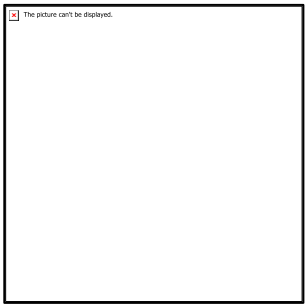
# MESSAGE FROM PRESIDENT/CHAIR LSGI




The Pandemic Preparedness Plan of Thirumarady Grama Panchayat has been developed with the objective of strengthening the capacity of the local self-government system to effectively prevent, detect, and respond to public health emergencies. The recent global experience with the COVID-19 pandemic highlighted the importance of preparedness, coordinated action, and community participation in safeguarding public health.

This plan outlines the strategies, roles, and responsibilities of various departments and stakeholders in ensuring timely surveillance, rapid response, efficient resource management, and community awareness during potential outbreaks or pandemics. It also emphasizes the importance of inter-sectoral coordination, early warning systems, and strengthening health infrastructure at the local level.

We appreciate the efforts of the health department, local institutions, and all stakeholders who contributed to the preparation of this plan. We hope that this document will serve as a practical guide for preparedness and response, helping Thirumarady Grama Panchayat to effectively manage any future public health emergencies.

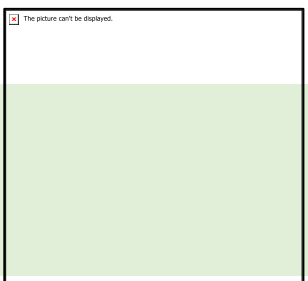
We extend our sincere gratitude to all those who supported this initiative and

look forward to continued cooperation in protecting the health and well-being of our community.

**PANCHAYATH PRESIDENT**

**THIRUMARADY PANCHAYATH**

# MESSAGE FROM HEALTH STANDING COMMITTEE CHAIR



# MESSAGE BY MEDICAL OFFICER

Pandemics pose a significant threat to public health, social stability, and the overall well-being of the community. Thirumarady Panchayath recognizes the importance of being adequately prepared to prevent, detect, and respond effectively to any emerging infectious disease threats. This Pandemic Preparedness Plan outlines the coordinated strategies for surveillance, early detection, case management, risk communication, interdepartmental coordination, and community participation. Strengthening local preparedness, ensuring timely response mechanisms, and fostering community awareness are key priorities to minimize morbidity and mortality during public health emergencies. Active collaboration between the Health Department, Local Self Government, ICDS, Education Department, Arogya Sena volunteers, and community stakeholders will be essential for successful implementation of this plan. Continuous capacity building, regular review of resources, and simulation exercises will further enhance our resilience against future pandemics. Together, with collective responsibility and coordinated action, we can safeguard the health and well-being of the people of Thirumarady Panchayath.

**DR VINOD**

**MEDICAL OFFICER**

**FHC THIRUMARADY**

# EXECUTIVE SUMMARY

Primary Health Centre (PHC) functions as the primary public healthcare institution serving the population of Thirumarady Grama Panchayath. The PHC plays a pivotal role in delivering comprehensive, accessible, and affordable healthcare services, with a strong focus on preventive, promotive, curative, and rehabilitative care in accordance with national and state health programmes.

The PHC caters to a predominantly rural population, addressing key public health priorities such as maternal and child health, communicable and non-communicable disease control, immunization, family welfare, adolescent health, and geriatric care. Regular outpatient services, home-based care through field health staff, and outreach activities ensure healthcare coverage even in geographically challenging areas. The institution actively implements national health missions, including the National Health Mission (NHM), National Tuberculosis Elimination Programme, National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), and other disease surveillance initiatives.

Thirumarady PHC works in close coordination with the Grama Panchayath, ASHA workers, Anganwadi centres, schools, and community-based organizations to strengthen community participation and improve health awareness. Emphasis is placed on early detection, timely referral, health education, and lifestyle modification to reduce disease burden and improve overall health outcomes.

Despite constraints related to infrastructure, manpower, and increasing service demand, the PHC continues to enhance service delivery through effective planning, data-driven decision-making, and community engagement. Strengthening facilities, upgrading digital health systems, and expanding preventive services remain key focus areas for future development.

Overall, Thirumarady Primary Health Centre stands as a vital institution in safeguarding public health and improving the quality of life of the residents of Thirumarady Grama Panchayath

# LIST OF ABBREVIATIONS

| | |
|---|---|
| **LSGD/LSGI** | **Local Self Government Department / Local Self Government Institution** |
| **BMO** | **Block Medical Officer** |
| **IDSP** | **Integrated Disease Surveillance Programme** |
| **NDMA** | **NATIONALDISASTER MANAGEMENT AUTHORITY** |
| **PPE** | **PERSONAL PROTECTIVE EQUIPMENT** |
| **ICMR** | **INDIANCOUNCIL OF MEDICAL RESEARCH** |
| **CD** | **COMMUNICABLE DISEASES** |
| **NCD** | **NON-COMMUNICABLE DISEASES** |

# TABLE OF CONTENTS

# INTRODUCTION

- **Background of the PPP**
- LSGD at a glance

# LSGD AT A GLANCE

- Geographical boundaries with political map ( based on latest delimitation)
- Baseline data
- Ward division -

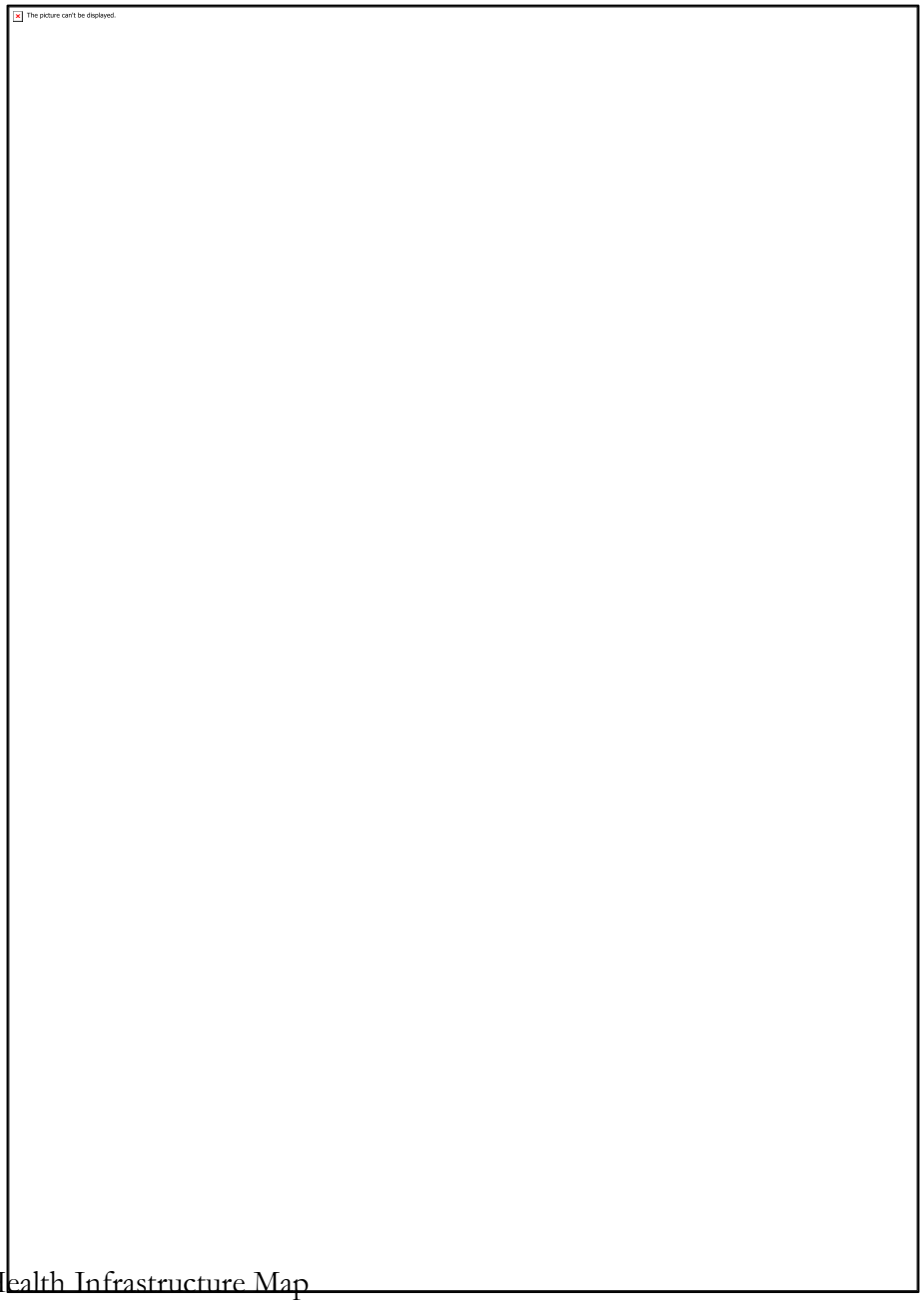
| Ward | Houses | Population | Migrants | Wells | Hot spots | Ed. Institutions | Hosp pvt/govt. |
|---|---|---|---|---|---|---|---|
| 15 | 5217 | 18385 | 459 | 4627 | nil | 8 | 4(govt) |

- Risk stratification among wards in the context of Communicable diseases and hazards
- Major Roads/rivers
- Major establishments with geospatial mapping
- occupational groups, socio cultural groups, migration & mobility patterns
- *Vulnerability mapping*
- Disaster prone areas (geographic vulnerability)

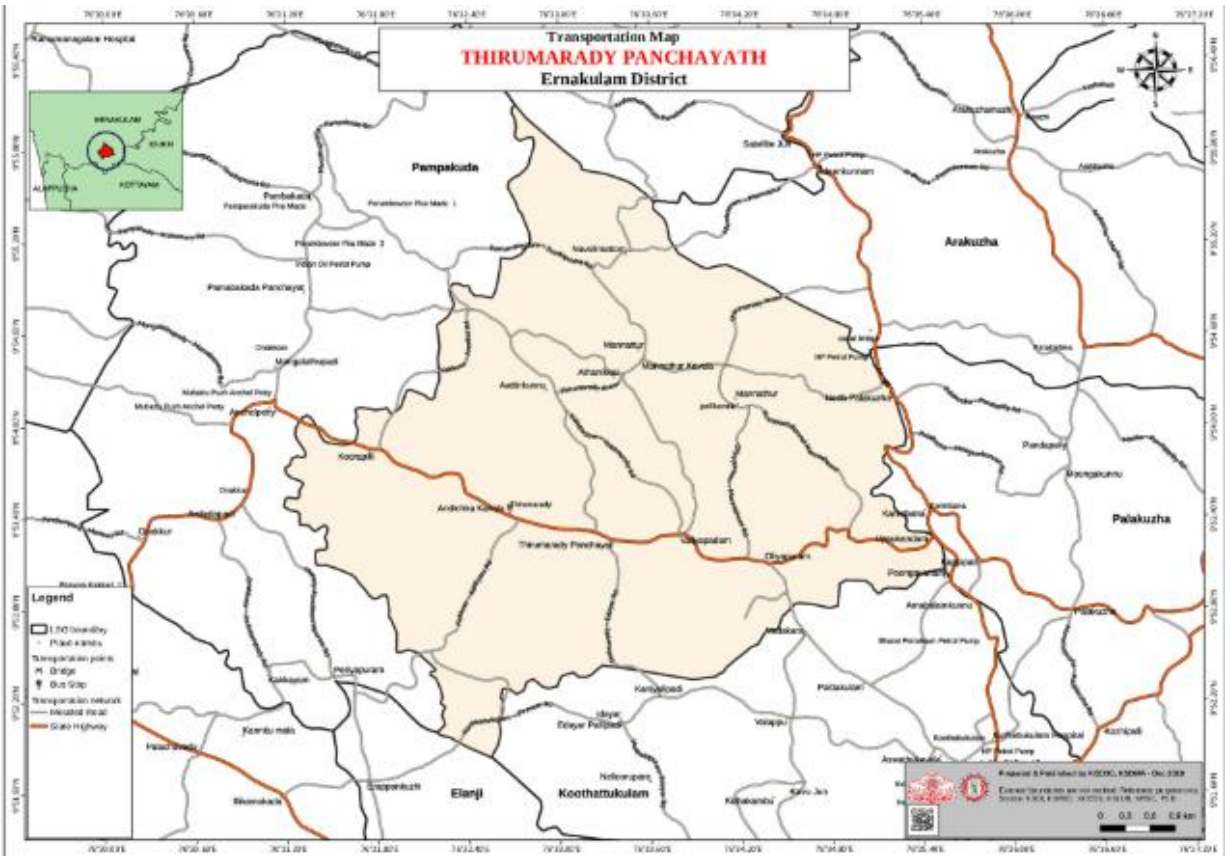
**Maps - ward-based (Mention source also)**

