planning)



#### 4. MANAPULLIKAVU VELA



Event Name: Manapullikavu vela

Location: Kadamkode, Palakkad

Significance: It honors the presiding deity, Manappully\_Bhagavathy, who is believed to protect devotees, grant prosperity, and destroy evil, celebrating her birthday and victory over a demon

Duration: Typically, 2 days

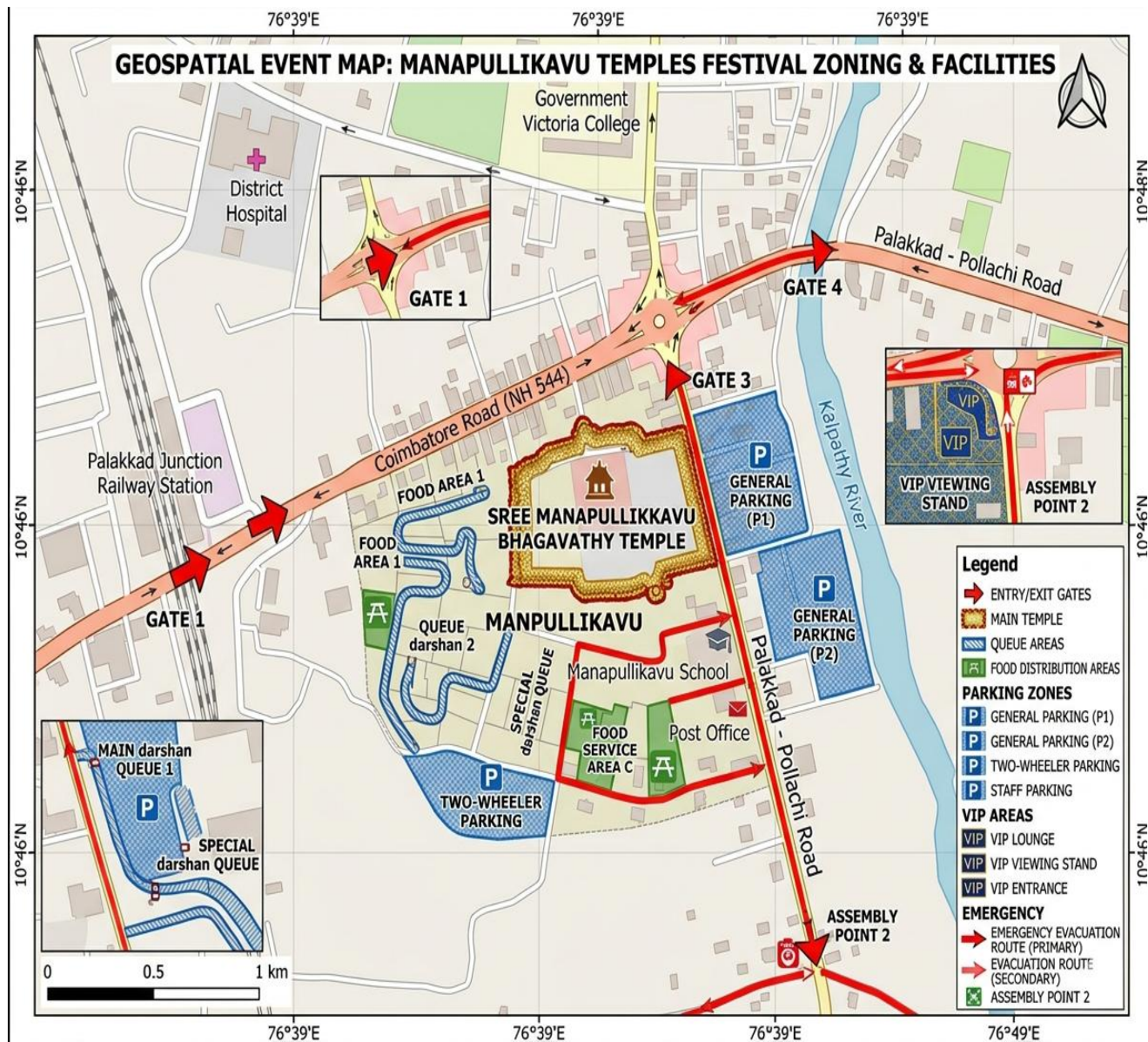
Footfall: Hundreds of thousands of devotees daily

Peak Days: Last day

Key Activities:

- Religious gatherings & prayers
- Elephant Processions
- Food distribution (Annadanam)
- Night programs
- Fire Works
- Mini Costume parade

## Geospatial Mapping (Event Medical Planning)



### Hospital List with Command Points

Primary Referral Hospitals: District Hospital Palakkad

Command Points Setup:

- Main Medical Command Center: At festival control room

Field Command Posts:

- Near main gate

- Near food distribution area
- Near parking area

## **SOP for Medical Hazards**

### A. Crowd-related incidents (Stampede):

- Immediate triage using START protocol
- Activate mass casualty plan
- Ambulance dispatch priority tagging

### B. Heat-related illness:

- ORS distribution points
- Shade/rest areas
- Rapid cooling protocols

### C. Cardiac emergencies:

- AED availability at key points
- CPR-trained staff deployment

### D. Food poisoning:

- Isolation area setup
- Rapid transport to hospital
- Food sample collection

### E. Fire incidents:

- Coordination with fire force
- Evacuation routes activation

## **HR Distribution List (Medical Team)**

### Command Structure:

- Incident Commander (Medical Officer)
- Deputy Commander
- Zone Medical Officers

#### Team Allocation:

- Triage Teams: At entry points
- First Aid Teams: Across venue
- Ambulance Teams: Mobile units

#### Specialists:

- Emergency physicians
- Nurses
- Paramedics
- Pharmacists

#### Support Staff:

- Volunteers
- Crowd control assistants

### **List of Empaneled Ambulances & EMTs**

#### Ambulance Types:

- ALS (Advanced Life Support)
- BLS (Basic Life Support)
- Patient Transport Vehicles

#### Deployment Plan:

- 1 ambulance per major zone
- 2–3 ambulances at main standby
- Dedicated referral transport units

#### Suggested Providers (example framework):

- Kerala Health Services
- 108 Emergency Response Service
- Local private ambulance services (empaneled)

## EMT Requirements:

- Certified EMT-B / EMT-A

## Trained in:

- CPR & AED
- Trauma care
- Mass casualty handling

**Contact Points**

SI No	District	DMO Office	Collectorate Control Room	DISHA
1	Palakkad	04912 505189 04912 505264	<b>Control Room</b> - 100 0491-2525340. 0491-2544927.	1056