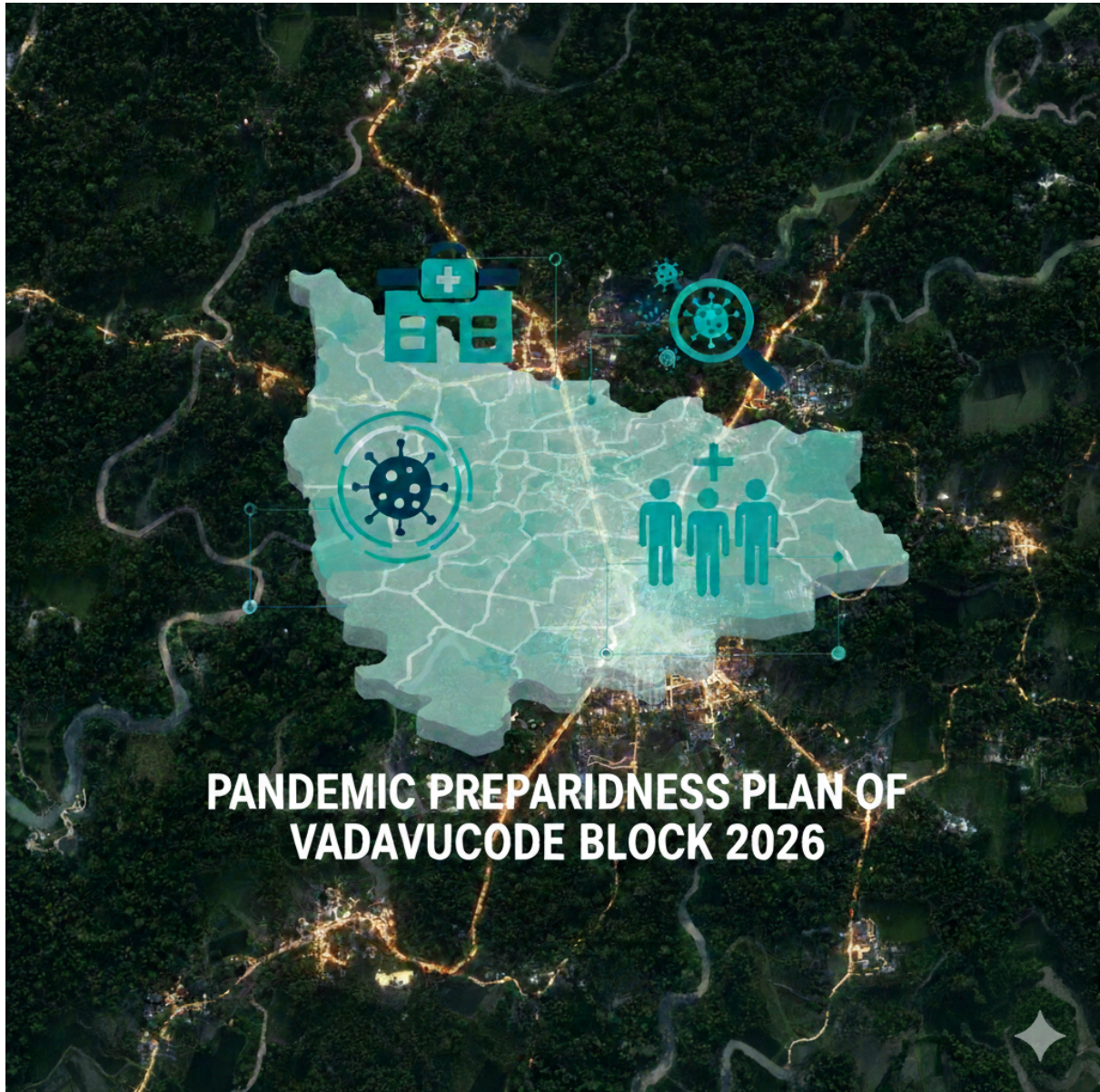




**PANDEMIC PREPARIDNESS PLAN OF
VADAVUCODE BLOCK 2026**

MESSAGE FROM BLOCK PANCHAYTH PRESIDENT

The COVID-19 pandemic has taught us the importance of preparedness, resilience, and community solidarity in facing health emergencies. As the Chair of our Local Self-Government Institution (LSGI), I am pleased to present the **Pandemic Preparedness Plan for Vadavucode Block**, which aims to safeguard the health and well-being of every resident in our jurisdiction.

This plan is designed to strengthen our local health infrastructure, ensure timely dissemination of accurate information, and enhance coordination between government agencies, healthcare providers, and the community. It outlines clear protocols for surveillance, prevention, early detection, and response to infectious diseases, emphasizing the need for cooperation at every level.

The success of this plan depends not only on the efforts of the LSGI but also on the active participation of every citizen. I urge all residents, community organizations, and frontline workers to adhere to the guidelines, participate in awareness programs, and support the initiatives outlined in this plan. Together, we can ensure a safer, healthier Vadavucode, resilient against future health crises.

I extend my gratitude to all healthcare professionals, volunteers, and officials who contributed to the preparation of this plan. Let us move forward with unity, vigilance, and commitment to the welfare of our community.