1. Geographical boundaries - ward boundaries map
2. Health infrastructure map
3. roads and rivers map
4. major establishments map
5. disaster-prone areas map
6. hotspot map - CD & disasters

# INTEGRATED HEALTH INFRASTRUCTURE MAP OF THIRUMARADY PANCHAYAT




Health Infrastructure Map




**Transportation Map**

Source – dmp.kila.ac.in

# GENERAL PROFILE OF THE LSGI'S

## Background of the LSGI

Thirumarady Grama Panchayat is situated in the pampakuda block of ernakulam district, Kerala. The geographical landscape of the Panchayat is predominantly low-lying, characterized by extensive paddy fields (Kole lands) and a dense network of rivers, canals, and backwaters. This unique terrain plays a significant role in shaping the local microclimate and poses distinct challenges to transportation, emergency response, and service delivery, particularly during monsoon seasons and flood events.

The Panchayat is administratively divided into multiple wards, with a population largely dependent on traditional livelihoods. Agriculture—especially paddy cultivation—fishing, coir and coconut husk processing, and allied activities form the backbone of the local economy. In recent years, tourism-related activities and service-sector employment have also shown gradual growth. The area hosts a diverse workforce, including a notable presence of migrant labourers, particularly in construction, agriculture, and allied sectors.

From a public health and disaster management perspective, Thirumarady LSGI has historically not been vulnerable to seasonal flooding, waterborne diseases, and vector-borne illnesses such as Dengue and Leptospirosis.. These recurring emergencies have underscored the importance of strengthening local preparedness, response mechanisms, and inter-departmental coordination.

In this context, the development of a localized, data-driven Auxiliary Infrastructure and Logistical Resource Map is essential to support effective planning, timely emergency response, and sustainable development initiatives. Such mapping enables the Panchayat to identify critical resources, improve accessibility during disasters, and enhance overall resilience of the community.

Table 1: Background of LSGD

| **Description** | **Details** |
|---|---|
| Name of LSGI | THIRUMARADY |
| Type (GP/Municipality / Corporation etc.) | Grama Panchayath |
| Block | PAMPAKUDA |
| District | ERNAKULAM |
| Number of wards | 15 |

Table 1: Background of LSGD

| Description | Details |
|---|---|
| Total area (sq. km) | 29.24 |
| Population(Projected) | 18385 |
| Population density | persons/sq km |
| Terrain (coastal/low-lying/backwaters/foothills, etc.) | Lowlying |
| Number of rivers passing through LSGI | Nil |
| Number of water bodies in the LSGI | 21 |
| Number of educational institutions | 8 |
| Factories / small-scale industries | 5 |
| Flood-prone wards | 1 |
| Landslide-prone wards | 0 |
| Death Management and Disposal Facilities (mortuaries/crematorium, including electric) | Nil |
| Auditoriums/Marriage halls/convention centres/community halls | Auditorium 3,marriage hall -0,convention centre-0,community hall-1 |
| | |
| | |
| | |
| | |

## Demographic and Vulnerable Population

Understanding the demographic composition and vulnerable population groups is essential for pandemic preparedness. Children, elderly, economically deprived families, migrant workers, and

socially vulnerable groups are at increased risk during public health emergencies due to higher exposure, limited access to services, and dependency on public systems..

| Description | | Details (in numbers) |
|---|---|---|
| DEMOGRAPHIC PROFILE | | |
| Total population | | 18385 |
| Male | | 9269 |
| Female | | 9116 |
| Transgender | | 0 |
| Children under 5 | | 212 |
| Adolescent | | 1014 |
| Elderly (>60) | | 3588 |
| SOCIAL/LIVELIHOOD VULNERABILITY | | |
| Previous EPEP family | | 17 |
| BPL family | | 1924 |
| Tribal communities | | 0 |
| Migration | Immigrant | 395 |
| | Emigrant | |
| Socio-economically deprived | | NIL |
| Fisherfolk | | NIL |
| SC Community | | 8 |
| ST Community | | NIL |

**Graphs:** Population pyramid (if possible) for seeing if your LSGI has a high "dependency ratio" (lots of children and elderly compared to working adults).

## Clinical Vulnerability

Certain population groups needs priority healthcare & are at higher risk of severe illness, complications, and mortality during pandemics. Patients with chronic diseases, those requiring regular medical care, and individuals with mobility or functional limitations face challenges in accessing timely care during emergencies. Mapping these groups helps in prioritizing continuity of treatment, medicine stock planning, oxygen support, referral transport, and targeted home-based care.

| Description | Details in numbers |
|---|---|
| Pregnant women | 14 |
| Lactating mothers | 87 |
| Bedbound patients | 43 |
| Patients under palliative care other than bedbound | 25 |
| Patients on Haemodialysis | 11 |
| Patients on CAPD | 0 |
| Cancer patients (currently on treatment) | 22 |
| Haemophilic patients | 0 |
| Mentally challenged | 0 |
| Differently abled | 3 |
| Diabetic patients | HD 1139 |
| Hypertensive patients | 1138 |
| TB patients | 6 |

## Major Festivals & Events specific to the LSGI
(with the possibility of a public gathering)

| Sl. No. | Name of festival | Month detailing the periodicity |
|---|---|---|
| 1 | ATTINKUNNEL PALLI | JANUARY |

| | | |
|---|---|---|
| 2. | ST.JOSEPH CHURCH MADAMKAVALA | JANUARY |
| 3. | MAHADEVA TEMPLE THIRUMARADY | DECEMBER – JANUARY |
| 4. | EDAPRAKAAVU,AMBASSERIKAAVU | FEBRUARY |
| 5 | KALAVAYAL | FEBRUARY-MARCH |
| 5. | NELLIKUNNEL CHURCH | FEBRUARY |
| 6. | TRIPATHATHIRIKULANGARA | APRIL-MAY |
| 7. | ERUMELI SREETHARMASHETHRAM | APRIL |
| 8 | MULLAVALLI SHIVASANGARA NARAYANA SHETHRAM | DECEMBER |

# INFRASTRUCTURE & RESOURCE INVENTORY

## Health Facility Directory & Basic Capacity in the LSGD

This section provides an overview of the healthcare infrastructure available within the LSGD area. It outlines the distribution and basic capacity of health facilities that form the backbone of service delivery during routine times and public health emergencies.

Family Health Centres (FHCs) and Community Health Centres (CHCs) generally function as the first point of contact for the community, providing essential outpatient and inpatient services. General Hospitals (GH) and Medical College Hospitals (MCH), where accessible, serve as the main referral centres for advanced diagnostics, specialist care, and critical services during public health emergencies. This inventory helps identify existing strengths, gaps, and potential surge capacity that can be mobilised during a pandemic or disaster.

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 | | | | | | | | |
| | FHC THIRUMARADY | FHC | 04852877300 | 0 | 0 | 0 | 0 | 0 |
| Private Healthcare Facilities | | | | | | | | |
| | NIL | | | | | | | |
| AYUSH Healthcare Facilities | | | | | | | | |
| | GOVT.Ayurveda Hospital | | 04852877033 | 10 | 0 | 0 | 0 | 0 |
| | Govt. Homeo hospital | | | 0 | 0 | 0 | 0 | 0 |

## Private Clinics

Private clinics are an essential part of pandemic preparedness, as they are often the first place people seek care when symptoms begin. In many communities, private clinics manage a significant share of outpatient visits and therefore play a critical role in early case detection, timely referrals,

and disease surveillance. Having an up-to-date understanding of where these clinics are located, the services they provide, and how they are linked to the public health system helps ensure that no cases are missed during an outbreak. It also allows health authorities to engage private practitioners more effectively for reporting, risk communication, and coordinated response, strengthening the overall capacity of the health system to manage public health emergencies.

Table 6. Private Clinic Resource Summary

| Sl No. | Name of Clinic | Registered (Y/N) | Clinic (General / Speciality) | Speciality (if any) | Address | Contact Number | Diagnostic Facility (Y/N) | Ambulance Linkage (Y/N) |
|---|---|---|---|---|---|---|---|---|
| 1 | St. Mary's clinic | N | GENERAL | Nil | Mannathoor (p. o) Thirumaradi | 9497699245 | N | N |
| | | | | | | | | |

## Healthcare Education & Training Institutions

This section tracks the educational infrastructure available, which is vital for human resource planning in the health sector.

| Category of Institution | Govt | Private | AYUSH | Total |
|---|---|---|---|---|
| Medical Colleges | 0 | 0 | 0 | 0 |
| Nursing Colleges | 1 | 0 | 0 | 1 |
| Dental Colleges | 0 | 0 | 0 | 0 |
| Para-medical / Allied Health | 0 | 0 | 0 | 0 |
| Pharmacy Colleges | 0 | 0 | 0 | 0 |

## Specialized Services & Emergency Inventory

This section provides a detailed view of the specialized medical resources available to the community, focusing on emergency response and critical care capabilities. This table tracks the vital assets required for managing severe illnesses and emergencies across Government, Private, and AYUSH sectors.

| Item | Govt | Private | AYUSH | Total |
|---|---|---|---|---|

| Item | Govt | Private | AYUSH | Total |
|---|---|---|---|---|
| Hospital beds | 10 | 0 | 0 | 0 |
| Oxygen-generating systems(Y/N) | 0 | 0 | 0 | 0 |
| Oxygen-supported beds(Numbers) | 0 | 0 | 0 | 0 |
| Ventilator-supported beds | 0 | 0 | 0 | 0 |
| ICU beds | 0 | 0 | 0 | 0 |
| Burns units | 0 | 0 | 0 | 0 |
| Blood centres | 0 | 0 | 0 | 0 |
| BLS ambulances | 0 | 0 | 0 | 0 |
| ALS ambulances | 0 | 0 | 0 | 0 |
| Dialysis facilities | 0 | 0 | 0 | 0 |
| Dispensaries | 0 | 0 | 0 | 0 |
| Medical store | 0 | 0 | 0 | 0 |
| Industrial establishments(**Medium-scale industries/small-scale industries establishments to whom we can depend in a worst-case scenario)** | 0 | 0 | 0 | 0 |

## Oxygen & Diagnostic Capacity

Monitoring **oxygen and diagnostic capacity** is a critical component of public health preparedness, ensuring that the LSGD can handle both chronic care and sudden surges in respiratory or infectious diseases.

| Name of Health Facility | Oxygen-generating System (Y/N) | Backup Oxygen Source (Y/N) | Diagnostic Facilities Available(Y/N) | | | | |
|---|---|---|---|---|---|---|---|
| | | | Lab | USG | X-ray | CT/MRI | RT-PCR |
| Government Healthcare Facilities | | | | | | | |
| FHC Thirumarady | 0 | 0 | Y | 0 | 0 | 0 | N |

| Name of Health Facility | Oxygen-generating System (Y/N) | Backup Oxygen Source (Y/N) | Diagnostic Facilities Available(Y/N) | | | | |
|---|---|---|---|---|---|---|---|
| | | | Lab | USG | X-ray | CT/MRI | RT-PCR |
| Private | | | | | | | |
| Nil | | | | | | | |

## Diagnostics facility mapping at the LSGI level

The diagnostic capacity of _____ **G.P** represents the "intelligence network" of our healthcare system. The speed and accuracy of disease identification depend entirely on the distribution and technical level of these facilities.

| Item | Govt | Private | AYUSH | Total |
|---|---|---|---|---|
| General labs | 2 | 4 | 0 | 6 |
| Microbiology labs | 0 | 0 | 0 | 0 |
| RT-PCR labs | 0 | 0 | 0 | 0 |
| USG units | 0 | 0 | 0 | 0 |
| CT/MRI units | 0 | 0 | 0 | 0 |
| Research labs | 0 | 0 | 0 | 0 |
| Labs of other departments that can be repurposed | 0 | 0 | 0 | 0 |

## Laboratory Identification & Basic Details

| Sl. No. | Name of Laboratory | Ownership (Govt / Private / Academic) | Address | Contact No. | 24×7 Services (Yes/No) | NABL / Govt Approved (Yes/No) |
|---|---|---|---|---|---|---|
| 1 | JJ DIAGNOSTIC | PRIVATE | THIRUMARADY | 9495045724 | NO | No |
| 2 | B.CARE THIRUMARADY | Private | Thirumarady | 9447456451 | No | No |
| 3 | St.Mary's | Private | Mannath | 98195554 | No | No |

| Sl. No. | Name of Laboratory | Ownership (Govt / Private / Academic) | Address | Contact No. | 24×7 Services (Yes/No) | NABL / Govt Approved (Yes/No) |
|---|---|---|---|---|---|---|
| | clinical lab | | oor | 09 | | |
| 4 | St. Mary's clinical lab | Private | Kakkoor | 9819555409 | No | No |

## Social and Community Infrastructure for surge plan

This table serves as our **logistics and shelter inventory.** By mapping these locations, quickly we can identify where to house displaced citizens, where to set up temporary medical clinics, and how to manage the deceased with dignity during a crisis.

| **Category** | **Total Count** | **Ward** | **Est. Capacity (Persons)** | **Contact details** |
|---|---|---|---|---|
| Educational Institutions | | | | |
| Anganwadis | 17 | 15 wards | 80 | |
| Schools | 5 | Ward3 ,ward 5,ward 9,ward 6,ward 11 | 30 | |
| Colleges | | | | |
| Healthcare Educational Institutions | | | | |
| Medical colleges (Govt/Private) | 0 | 0 | 0 | 0 |
| Nursing colleges (Govt/Private) | 1(govt) | Ward 5 | 40 | |
| Dental colleges (Govt/Private) | 0 | 0 | 0 | 0 |
| Paramedical institutes (Govt/Private) | 0 | 0 | 0 | 0 |
| Community Gathering Spaces | | | | |

| | | | | |
|---|---|---|---|---|
| Community halls | 1 | | 30 | |
| Auditoriums | 4 | | 100 | |
| Religious buildings | 0 | | | |
| Vulnerable Group Support Facility | | | | |
| Destitute homes | 0 | | | |
| Elderly homes | 1 | | 10 | |
| LSGD owned other buildings | 0 | | | |
| Mass Fatality Management (MFM) Infrastructure | | | | |
| Mortuary | 0 | | | |
| Crematorium | 0 | | | |

*refer annexure 1 for contact details

## Human resources

This section focuses on the **human capital** available within the LSGI. In any emergency—be it a pandemic, flood, or industrial accident—infrastructure is only as effective as the people operating it.

### Medical & Clinical Personnel

This table tracks the "Frontline" providers responsible for diagnosis, treatment, and clinical management. Narrative sentence: eg., "Total health workforce: 450 personnel, with 60% in government facilities serving as primary surge capacity." A detailed directory with the contact numbers of all workers is maintained (**Annexure in 1**).

| Cadre | Govt (No.) | Private (No.) | Total |
|---|---|---|---|
| Doctors—Modern Medicine | 1 | 1 | 2 |
| Doctors – AYUSH | 1 | 0 | 1 |
| Doctors – Veterinary | 1 | 0 | 1 |
| Doctors – Dental | 0 | 0 | 0 |
| Nursing officers | 3 | 0 | 3 |
| Lab technicians | 1 | 6 | 1 |
| Optometrist | 1 | 0 | 1 |
| Pharmacists | 1 | 0 | 1 |
| Psychologists | 0 | 0 | 0 |
| Counsellors | 0 | 0 | 0 |

### Public Health & Field-Level Workforce

These individuals are the backbone of surveillance, maternal-child health, and decentralized care.

| Cadre | Health services | Municipal common services | Total |
|---|---|---|---|
| HS (Health Supervisors) | 1 | 9 | 1 |

| Cadre | Health services | Municipal common services | Total |
|---|---|---|---|
| HI (Health Inspectors) | 1 | 1 | 2 |
| LHS (Lady Health Supervisor) | 1 | 0 | 1 |
| LHI (Lady Health Inspectors) | 1 | 0 | 1 |
| JPHN (Jr Public Health Nurses) | 3 | 0 | 3 |
| JHI (Jr Health Inspectors) | 2 | 0 | 2 |
| MLSP (Mid-Level Service Providers) | 4 | 0 | 4 |
| Palliative Nurses | 1 | 0 | 1 |
| RBSK Nurses | 1 | 0 | 1 |
| PRO | 1 | 0 | 1 |
| Epidemiologist | 1 | 0 | 1 |
| Data Manager | 1 | 0 | 1 |

## Community & Support Cadre

This group represents the surge capacity of the LSGI—people who can be called upon for logistics, rescue, and specialized support.

| Cadre | Number |
|---|---|
| ASHA Workers | 13 |
| AWW (Anganwadi Workers) | 16 |
| Emergency Medical Volunteers (Trained) | 0 |
| Kudumbashree | 112 |
| MNREGS | 127 |

| Cadre | Number |
|---|---|
| Purusha Swayam Sahaya Sangham | 0 |
| Ex-Servicemen | 0 |
| Retired Police Officers | 0 |
| NCC/NSS Volunteers | 0 |
| Red Cross volunteers | 0 |
| One Health Community Volunteers | 0 |
| One Health Community Mentors | 0 |

## Community Organizations

This section details the presence of community-based organisations (CBOs), non-governmental organisations (NGOs), faith-based organisations (FBOs), Kudumbashree Self-Help Groups (SHGs), and Ayalkootams within the Local Self-Government Institution (LSGI). These groups enhance grassroots mobilization, resource distribution, and support networks crucial for pandemic response and community resilience.

| Category | Total Count |
|---|---|
| NGOs | 0 |
| Religious based organizations | 2 |
| Foreign based organizations | 0 |
| Sports Club/youth clubs | 0 |
| Kudumbashree SHGs | 13 |
| Ayalkootams | |
| Political organizations | 3 |
| Residential organizations | 5 |

## Administrative & Emergency Services

This section outlines the availability of key non-health emergency support services and infrastructure within the LSGI, which are essential for effective pandemic preparedness and response. These facilities support law enforcement, disaster response, water supply, logistics, mobility, and community-level interventions during public health emergencies.

| Category | Total Count | Contact details |
|---|---|---|
| Police Stations | 0 | |
| Fire & Rescue Stations | 0 | |
| Water Pumping Points | 0 | |
| Public Distribution System (PDS) | 0 | |

## Information regarding resources

The availability of essential transport and support resources plays a quiet but critical role in saving lives. Equipment such as ambulances, mobile mortuaries, amphibian ambulances, and motorized boats ensures that patients, samples, and healthcare teams can move swiftly—even in flooded, remote, or difficult terrains. Heavy vehicles like JCBs, cranes, tractors, and torus lorries support logistics, waste management, emergency infrastructure, and rapid conversion of spaces into care or isolation facilities. Taxis, four-wheel-drive vehicles, and trucks help maintain continuity of essential services, reach vulnerable populations, and support home-based care and supply delivery.

| Means of transportation | Total Count |
|---|---|
| JCB | 4 |
| Crane | 4 |
| Heavy Trucks | 5 |
| Tractor | 2 |
| Ambulances | 1 |
| Mobile mortuaries | 0 |
| Boats | 3 |
| Taxi service | 6 |

**Note:** For specific details regarding vehicle owners and contact information, please refer to **Annexure [X]**.

## ONE HEALTH & ENVIRONMENTAL SURVEILLANCE

The One Health method integrates environmental, animal, and human health to enable proactive pandemic preparedness. Panchayat-level surveillance needs to be improved in order to detect and treat zoonotic and environmentally generated diseases early. Surveillance is strengthened through systematic assessment of animal populations, veterinary infrastructure, poultry and slaughter facilities, inter-sectoral coordination, and specialised tools like avian influenza seasonality mapping using GIS in previous outbreaks to enable predictive alerts and ward-specific sampling to support effective pandemic preparedness in high-risk areas like _____.

## Animal & Bird Population

Mapping animal and bird populations at the Panchayat level is essential for identifying and prioritising zoonotic disease hazards like rabies, avian influenza (H5N1), leptospirosis, anthrax, and Nipah-like spillover occurrences. Risk classification, targeted surveillance, vaccination planning, and early epidemic detection made feasible by comprehensive population mapping all enhance One Health-based pandemic preparedness.

| Category | Item | Estimated Population | Wards |
|---|---|---|---|
| Animal Population | Livestock (Cattle/Goats/Buffalo) | Cattle-921<br>Buffallo-116<br>Goat - 1599 | All wards |
| | Pet Animals (Dogs/Cats) | 1050 | All wards |
| | Stray Dog Population | 153 | All wards |
| | Pig Farms (Number of heads) | 153, 1 | 11 |
| | Small Units (Sheep / Goats – clustered) | 0 | |
| Bird Population | Poultry Units (Birds) | Poultry-1,48,706<br>Duck-256 | All wards |
| | Poultry- (FOWL) | 0 | |
| | Wild/Migratory Birds (Observed) | NIL | |
| | Crow Mortality Events | Nil | |

| Category | Item | Estimated Population | Wards |
|---|---|---|---|
| | (Reported) | | |

There is no risk of zoonotic diseases in **the Thirumarady panchayath.**. There is no considerable risk of avian influenza introduction and amplification in the panchayath.

## Veterinary Infrastructure

Veterinary institutions are a core pillar of One Health surveillance, enabling early zoonotic disease detection through vaccination, investigation of unusual animal illness or deaths, sample collection, and timely outbreak reporting. A well-mapped and responsive veterinary network strengthens coordination with human health and LSGI systems, ensuring rapid response during zoonotic events and pandemics.

| Facility Type | Name of Facility | Ownership Govt / Pvt | Location( Ward No) | Contact number |
|---|---|---|---|---|
| Veterinary Dispensary | 0 | | | |
| Veterinary Hospital / Polyclinic | 1 | Govt | 7 | 9745975397 |
| Private Veterinary Clinics | 0 | | | |
| Mobile / Emergency Vet Service (incl. night services) | 0 | | | |
| Pet Homes / Animal Shelters | 0 | | | |
| Slaughterhouse-linked Veterinary Inspection Unit | 0 | | | |

## Veterinary Doctors & Workforce

Early detection, diagnosis, reporting, and reaction to animal illness epidemics depend on the availability and accessibility of qualified veterinary specialists. By identifying unusual animal

morbidity or mortality promptly, collecting samples promptly, and coordinating efficiently with human health and LSGI systems—especially during zoonotic outbreaks and pandemic-prone situations—a clearly defined veterinary workforce enhances One Health surveillance.

| Category | Number Available | Type (Govt/Pvt) | Contact number |
|---|---|---|---|
| Government Veterinary Doctors | 1 | Govt | 9745975397 |
| Private Veterinary Doctors | 0 | | |
| Livestock Inspectors | 3 | govt | |
| Para-veterinary Staff / Attenders | 1 | govt | |
| Contract / On-call Veterinary Support (if any) | 0 | | |

## High-Risk Interface Points (Surveillance Sites)

There is no high-risk interface points for zoonotic disease surveillance in Thirumarady Grama Panchayath include *wetland–livestock–human contact zones, backyard poultry farms, cattle sheds near water bodies, fish markets, and areas of high human–animal interaction such as community slaughter points and migratory bird congregation sites*. These are the primary surveillance sites where zoonotic spillover risks are elevated.

| Type of Habitat | Type of High risk interface | Geographical vulnerability |
|---|---|---|
| **Wetlands & Backwaters** | Nil | |
| **Backyard Poultry Farms** | Nil | |
| **Cattle Sheds near Water Bodies** | Nil | |
| **Fish & Meat Markets** | Nil | |
| **Community Slaughter Sites** | Nil | |
| **Migratory Bird Congregation Areas** | Nil | |
| **Rodent-Infested Grain Storage** | nil | |

| Category | Total Count | Key Locations (wards) |
|---|---|---|
| Poultry Farms | 3 | 4,6,8 |
| Backyard / Clustered Poultry Units | 0 | |
| Duck Rearing Units (open water access) | 0 | |
| Slaughterhouses/ Slaughter Points | 0 | |
| Meat/Fish Markets | 0 | |
| Live Bird Sale Points | 0 | |
| Cattle Markets / Weekly Animal Fairs | 0 | |
| Pet Shops / Breeders | 0 | |
| Animal Shelters / Pet Homes | 0 | |
| Waste Disposal Sites near Animal Units | 0 | |

## Environmental Risk Mapping

Environmental risk mapping identifies monsoon/flood hotspots for vector-borne (dengue, chikungunya), water-borne (leptospirosis, diarrhoea), and zoonotic diseases in Kerala's wetlands. Systematic surveillance supports early warnings, targeted interventions, and Panchayat pandemic preparedness.

**Waterborne exposure**: Flood-prone areas and stagnant water bodies facilitate *leptospira survival*, raising leptospirosis risk.

**Traditional practices**: Informal slaughter and fish markets lack standardized hygiene, creating *spillover opportunities*.

| Risk Factor | High-Risk Wards | Key Locations | Risk Level (High/Med/Low) |
|---|---|---|---|
| Flood-prone areas | nil | | |

| | | | |
|---|---|---|---|
| Water bodies/wetlands | nil | | |
| Solid waste accumulation | Nil | | |
| Animal waste disposal issues | Nil | | |
| Rodent infestation zones | Nil | | |
| Industrial effluent discharge | Nil | | |
| Construction sites / abandoned buildings | 8,5 | Chinmaya vishwa vidyapeeth | Low |
| Poor drainage/blocked canals | Nil | | |
| Drinking water source contamination risk | nil | | |

## Disease Seasonality Mapping

1, **Flooding & waterlogging** → amplifies leptospirosis, malaria, diarrheal diseases.

.

**2, Migratory bird influx (Nov–Feb)** → avian influenza risk.

**3, Mosquito breeding cycles** → vector-borne disease peaks in monsoon.

**4, Agricultural practices** → close human–animal contact in paddy fields.

| Disease | Peak Risk Season | Key Drivers | High-Risk Locations | Surveillance Focus |
|---|---|---|---|---|
| Avian Influenza | NA | | | |
| Leptospirosis | NA | | | |
| Dengue/Chikungunya | Monsoon | | | |

| | | | | |
|---|---|---|---|---|
| Acute Diarrheal Diseases | | | | |
| Rabies | NA | | | |
| Anthrax (rare) | NA | | | |

## Vulnerability Mapping

Vulnerability mapping pinpoints high-risk populations, occupations, and areas exposed via environment, livelihoods, socio-economics, and poor service access. Paired with environmental/seasonality mapping, it enables risk-based surveillance, targeted actions, and optimal resource use in One Health and pandemic planning.

| Vulnerability Factor | High-Risk Wards | Key Groups / Locations | Risk Level |
|---|---|---|---|
| Flood-prone households | Nil | | |
| Wetland-adjacent communities | Nil | | |
| Backyard poultry / duck rearing households | Nil | | |
| Livestock-rearing households | Nil | | |
| Slaughterhouse & meat market workers | Nil | | |
| Fisherfolk & fish market workers | Nil | | |
| Sanitation workers | Nil | | |
| Daily wage / migrant workers | Nil | | |
| Elderly & chronically ill populations | Nil | | |
| Pregnant Women | Nil | | |
| Children (schools, Anganwadi's) | Nil | | |
| Limited access to safe water & sanitation | Nil | | |

# EPIDEMIOLOGICAL TRENDS (2021–2025)

Disease surveillance is the systematic collection, analysis, and interpretation of health data for planning, implementation, and evaluation of public health practice. This section presents the disease surveillance profile of the LSGI based on routine reporting systems and outbreak investigations to identify priority diseases, seasonal patterns, and emerging public health threats.

## Disease Burden among human beings(Last 5 Years)

Analysis of disease-wise data for the last five years helps identify persistent public health problems, emerging diseases, and changes in disease burden. This information supports prioritisation of prevention, preparedness, and response activities at the Panchayat level.

| Disease | 2021 | 2022 | 2023 | 2024 | 2025 | Trend(Increasing/Stable/Decreasing) |
|---|---|---|---|---|---|---|
| Dengue | | 6 | 21 | 14 | 4 | Decreasing |
| Leptospirosis | | 0 | 2 | 2 | 1 | Decreasing |
| Hepatitis A | 0 | 0 | 0 | 0 | 5 | Increasing |
| Malaria | 0 | 0 | 1 | 0 | 0 | Stable |
| Scrub Typhus | 0 | 0 | 0 | 0 | 0 | Stable |
| Typhoid | 0 | 0 | 0 | 0 | 0 | Stable |
| H1N1 | 0 | 0 | 0 | 0 | 0 | Stable |
| H3N2 | 0 | 0 | 0 | 0 | 0 | Stable |
| ADD | 12 | 15 | 68 | 14 | 25 | Increasing |
| Mumps | 0 | 0 | 0 | 0 | 0 | Stable |
| Measles | 0 | 0 | 0 | 0 | 0 | Stable |
| Hepatitis B | 0 | 0 | 2 | 4 | 2 | Stable |
| Hepatitis C | 0 | 0 | 0 | 0 | 0 | Stable |
| Tuberculosis | 5 | 8 | 9 | 10 | 6 | Decreasing |
| Leprosy | 0 | 0 | 0 | 0 | 0 | Stable |
| COVID-19 | 216 | 82 | 6 | 0 | 0 | Decreasing |

***(use the above table data to create the graph/diagram)**

## Seasonal Trend Analysis

Seasonal analysis helps anticipate surges (e.g. dengue in monsoon, leptospirosis after floods, influenza in cooler months) and plan pre-emptive vector control, stockpiling of IV fluids, and awareness campaigns at Panchayat level.

### DENGUE

Dengue is a major seasonal vector-borne disease strongly associated with rainfall, water stagnation, and increased mosquito breeding during the monsoon period.

Peak: July–November

Dengue – Ward-wise Yearly Distribution (2021–2025)

| Ward | Dengue – Ward-wise Yearly Distribution | | | | | |
|---|---|---|---|---|---|---|
| | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 1 | 2 | 0 | 0 | 2 |
| 3 | 0 | 0 | 1 | 2 | 1 | 4 |
| 4 | 0 | 1 | 1 | 0 | 0 | 1 |
| 5 | 0 | 0 | 2 | 0 | 0 | 2 |
| 6 | 0 | 1 | 0 | 2 | 0 | 2 |
| 7 | 0 | 0 | 2 | 1 | 1 | 4 |
| 8 | 0 | 0 | 1 | 1 | 0 | 2 |
| 9 | 0 | 1 | 3 | 0 | 0 | 3 |
| 10 | 0 | 0 | 3 | 2 | 1 | 6 |
| 11 | 0 | 1 | 0 | 0 | 0 | 0 |
| 12 | 0 | 0 | 6 | 1 | 0 | 7 |
| 13 | 0 | 00 | 0 | 1 | 1 | 2 |

## LEPTOSPIROSIS

Leptospirosis cases are closely linked to monsoon rains, flooding, and occupational exposure, particularly in low-lying and waterlogged areas.

Peak: June - August

Leptospirosis – Ward-wise Yearly Distribution (2021–2025)

| Ward | Leptospirosis – Ward-wise Yearly Distribution | | | | | |
|---|---|---|---|---|---|---|
| | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 1 | 0 | 0 | 1 |
| 4 | 0 | 0 | 0 | 1 | 0 | 1 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 1 | 1 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 0 | 0 | 1 | 0 | 0 | 1 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 1 | 0 | 1 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 |

## VIRAL HEPATITIS - A

Hepatitis A cases are commonly associated with unsafe drinking water, food contamination, and breakdowns in sanitation, often presenting as clusters or outbreaks.

Peak: October - December

Hepatitis A – Ward-wise Yearly Distribution (2021–2025)

| Ward | Hep A – Ward-wise Yearly Distribution | | | | | |
|---|---|---|---|---|---|---|
| | 2021 | 2022 | 2023 | 2024 | 2025 | Total |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 0 | 0 | 0 | 0 | 5 | 5 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 |

## Outcome-Based Trend Analysis- 2025

## Transmission Trend- 2025

For effective management of public health issues, it is important to track the trend of disease transmission mode. It helps identify the population or place at high risk that can be used to predict outbreaks and implement targeted interventions as quickly as possible. Understanding these kinds of trends enables authorities to allocate resources efficiently and change the strategies adequately based on the trend that follows.

| Mode of Transmission | No. of cases | No. of Deaths |
|---|---|---|
| Vector Borne Diseases | 4 | 0 |
| Water Borne Diseases | 4 | 0 |
| Air Borne Diseases | 0 | 0 |
| Blood Borne Diseases | 2 | 0 |
| Food Borne Diseases | 0 | 0 |

### Vector-Borne Disease

| Disease | No. of Cases | No. of Deaths |
|---|---|---|
| Dengue | 4 | 0 |
| Malaria | 0 | 0 |
| Chikungunya | 0 | 0 |

### Water Borne Disease

| Disease | No. of Cases | No. of Deaths |
|---|---|---|
| Cholera | 0 | 0 |
| Typhoid | 0 | 0 |
| Hep- A | 4 | 0 |
| Dysentery | 0 | 0 |
| Amoebiasis | 0 | 0 |
| E- Coli infections | 0 | 0 |

## Air Borne Disease

| Disease | No. of Cases | No. of Deaths |
|---|---|---|
| Influenza | 0 | 0 |
| H1N1 | 0 | 0 |
| TB | 6 | 0 |
| Chickenpox | 0 | 0 |
| Measles | 0 | 0 |
| Covid-19 | 0 | 0 |
| Pertussis | 0 | 0 |
| Mumps | 0 | 0 |

## Blood-Borne Disease

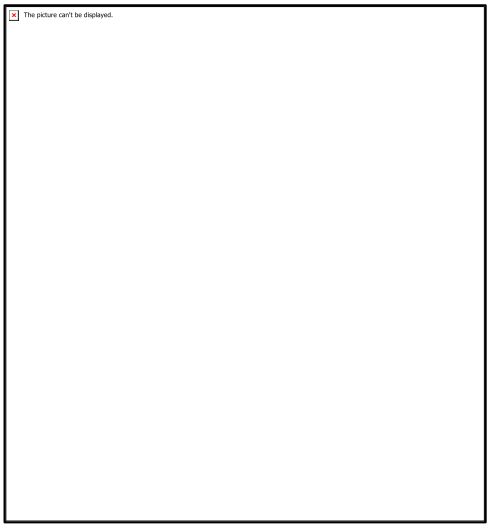
| Disease | No. of Cases | No. of Deaths |
|---|---|---|
| AIDS | 0 | 0 |
| Hep- B | 2 | 0 |
| Hep- C | 0 | 0 |

## Zoonotic Disease

| Disease | No. of Cases | No. of Deaths |
|---|---|---|
| Rabies | 0 | 0 |
| Leptospirosis | 2 | 0 |
| Avian influenza | 0 | 0 |
| West nile | 0 | 0 |
| Anthrax | 0 | 0 |

| | | |
|---|---|---|
| Nipah | 0 | 0 |
| Scrub Typhus | 0 | 0 |

## Integrated Disease Hotspot Map (2021–2025)




| Ward No | Dengue Total (2021-25) | Leptospirosis Total (2021-25) | Hepatitis A Total (2021-25) | Mumps (2021-25) | ADD (2021-25) | Total Cases |
|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 6 | 6 |
| 2 | 2 | 0 | 0 | 0 | 7 | 9 |
| 3 | 4 | 1 | 0 | 0 | 9 | 14 |
| 4 | 1 | 1 | 0 | 0 | 8 | 10 |
| 5 | 2 | 0 | 0 | 0 | 17 | 19 |
| 6 | 2 | 1 | 0 | 0 | 5 | 8 |
| 7 | 4 | 0 | 0 | 0 | 12 | 16 |
| 8 | 2 | 1 | 0 | 0 | 5 | 8 |
| 9 | 3 | 0 | 5 | 0 | 4 | 12 |
| 10 | 6 | 0 | 0 | 0 | 18 | 24 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 11 | 0 | 1 | 0 | 0 | 13 | 14 |
| 12 | 7 | 0 | 0 | 0 | 14 | 21 |
| 13 | 2 | 0 | 0 | 0 | 7 | 9 |

# Preparedness and Response Protocol at LSG Level

This section describes the operational framework for the LSGI once a pandemic is declared. It explains how the LSGI and health system will move from routine data collection to active response, using a One Health approach.

## Constitution of One Health Committee

The LSGD shall constitute a One Health Committee comprising the LSGI President, Medical Officers (Modern Medicine, AYUSH, and Veterinary), the Health Inspector, and the Veterinary Surgeon.

**Objective:** The One Health Committee coordinates human, animal, and environmental health to prevent and control pandemics.

| Sl No | Name | Designation | Department/Institution | Role in Committee | Contact Number |
|---|---|---|---|---|---|
| 1 | A C Jhonson | Panchayat President | LSGD | Chairperson | 9961791040 |
| 2 | Dr Vinod | Medical Officer (PHC/CHC) | Health Dept | Member Secretary | 9605466066 |
| 3 | Shibu | Veterinary Officer | Animal Husbandry | Member | 9745975397 |
| 4 | Dr Adithya K | Epidemiologist | Health Dept | Member | 7559826445 |
| 5 | Arya Vijayan | Health Inspector/PHN | Health Dept | Surveillance | 7510480785 |
| 6 | Sherin Paul | ASHA Supervisor | Health Dept | Community link | 9961663757 |
| 7 | Sunitha | ICDS Supervisor | Social Welfare | Vulnerable groups | 9961512662 |
| 8 | Koothattukulam | Police Station Officer | Police Dept | Law & order | 04852-252323 |
| 9 | Sinu kakkoor | Ward Councillor Representative | LSGD | Community coordination | 9605529249 |
| 10 | Sajani raju | Kudumbashree CDO | Kudumbashree | Community mobilisation | 9744061847 |

| | | | | | |
|---|---|---|---|---|---|
| 11 | | NGO/Volunteer rep | Civil Society | Support services | |
| 12 | | Line Department representations | | | |

Key Responsibilities:

- Review disease surveillance data (human + animal)
- Conduct ward-wise risk assessment and vulnerability mapping
- Approve quarantine/isolation centre locations
- Coordinate with district for resources (PPE, oxygen, ambulances)
- Periodically review health system surge capacity, including beds, oxygen, human resources, and ambulances.
- Approve and monitor risk communication and community engagement strategies, including rumour management.
- Ensure protection and service continuity for vulnerable groups (elderly, persons with disabilities, dialysis patients, coastal populations).
- Conduct quarterly mock drills
- Monitor equity measures for vulnerable groups

Meeting Schedule:

Quarterly (normal times) | Weekly (outbreak alert) | Daily (pandemic phase)

## Pandemic Response Workforce

To ensure a coordinated and timely response during a pandemic, a dedicated Pandemic Response Workforce shall be constituted at the LSG level. The workforce will function under the overall supervision of the One Health Committee and in close coordination with the health authorities. Team-based deployment will enable efficient surveillance, case management, quarantine and isolation management, logistics support, and risk communication. Each team shall have a clearly designated team leader, defined roles, and an identified pool of personnel to allow rapid activation, rotation of duties, and continuity of services during prolonged emergencies.

**Total Response Workforce Available: 300 persons**

| Team Name | Composition | Key | Team Leader |
|---|---|---|---|

| | | Responsibilities | |
|---|---|---|---|
| **Surveillance and Contact Tracing Team** | HI, JHI, JPHN, ASHAs and Volunteers | Case detection, contact listing, home visits, reporting | HI |
| **Case Management Team** | Doctors, Nurses, MLSP, Palliative Nurses | Patient care & referral | DOCTOR |
| **Quarantine & Isolation Team** | LSGD staff, Volunteers | Facility management | JHI |
| **Psychosocial support** | Nil | | |
| **Logistics & supply chain Team** | LSGD staff, Storekeepers, | Supplies & transport [PPE, medicines, oxygen, transport, waste management] | Ward Member |
| **Communication Team** | Ward members, Kudumbashree, Youth clubs, AWW workers and other self help groups | IEC, community meetings, countering misinformation | M.O in charge |
| **Transportation** | KSRTC, educational institutional buses | | |
| **Media Surveillance** | PRO | | PRO |
| **Intersectoral coordination and convergence** | HI | | HI |
| **Collaborative surveillance** | M O | | M O |

All teams shall be activated immediately upon outbreak alert or pandemic declaration and shall report daily to the LSG Incident Commander/Medical Officer, with consolidated reporting to the Block PHC. Duty rosters and alternate personnel shall be maintained to ensure uninterrupted services during staff shortages or prolonged response periods. Team composition and numbers may be revised based on the magnitude of the outbreak and availability of human resources.

## Activities and Measures before and during Pandemic

## PHASE 1 - Alert / Preparation

**Surveillance and Reporting-Enhanced syndromic surveillance:**

1. **Data sources for surveillance:** IHIP, HMIS, E-Health, Communicable Disease Register
2. **Event-based triggers (to be monitored and reported):**

   Cluster of fever cases in one locality

   Death of unknown cause

   More than 2 cases reported from a ward

   Sudden high absenteeism in schools or work place

3. **Zoonotic and animal health surveillance**

   Sudden animal/bird death

   Abortion storms in cattle

   Respiratory outbreaks in poultry

   Neurological signs (excess salivation, aggression) in animals

4. Logistics and Stock Preparedness

- Identify and empanel local vendors and define emergency procurement mechanisms in accordance with existing LSGD and Health Department norms.
- Prepare and maintain an essential logistics checklist covering medical supplies, consumables, and support equipment.
- Pre-identify secure storage locations for emergency stocks and ensure maintenance of stock registers with regular updating.
- Finalise emergency transport arrangements, including availability of vehicles and identified drivers for rapid deployment during alerts.
- Designate a Nodal Officer for Logistics to enable prompt decision-making, coordination, and communication during emergencies.
- Conduct rapid stock verification and ensure availability of minimum buffer stock, including:

- PPE kits –0
- Pulse oximeters – 3
- Hand sanitizers litres -0
- Masks, gloves, disinfectants – adequate quantity

Identify critical gaps in logistics and immediately communicate requirements to the Block and District authorities for timely replenishment and support. Monitor expiry dates and stock rotation.

## ➢ Identification of Quarantine and Isolation Facilities

- Identify and list suitable buildings for quarantine and isolation (schools, hostels, community halls, etc.).
- Categorise cases as per the severity and allocate to appropriate facilities (for instance, severe cases to classrooms, mild cases to an assembly hall in case of a school).
- Facility readiness checklist needed (beds, toilets, ventilation) etc.
- Find an alternate site if the primary sites are not available or not in use.
- Identify facility managers and support staff
- Prepare basic SOPs for:

**Food, water, sanitation**

**Source Protection**:

Immediately inspect and protect all public water sources (wells, borewells, taps).

Ensure hand pumps are at least 20 feet away from any toilet or soakpits.

**Chlorination&Testing**:

Maintain a residual chlorine level of 0.5 mg/L during the outbreak (increased from the normal 0.2mg/L).

The Village Water and Sanitation Committee (VWSC) must conduct daily testing using Field Test Kits (FTKs) and report results to the PHC.

**Safe Handling**: Distribute Information, Education, and Communication (IEC) materials advising households to boil water for 20 minutes and store it in narrow-necked, covered

containers.

**Alternative Supply**: If a source is contaminated, the GP must provide tanker water or seal the source and provide disinfection tablets (e.g., halogen tab)

## Infection prevention and waste disposal

Public Area Disinfection: Regularly disinfect public places (markets, GP office, religious sites) using1%SodiumHypochloritesolution.

**CommunityToilets**:

Clean Community Sanitary Complexes (CSCs) at least twice daily with disinfectants. Provide soap and running water at all public toilet entries.

- Ensure availability of basic amenities: water, sanitation, electricity, ventilation, and waste disposal. Prepare a rapid activation plan for these facilities if case numbers increase.

    - Infection prevention and waste disposal

- Ensure availability of basic amenities: water, sanitation, electricity, ventilation, and waste disposal. Prepare a rapid activation plan for these facilities if case numbers increase.

### ➢ Risk Communication and Community Preparedness

- Disseminate **e**arly warning messages on symptoms, preventive measures, and reporting mechanisms. Display IEC materials both in English and the local language in public places and ensure ward-level awareness.
- Sensitize elected representatives and community leaders on preparedness measures.
- Establish a rumour tracking and misinformation response mechanism to identify, verify, and promptly counter false or misleading information.
- Engage trusted local persons (ward members, ASHA workers, religious leaders, teachers, community volunteers) to communicate official public health messages and reinforce correct practices.
- Develop and deploy targeted IEC materials for:
    - Schools and educational institutions
    - Markets and commercial areas
    - Work sites and labour settings

- Conduct community sensitization meetings at the ward level to promote preventive behaviors, address concerns, and strengthen community participation in preparedness and response.

➢ **Protection of Vulnerable Groups**

Vulnerable populations require priority protection through targeted line-listing, service continuity, and delivery mechanisms.

- Prepare and regularly update **line-lists** of vulnerable populations, including:
  - Elderly persons living alone
  - Persons with disabilities
  - Pregnant women
  - Migrant workers
  - Dialysis patients

  The detailed line-lists shall be maintained as **Annexure** ___ and updated periodically.

➢ Clinical Dependency Mapping

Develop ward-wise dependency and vulnerability maps to identify households requiring regular support during emergencies. Ensure continuity of essential health services for vulnerable groups, including

- Dialysis services (facility mapping, transport arrangements, and scheduling)
- Continuity of treatment for TB, HIV, and other chronic conditions requiring uninterrupted medication
- Mental health and psychosocial support services

Establish **delivery mechanisms** for food, essential commodities, and medicines to vulnerable households through coordinated action involving ASHAs, JPHNs, Kudumbashree, volunteers, and local administration.

# PHASE 2 - Active Response

## 1. Case Identification and Contact Tracing

Case detection and contact tracing activities will be carried out in coordination with the Health authorities, following disease-specific SOPs and IDSP guidelines.

**Field Staff Involved**

- Health Inspector (HI)
- Junior Health Inspector (JHI)
- Junior Public Health Nurse (JPHN)
- ASHAs and ASHA Supervisors
- Ward-level volunteers and Kudumbashree members (as required)

## 2. Screening Checkpoints

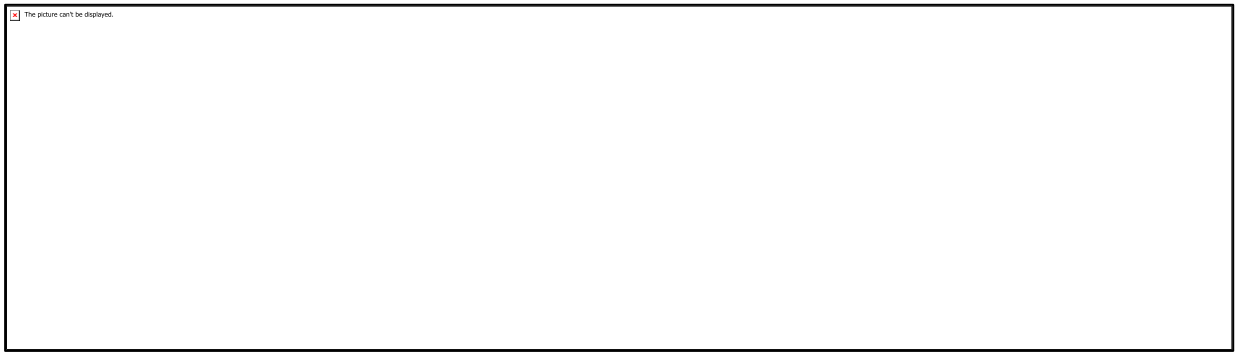
Screening checkpoints at high-traffic locations (transport hubs, markets, religious gatherings) for early detection of symptomatic travellers and crowd screening during outbreaks. Potential locations include bus stands, market entry points, and boat jetties, based on local context and risk assessment.

Screening activities will be carried out by trained personnel such as ASHAs, ward members, and volunteers, with support from Health Department staff. Necessary equipment, including non-contact thermometers and appropriate PPE, shall be ensured prior to activation.

| Location | Type (Bus stand/Jetty/Market/Railway) | Staff Deployed (ASHAs/Volunteers) | Screening Method | Reporting authority |
|---|---|---|---|---|
| Bus stand | Transport hub | One JHI<br>One ASHA<br>One health Mentors | 1.Swab Collection.<br>2. Blood smears collection (RDT)<br>3.Thermal Scanners | Surveillance Nodal Officer in control room |
| Market entry | Market | One JHI<br>One ASHA<br>Male health | 1.Swab Collection.<br>2. Blood smears collection (RDT) | Surveillance Nodal Officer in |

| | | | | |
|---|---|---|---|---|
| | | volunteers | 3.Thermal Scanners | control room |
| Boat jetty | Water transport | One JHI<br>One ASHA<br>Male health volunteers | 1.Swab Collection.<br>2. Blood smears collection (RDT)<br>3.Thermal Scanners | Surveillance Nodal Officer in control room |

## Standard Screening Protocol




The screening protocol shall include temperature screening, observation for visible symptoms, and inquiry regarding recent travel or exposure history. Individuals identified as suspects during screening shall be immediately referred to the nearest PHC/FHC for further evaluation, testing, and appropriate action as per prevailing guidelines.

### 3. Pandemic Control Room

The Pandemic Control Room (PCR) serves as the central nerve center for real-time coordination, data aggregation, decision support, and communication during outbreaks. It consolidates information from all LSGD teams, health facilities and community sources to enable rapid response decisions.

#### Control Room Infrastructure and Location

**Primary Location:** Thirumarady Panchayath Hall

**Backup Location:** mini Auditorium, Kakkoor.

## Health System Control Room Framework

The PCR is organized into **seven functional pillars** to ensure no aspect of the response is overlooked:

1. ***Rapid Response Team (RRT)***
    - Provides immediate intervention during emergencies, clusters, and field alerts.
    - Coordinates urgent actions such as case investigation, contact tracing, isolation, and inter-facility referrals.
2. ***Data Management & Analytics Team***
    - Collects, validates, and manages key health system indicators (cases, tests, beds, HR, supplies).
    - Analyzes data trends, generates projections, and supports evidence-based decision-making for local authorities.
3. ***Human Resource Deployment Team***
    - Allocates healthcare staff efficiently based on workload and need
    - Ensures adequate and equitable workforce distribution across facilities
4. ***Laboratory Surveillance Team***
    - Oversees diagnostic testing coordination, sample transport, and timely reporting of results.
    - Monitors lab indicators (testing volume, positivity rate, turnaround time) for early detection of outbreaks
5. ***Vaccination Cell (If Required)***
    - Plans and executes vaccination campaigns, including micro-planning and session scheduling.
    - Tracks coverage, identifies gaps, and coordinates corrective actions with field teams and outreach services.
6. ***Infrastructure & Patient Occupancy Team***
    - Monitors facility capacity, earmarked beds, oxygen and critical care resources across all linked facilities.
    - Ensures optimal patient distribution and referral management using updated bed-status and resource data.
    - BMWM
7. ***Communication team***
8. ***Logistics and supply chain***
9. ***Transportation (interfacility & emergency transport)***
10. ***Media surveillance Call centre***
11. ***Management of the deceased***
12. ***Intersectoral coordination and convergence***

## Key Control Room Team

The Control Room Team coordinates all pandemic response activities within the LSGD and serves as the single command and communication hub during activation. It integrates information, field actions, logistics, and policy execution across all participating departments and health facilities.

| Role | Name | Designation | Contact Number | Responsibility |
|---|---|---|---|---|
| **In-charge/Nodal Officer** | Rejimon T P | Panchayath Secretary | 8075694928 | Overall coordination, decision-making, and reporting to the District level. |
| **Data Entry Operator** | Diljith | TA | 9746956763 | Managing the line list, updating dashboards, and tracking testing results. |
| **Communication Officer** | Arya Vijayan | HI | 7510480785 | Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls. |
| **Logistics Coordinator** | Shibu | JHI | 9961842893 | |
| **Technical Support***(IT/Data)* | Diljith | TA | 9746956763 | |

SOP for alert escalation/trigger point with mapping of responsibilities.

**Key Points:**

- The Control Room shall be staffed with a designated In-charge, data entry personnel, and communication staff with clearly defined roles and shift arrangements.
- It shall maintain updated records on daily monitoring indicators including new cases, persons under active quarantine, and hospital bed occupancy.
- All reports and situation updates shall be shared daily with the Block and District Surveillance Unit.

- The Control Room shall act as a single point of contact for coordination with response teams, health institutions, and other departments.

- Contact details of the Control Room shall be widely communicated to field staff and stakeholders during activation.

## Daily Monitoring Indicators

To ensure timely decision-making and effective response, the following key indicators shall be monitored and updated on a daily basis by the Pandemic Control Room:

1. **Epidemiological Indicators:**

   New cases reported today, Total active cases, Test Positivity Rate (TPR), Case Fatality Rate (CFR)

2. **Surveillance Indicators:**

   Persons under home quarantine, High-risk contacts identified, Fever, ILI, SARI or other symptoms (syndromic surges), Travellers (symptomatic or high-risk arrivals),Animal husbandry surveillance (zoonotic alerts, unusual animal deaths, poultry/bird flu signals), Mortality surveillance (excess deaths, unexplained fatalities, verbal autopsy reports)

3. **Logistics and Infrastructure Indicators:**

   Hospital / CFLTC beds occupied, Oxygen cylinders/concentrators available, Ambulances on standby

4. **Alert Findings**

   The following table outlines category-specific **trigger points (red flags)** from surveillance indicators and corresponding immediate actions for the Pandemic Control Room. These enable rapid response to alert findings like testing anomalies, positive cases exceeding thresholds, clusters, and WGS reports.

| Category | Trigger Pophint (Red Flag) | Immediate Action |
|---|---|---|
| **Clusters** | **Geographical or facility-based:** 5+ cases linked to one location (office, school, street). | Declare a micro-containment zone; perimeter control and active case finding. |
| **Testing** | Sudden drop in testing volume / | Review the sample collection |

| | | |
|---|---|---|
| | delay in reporting / unusual testing trends | process, address lab bottlenecks, deploy additional testing teams, and notify the District Lab. |
| **Lab** | Test Positivity rate increases | Increase testing sites in that ward. |
| **Hospital** | >80% Oxygen bed occupancy | Activate backup/CFLTC beds. |
| **Travel** | Cluster of cases from a single flight/train or high-risk arrival group. | Trace all passengers in adjacent seats; implement mandatory institutional quarantine. |
| **Animal** | Mass poultry/wildlife death or unusual sickness | Notify Animal Husbandry, sample the area, and dispatch RRT for environmental sampling and zoonotic check. |
| **Mortality** | Sudden spike in home deaths or brought-in-dead (BID) cases | Audit the deaths and Active Case Search drive |
| **Additional investigations like Whole Genome Sequencing (WGS)** | Detection of a **Variant of Concern (VOC) or Variant of Interest (VOI)** | Implement strict micro-containment; update clinical protocols to match variant severity. |

## 4. Communication of Public Health Information

A Community Communication Hub shall be established to ensure timely, accurate, and consistent dissemination of information during a pandemic. The Hub will function under the coordination of Nodal officers of the control room and act as the nodal point for public communication, risk messaging, and community engagement. **It will support dissemination of official advisories, promote preventive behaviors, address rumors and misinformation, and ensure that messages reach all sections of the population through trusted local channels and leaders.**

Key communicators

- | Channel | Responsible Person | Contact |
|---|---|---|
| Ward-level announcements | ASHA Worker | 9562732218 |
| Social media messages | PRO | 7907633080 |
| Local Cable TV/Radio messages | | |

disseminated through the Hub shall align with advisories issued by the Health Department and District authorities.

- Community leaders shall be sensitized to support behavior change, reduce stigma, and counter misinformation.

- Special efforts shall be made to reach vulnerable and hard-to-reach populations using locally appropriate communication methods.

**Rumor Tracking:** A designated volunteer will monitor local social media/WhatsApp groups daily to identify misinformation and issue official clarifications via the Communication Hub.

## 5. Coordination with District/State Authorities & Other Organisations

Effective coordination with Block, District, and State authorities is essential to ensure timely reporting, technical guidance, and uninterrupted supply of essential resources during a pandemic. The LSG shall establish clear communication channels, designate responsible officers, and adhere to prescribed reporting timelines to support coordinated public health action and efficient resource mobilisation.

Key Details:

- **Nodal Officer for Reporting: Dr .Vinod P**
- **Contact Number:9605466066**

Reporting Schedule and Protocols:

| To Whom | What to Report | Frequency | Nodal Person |
|---|---|---|---|
| **Block PHC** | Complete Situation Report (Cases, Quarantine, Beds, Screening, Deaths) | | Health Inspector |
| **District IDSP Unit** | Outbreaks/Clusters/Unusual Events (>5 cases same ward) | | Block Medical Officer |
| **Veterinary Officer** | Animal health events/Zoonotic alerts | | Junior Health Inspector |
| **State Cell** | Zoonotic cross-sector events | | Veterinary Officer |

## Supply Chain Coordination

The LSG shall coordinate closely with Block, District, and State authorities (KMSCL) to ensure uninterrupted availability of essential goods, medical supplies, and logistics during a pandemic. Supply requirements shall be assessed regularly based on case load and communicated promptly to the appropriate authorities for timely replenishment.

**Key Points:**

- Maintain updated contact details of District and Block nodal officers for health logistics, oxygen supply, ambulances, and essential medicines.
- Submit timely indent requests for PPE, testing kits, medicines, oxygen, and other critical supplies through prescribed channels.
- Monitor stock levels at LSGD facilities, quarantine/isolation centres, and field teams through daily stock registers and dispensing logs to prevent shortages.
- Coordinate with District authorities, Karunya/Neethi medical shops, and local purchase committees for funds allocation and emergency procurement.
- Ensure regular monitoring of dispensing registers at all facilities to track usage, expiry, and pilferage—shortages being a perennial issue requiring proactive weekly audits.

- Activate surge procurement protocols during high caseloads, leveraging local purchase powers under LSGD funds alongside state supplies.

## Resource Inventory and Contacts

| Resource Category | Source (District/State/Private) | Contact |
|---|---|---|
| **PPE Kits/Masks/Gloves** | KMSCL | 04842555009 |
| **PPE Kits/Masks/Gloves** | Neethi medicals | 7907195612 |
| **Oxygen Cylinders/Concentrators** | KMSCL | 04842555009 |
| **Medicines/Antivirals** | KMSCL | 04842555009 |
| **Medicines/Antivirals** | Neethi Shops | 7907195612 |
| **Test Kits (RTPCR/Rapid)** | KMSCL | 04842555009 |

## Collaboration with NGOs, PPP, and CSR

To augment government efforts during a pandemic, the LSG shall collaborate with NGOs, voluntary organisations, and private sector partners through public–private partnerships and Corporate Social Responsibility (CSR) initiatives, in coordination with District authorities.

**Key Points:**

- Engage NGOs and community-based organisations for community outreach, awareness, and support to vulnerable populations.
- Leverage CSR support for procurement of medical equipment, PPE, oxygen concentrators, food kits, and sanitation materials, as permitted.
- Ensure all collaborations align with government guidelines and are routed through approved administrative and financial procedures.
- Maintain transparency and documentation for all external support received and utilised.

| Organization | Type | Support Offered | Contact Person |
|---|---|---|---|

| | | | |
|---|---|---|---|
| **Youth Clubs/Student Unions** | CBO | Kakkoor Boys Club | 7510590389 |

## Interdepartmental Coordination

Coordination among departments during a pandemic shall be ensured through regular review meetings convened by the LSGD President. These meetings will provide a structured platform for sharing situational updates, assessing resource availability, resolving operational gaps, and taking joint decisions to ensure a coordinated and timely response.

| Department | Representative | Key Role | Contact |
|---|---|---|---|
| Health (PHC) | Staff Nurse : Bincy | Case management | 9400664086 |
| Veterinary | Veterinary Surgeon: Dr.shibu | Animal surveillance | 9745975397 |
| ICDS | Supervisor: Sunitha | Nutrition support | 9961512662 |
| Education | Head Teacher: sakeer | School coordination | 9961080601 |
| Police | Koothattukulam | Containment enforcement | 04852252323 |
| Water Authority | Piravom | Water supply | 0485-2242462 |
| LSGD Engineering | Jesna | Quarantine infrastructure | 9446538144 |

## PHASE 3 - Surge Capacity

Phase 3 is activated when there is a rapid increase in cases, high test positivity rates, or when existing health facilities and quarantine arrangements approach saturation. The focus of this phase is to expand isolation capacity, augment clinical care services, and mobilise additional resources through district and state support mechanisms.

## Conversion of Community Facilities

To manage increased case load, the LSGD shall activate additional isolation facilities by repurposing identified community infrastructure such as community halls, auditoriums, schools, hostels, or other suitable buildings.

| Name of facility | Facility Type | No. of Buildings | Ward | Surge Capacity (Beds) | Nodal Person |
|---|---|---|---|---|---|
| TMJM Govt College | Educational Institution | 8 | 2 | 400 | Prinicipal |
| Govt VHSE Thirumarady | Educational Institution | 3 | 13 | 100 | Prinicipal |
| Mentor college | Educational Institution | 4 | 2 | 100 | Prinicipal |
| Tagore Hall | LSGD owned building | 1 | 13 | 50 | Panchayath secretary |
| **Vadakara Church** | **Religious building** | 2 | 6 | 50 | Church committe secretary |
| **Aattinkunnu Church** | **Religious building** | 2 | 2 | 50 | Church committe secretary |
| **St.Joseph Church** | **Religious building** | 2 | 14 | 50 | Church committe secretary |

- **Recovery and rehabilitation phase**
- **Recovery**
    - Damage & impact assessment
    - Restoration of health services
    - Rehabilitation of affected population
    - Psychosocial & mental health support
    - Disease surveillance during recovery phase
    - Environmental cleanup & sanitation
    - Livelihood restoration
    - Community engagement & confidence building
    - Documentation & after-action review
    - Lessons learned & best practices
    - Health system strengthening
    - Policy revision & preparedness enhancement
    - Research

## CONCLUSION

### Additional points

- tech support
- relief based commodities
- ham reading operators
- hazard vulnerability mapping
- Kseb & other power source
- HR specific responsibility

# RECOMMENDATIONS

1. Strengthening Healthcare Infrastructure

- Establish a primary health response unit within the Panchayat with trained staff.
- Ensure availability of basic medical supplies (masks, sanitizers, PPE kits, oxygen cylinders).
- Create tie-ups with nearby hospitals in _____ for emergency referral and transport.

2. Community Awareness & Education

- Conduct regular awareness campaigns on hygiene, vaccination, and preventive measures.
- Use local communication channels (community radio, WhatsApp groups, notice boards) to spread verified information.
- Train volunteers to act as health ambassadors in each ward.

3. Emergency Response & Coordination

- Form a Pandemic Preparedness Committee at Panchayat level including health workers, ward members, and NGOs.
- Develop a clear action plan for lockdowns, quarantine, and distribution of essentials.
- Maintain a database of vulnerable groups (elderly, differently-abled, chronically ill) for targeted support.

4. Supply Chain & Food Security

- Identify and support local suppliers and farmers to ensure uninterrupted food supply.
- Create community kitchens during emergencies to serve vulnerable populations.
- Stockpile essential commodities in Panchayat-run outlets for crisis periods.

5. Digital Preparedness

- Promote digital platforms for telemedicine consultations.
- Use Panchayat's website/social media for real-time updates on health advisories.
- Encourage online grievance redressal to reduce crowding in offices.

6. Training & Capacity Building

- Organize mock drills for pandemic response in schools, offices, and public spaces.
- Train Panchayat staff and volunteers in first aid, infection control, and crowd management.
- Collaborate with NGOs and health departments for capacity-building workshops.

7. Long-Term Resilience

- Integrate pandemic preparedness into the Panchayat Development Plan.

- Allocate a dedicated budget for health emergencies.
- Encourage community participation in planning and monitoring preparedness measures.

## MOCKDRILL SCENARIOS

**We had conducted a mock drill after the Pahalgam attack, where the hospital staff were advised to gather at the pharmacy and wait for the further instructions.**

# ANNEXURE

## 1. IMPORTANT PHONE NUMBERS

Phone numbers and particulars of persons responsible for providing guidance, assistance, and support for pandemic preparedness operations may be provided here in a manner that allows easy reference at a glance.The information recorded here could be exhibited elsewhere at the time of emergencies. LSG institutions shall give special attention to collect and record the above data of persons and institutions who/which are supposed to give technical and co-ordination support to reduce the impact of pandemic.

## 1.1. Details of grama panchayat/municipality/corporation wards

| Sl.No | Name of the ward | Ward number | Name of the ward member | Contact number |
|---|---|---|---|---|
| 1 | Koorappillil | 1 | Able | 9847030513 |
| 2 | Pump house-Vettimoodu | 2 | Jhonson Varghese | 9961791040 |
| 3 | Navolimattam | 3 | Manjusha Suresh | 9745812087 |
| 4 | Thattekkadu | 4 | Binoyi Kuriakose | 7034450272 |
| 5 | Vettikkattupara | 5 | Anitha Jacob | 9446415502 |
| 6 | Oliyappuram | 6 | Ryci Tomichan | 8848761115 |
| 7 | Kunnamkode | 7 | Sindhu Johny | 8075427258 |
| 8 | Manimalakkunnu | 8 | A C Jhonson | 9846475139 |
| 9 | Aathanickal Mannathur | 9 | Anitha Baby | 7025355106 |
| 10 | Nedungode | 10 | Sinu Kakkoor | 9605529249 |
| 11 | Thirumarady Panchayath | 11 | Maya K S | 9747574938 |
| 12 | Kakkoor vayal Nagar | 12 | Lissy Rajan | 9061053702 |
| 13 | Thirumarady school | 13 | Biji Jose | 7838535360 |
| 14 | Kakkoor Andichira | 14 | Aji M C | 7510590389 |
| 15 | Palachuvadu | 15 | Binoyi Kallattukuzhiyil | 9605681750 |

## 1.2. Other important phone numbers of grama panchayat/municipality/corporation area

| Sl. No. | Name | Contact number |
|---|---|---|
| 1. | Gramapanchayath president- JOHNSON VARGHEES | 9961791040 |
| 2. | Gramapanchayath visepresident-RICY TOMICHAN | 8848761115 |
| 3. | Gramapanchayath arogya standing chairman : sinu kakkoor | 9605529249 |

## 1.3. Important offices of grama panchayat/municipality/ corporation

| Sl.No | Name of the office | Contact person | Contact number |
|---|---|---|---|
| 1. | Village Office | Village Officer | 0485-2876444 |
| 2. | Agriculture Office | Agriculture Officer | |
| 3. | Animal Husbandry Office | Animal Husbandry Doctor | 9745975397 |
| 4. | Police Station | Police Officer | 0485-2252323 |
| 5. | BSNL Office | Officer | 1800-345-1500 |
| 6. | Block Office | Officer | 0485-2274404 |
| 7. | KSEB Office | Officer | 9496008956 |
| 8. | Fisheries Office | Officer | nill |
| 9. | Fire and Rescue | Officer | 0485-2275103 |

## 1.4. Health Services

| Sl. No | Name of the hospital/institution | Location | Phone number |
|---|---|---|---|
| 1. | Government hospitals/PHC | | 0485-2877300 |
| 2. | Private hospitals | Nil | |
| 3. | Clinical laboratories | Ward 13 | 9495045724 |
| 4. | Chemist/pharmacy | Ward-13 | 7907195612 |
| 5. | Blood donors | Nil | |
| 6. | Other language experts (Bihari, Hindi, Bengali, Asamees ……) | Nil | |

## 1.5. Veterinary Services

| Sl. No | Name of the Clinic | Name of the Surgeon/Doctor | Place/location | Phone number |
|---|---|---|---|---|
| 1 | Govt.Veterinary Hospital | Dr.shibu | Ward-13 | 9745975397 |

## 1.6. Helpline numbers

| **Helpline** | **Phone number** |
|---|---|
| Police | 0485-2252323 |

| | |
|---|---|
| Fire and Rescue | 0485-2275103 |
| KSEB | 9496008956 |

## 1.7. Public and Private Schools Contact details

| S.No | Name of School | Institution type | Phone number |
|---|---|---|---|
| 1 | St Johns HSS | Aided | 9446121569 |
| 2 | VHSE Thirumarady | Govt | 9961080601 |
| 3 | GHSS Athanickal | Govt | 9446668497 |
| 4 | GLPS Kakkoor | Govt | 8547147241 |

## 1.9. Anganwadi Contact Details

| Ward No | Name of Anganwadi Teachers | Phone number |
|---|---|---|
| 10 | LEELAMMA POULOSE | 9747240314 |
| 1 | REMA M KAIMAL | 9497461519 |
| 5 | SHINITHA | 7025352992 |
| 4 | SHYNI | 8943001271 |
| 13 | VILASAMMA | 9744502250 |
| 3 | AJITHA SAJEEVAN | 9496947668 |

| Ward No | Anganwadi No and Name of Teacher | Phone number |
|---|---|---|
| 7 | MERCY MATHEW<br>Minimol P M<br>MINEETAN | 9605859605<br>9605797214<br>9400676270 |
| 9 | Renjini | 8943083060 |
| | SEENA K K | 9444473031 |
| | SHEEJA | 9446960454 |
| | | |
| | | |

## 1.12. Information regarding resources

| Means of transportation | Name of Owner | Phone Number |
|---|---|---|
| Heavy Trucks | | |
| Tractor | | |
| Ambulances | Private | |
| Boats | Nil | |
| Taxi service | | |

# Annexure 1: LSG Baseline Data Collection Format

**A. Baseline data**

| Sl. No. | Indicator / Field | Baseline Data | Source / Remarks |
|---|---|---|---|
| 1 | Name of LSG | Thirumarady | |
| 2 | District | Ernakulam | |
| 3 | Block / Taluk | Muvattupuzha | |
| 4 | Type of LSG (Gram Panchayat / Municipality / Corporation) | Grama Panchayath | |
| 5 | Area (sq. km) | 29.24 Sq Km. | |
| 6 | No. of wards | 15 | |
| 7 | GIS boundary file available | Yes | |
| 8 | Key contact person & phone | MO & 9605466066 | |

**B. Demography**

| Indicator / Field | Baseline Data | Source / Remarks |
|---|---|---|
| Total population | 18385 | |
| Males | 9269 | |
| Females | 9116 | |
| Transgender population | 0 | |
| Age distribution (<5, 5–14, 15–59, ≥60) | <5 :212 ; 5-14: 1014 ; >60 :3588 | |
| No. of households | 5217 | |
| Population density (persons/sq.km) | | |
| No. of migrant workers | 395 | |
| Major occupational groups | | |

**C. Vulnerable Populations & Social Risks**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | No. of elderly (≥60) | 3588 | |
| 2 | No. of persons with disability | 18 | |
| 3 | No. of bedridden persons | 43 | |
| 4 | No. of chronic disease cases (DM/HTN/COPD/CKD etc.) | 2357 | |
| 5 | Pregnant women (current estimate) | 14 | |

| | | | |
|---|---|---|---|
| 6 | Children <5 years | 212 | |
| 7 | Tribal population (if any) | | |
| 8 | Fisherfolk / coastal vulnerable groups (if any) | 0 | |
| 9 | Urban slums / unnotified settlements (if any) | 0 | |
| 10 | Homeless population | 0 | |
| 11 | Orphanages / old age homes (number & capacity) | 1 | |
| 12 | Hostels / prisons / shelters (number & capacity) | 3 – 100 each | |
| 13 | Poverty / BPL estimate | 1924 | |
| 14 | Food insecurity hotspots | | |
| 15 | Any history of stigma/discrimination issues (Yes/No) | NO | |

**D. Health System & Service Readiness**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | No. of health facilities in LSG (PHC/CHC/TH/DH/Private) | FHC -1 | |
| 2 | PHC/Family Health Centre details (name, location) | 0 | |
| 3 | Subcentres / Health & Wellness Centres (number) | 3 | |
| 4 | Private clinics / hospitals (number) | 3 | |
| 5 | Labs available (public/private) | 3 | |
| 6 | Availability of ambulance services (Yes/No, number) | Yes | |
| 7 | Availability of isolation/quarantine facilities (Yes/No, details) | | |
| 8 | Cold chain facilities (Yes/No, details) | Nil | |
| 9 | Stockpile space available (Yes/No) | | |
| 10 | PPE / mask / sanitizer availability plan (Yes/No) | Yes | |

| | | | |
|---|---|---|---|
| 11 | Surveillance staff available (JHI/JPHN/ASHA count) | | |
| 12 | Existing emergency referral pathways (Yes/No) | YES | |

**E. Points of Entry & Mobility**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Bus stands / depots (number) | 0 | |
| 2 | Railway stations (number) | 0 | |
| 3 | Boat jetties / fishing harbours (number) | 0 | |
| 4 | Ports / airports nearby (specify distance) | 0 | |
| 5 | Major highways/roads passing through | 0 | |
| 6 | Border crossings (state/district) | 0 | |
| 7 | Major markets / weekly markets | 0 | |
| 8 | Tourism hubs / major event venues | 0 | |
| 9 | Schools/colleges with hostels (number) | 3 | |
| 10 | Factories / large workplaces (number) | 2 | |

**F. Water, Sanitation & Hygiene (WASH)**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Major drinking water sources (piped / wells / borewells / springs) | Well | |
| 2 | No. of public wells | 29 | |
| 3 | No. of households with piped water connection | | |
| 4 | Water quality testing routine (Yes/No) | Yes | |
| 5 | Common contamination risks (flooding, salinity, industrial waste) | Nil | |

| | | | |
|---|---|---|---|
| 6 | Open defecation free status (Yes/No) | NO | |
| 7 | Solid waste management system (Yes/No) | YES | |
| 8 | Bio-medical waste disposal mechanism (Yes/No) | YES | |
| 9 | No. of public toilets | 2 | |
| 10 | Handwashing stations in public places (Yes/No) | 0 | |

**G. Zoonotic Risks & One Health**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Livestock population (cattle/goats/pigs/poultry) – estimates | Cattle – 921<br>Buffalo – 116<br>Goat - 1599 | |
| 2 | No. of dairy farms / poultry farms / pig farms | 1 | |
| 3 | Slaughterhouses / meat shops (number) | 0 | |
| 4 | Animal markets (Yes/No, details) | 0 | |
| 5 | Veterinary dispensaries (number) | 1 | |
| 6 | History of zoonotic outbreaks (rabies, leptospirosis, avian flu etc.) | Nil | |
| 7 | Stray dog population management measures (Yes/No) | Yes | |
| 8 | Rodent infestation hotspots (Yes/No) | No | |
| 9 | Wetlands / waterlogged areas prone to leptospirosis | Nil | |
| 10 | Bat roosting areas / caves / fruit orchards (if any) | Nil | |
| 11 | Human-animal interface hotspots (farms near residences) | Nil | |

**H. Climate & Disaster Risks (Pandemic Amplifiers)**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Flood-prone wards (list) | NIL | |
| 2 | Landslide-prone wards (list) | NIL | |
| 3 | Cyclone/sea surge risk (Yes/No) | NIL | |
| 4 | Heatwave risk zones (Yes/No) | NIL | |
| 5 | Waterlogging areas (list) | NIL | |
| 6 | Shelter homes / relief camps (number, capacity) | NIL | |
| 7 | Past disaster displacement history | NIL | |

| | | | |
|---|---|---|---|
| 8 | Disruption to water supply/transport common (Yes/No) | NIL | |

**I. Critical Infrastructure & Logistics**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Schools (number) | 5 | |
| 2 | Anganwadis (number) | 17 | |
| 3 | Colleges (number) | 4 | |
| 4 | Community halls (number) | 8 | |
| 5 | Places of worship with large gatherings (number) | 4 | |
| 6 | Large markets / shopping areas (number) | Nil | |
| 7 | Warehouses / cold storages (number) | Nil | |
| 8 | Telecom/mobile network coverage gaps (Yes/No) | No | |
| 9 | Power outage frequency (high/medium/low) | Medium | |
| 10 | Availability of generators in key facilities | Yes | |

**J. Risk Communication & Community Networks**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Ward-level rapid response teams (Yes/No) | YES | |
| 2 | Jagratha samithis / committees active (Yes/No) | YES | |
| 3 | Kudumbashree presence and strength (number of units) | YES | |
| 4 | Volunteer network (number, coverage) | YES | |
| 5 | Community-based surveillance mechanisms (Yes/No) | YES | |
| 6 | IEC dissemination channels (WhatsApp groups, community radio, PA systems) | YES | |
| 7 | Rumour tracking mechanisms (Yes/No) | YES | |
| 8 | Languages spoken / literacy | Malayalam | |

| | | | |
|---|---|---|---|
| | considerations | | |
| 9 | Vulnerable groups communication strategy available (Yes/No) | no | |

**K. Preparedness Planning & Governance**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | LSG emergency plan available (Yes/No) | YES | |
| 2 | Pandemic preparedness plan available (Yes/No) | YES | |
| 3 | Incident Command System identified (Yes/No) | YES | |
| 4 | Rapid procurement mechanism available (Yes/No) | YES | |
| 5 | Emergency fund available (Yes/No, amount) | YES | |
| 6 | Past outbreak response experience (Yes/No, details) | YES | |
| 7 | Intersectoral coordination mechanism (Health, Police, LSG, Veterinary, Education) | YES | |
| 8 | Mock drills conducted in last 12 months (Yes/No) | YES | |
| 9 | Training coverage for staff/volunteers (Yes/No) | YES | |

**L. Surveillance & Data Systems**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Digital reporting tools used (e.g., DHIS2, portals) | PORTALS | |
| 2 | Availability of line-listing format (Yes/No) | YES | |
| 3 | Contact tracing team identified (Yes/No) | YES | |
| 4 | Mapping of high-risk households available (Yes/No) | YES | |
| 5 | Testing sample transport mechanism (Yes/No) | YES | |
| 6 | Reporting timeline adherence | GOOD | |

| | | | |
|---|---|---|---|
| | (good/average/poor) | | |
| 7 | Data sharing between departments (Yes/No) | YES | |
| 8 | Availability of dashboard for monitoring (Yes/No) | YES | |

**M. Additional Notes & Observations**

| Sl. No. | Indicator / Field | Baseline Data (Value / Description) | Source / Remarks |
|---|---|---|---|
| 1 | Key challenges perceived by LSG | Lack of fund and equipments | |
| 2 | Top 5 high-risk wards (reason) | Nil | |
| 3 | Any unique local risks (industrial pollution, refugee camps, etc.) | Nil | |
| 4 | Recommendations for preparedness strengthening | | |