AMRUTHA SANOOP
PRESIDENT
VADAVUCODE BLOCK PANCHAYTH

MESSAGE FROM HEALTH STANDING **COMMITTEE CHAIRPERSON**

It gives me great pleasure to present the **Pandemic Preparedness Plan for Vadavucode Block**. The COVID-19 pandemic has highlighted the critical importance of proactive health planning, swift response mechanisms, and community participation in safeguarding public health.

Our block administration, in collaboration with healthcare professionals, local authorities, and community stakeholders, has developed this comprehensive plan to ensure that we are well-prepared to prevent, detect, and respond to any future public health emergencies. The plan outlines key strategies for surveillance, early warning, medical preparedness, risk communication, and community engagement.

I urge all residents, healthcare workers, and local institutions to actively participate in the implementation of this plan. Our collective efforts will not only strengthen the health infrastructure of Vadavucode but also ensure the safety and well-being of every individual in our community.

Together, with awareness, cooperation, and resilience, we can face any health crisis effectively.

INDHU P K

HEALTH STANDING COMMITTEE CHAIRPERSON

VADAVUCODE BLOCK PANCHAYTH

MESSAGE BY MEDICAL OFFICER

THE HEALTH AND SAFETY OF THE PEOPLE OF VADAVUCODE BLOCK IS OUR HIGHEST PRIORITY. THE PANDEMIC PREPAREDNESS PLAN HAS BEEN DEVELOPED TO STRENGTHEN OUR CAPACITY TO RESPOND SWIFTLY AND EFFECTIVELY TO ANY PUBLIC HEALTH EMERGENCIES.

THIS PLAN FOCUSES ON EARLY DETECTION, TIMELY REPORTING, MEDICAL READINESS, AND COMMUNITY ENGAGEMENT. IT EMPHASIZES COORDINATED EFFORTS BETWEEN HEALTHCARE FACILITIES, LOCAL AUTHORITIES, AND RESIDENTS TO MINIMIZE RISKS AND PROTECT VULNERABLE POPULATIONS.

I ENCOURAGE EVERYONE TO FAMILIARIZE THEMSELVES WITH THE GUIDELINES OUTLINED IN THIS PLAN AND ACTIVELY PARTICIPATE IN HEALTH-PROMOTING PRACTICES. PREPAREDNESS, AWARENESS, AND COOPERATION ARE THE KEYS TO REDUCING THE IMPACT OF ANY PANDEMIC. TOGETHER, WE CAN ENSURE A HEALTHIER, SAFER VADAVUCODE.

DR. JEENA S MOHAN

MEDICAL OFFICER

VADAVUCODE BLOCK

EXECUTIVE SUMMARY

The **Pandemic Preparedness Plan for Vadavucode Block** is a comprehensive framework designed to strengthen public health systems and ensure rapid, coordinated responses to pandemics or other public health emergencies. The plan addresses the lessons learned from previous outbreaks and integrates local healthcare resources, administrative mechanisms, and community participation to mitigate risks effectively.

Key objectives of this plan include:

1. **Early Detection and Surveillance** – Strengthening monitoring systems to identify and report potential outbreaks promptly.
2. **Medical Preparedness** – Ensuring availability of healthcare facilities, medical supplies, trained personnel, and treatment protocols.
3. **Risk Communication** – Informing and educating the community through clear, timely, and accurate health messages.
4. **Community Engagement** – Promoting public participation in preventive measures, vaccination drives, and emergency response activities.
5. **Coordination and Response** – Establishing a structured system among local authorities, healthcare providers, and emergency services for effective decision-making and action.

The plan emphasizes a proactive approach, balancing prevention, preparedness, and response strategies. By fostering collaboration among government departments, healthcare institutions, and citizens, Vadavucode Block aims to reduce the impact of pandemics and ensure the health and safety of its population.

This document serves as both a strategic guide and an operational tool for local authorities, healthcare professionals, and the community to act decisively during public health crises.

LIST OF ABBREVIATIONS

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

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INTRODUCTION

The safety and health of the people of Vadavucode Block are our top priority. Recent pandemics have shown how crucial it is to be prepared for public health emergencies. This Pandemic Preparedness Plan provides clear guidance for preventing, detecting, and responding to outbreaks effectively.

The plan focuses on early warning, medical readiness, risk communication, and community involvement, ensuring that everyone—from healthcare providers to residents—plays a role in protecting public health.

Its main goal is to strengthen the resilience of Vadavucode Block, safeguard vulnerable populations, and maintain essential services during health crises. By working together, we can respond swiftly, reduce risks, and keep our community safe.

This plan is both a guide and an action tool, outlining roles, responsibilities, and protocols for all stakeholders committed to a healthier and prepared Vadavucode.

Scope and Objectives

Scope

The Pandemic Preparedness Plan of Vadavucode Block covers all aspects of public health emergency management within the block. It applies to:

- All healthcare facilities, including primary health centers, community health centers, and hospitals.
- Local government bodies and departments involved in health, sanitation, education, and emergency services.
- Community stakeholders, including residents, schools, and local organizations.
- Response activities, including prevention, early detection, treatment, and recovery during pandemics or infectious disease outbreaks.

The plan is designed to integrate **local resources, administrative mechanisms, and community participation**, ensuring a coordinated and efficient response to any health emergency.

Objectives

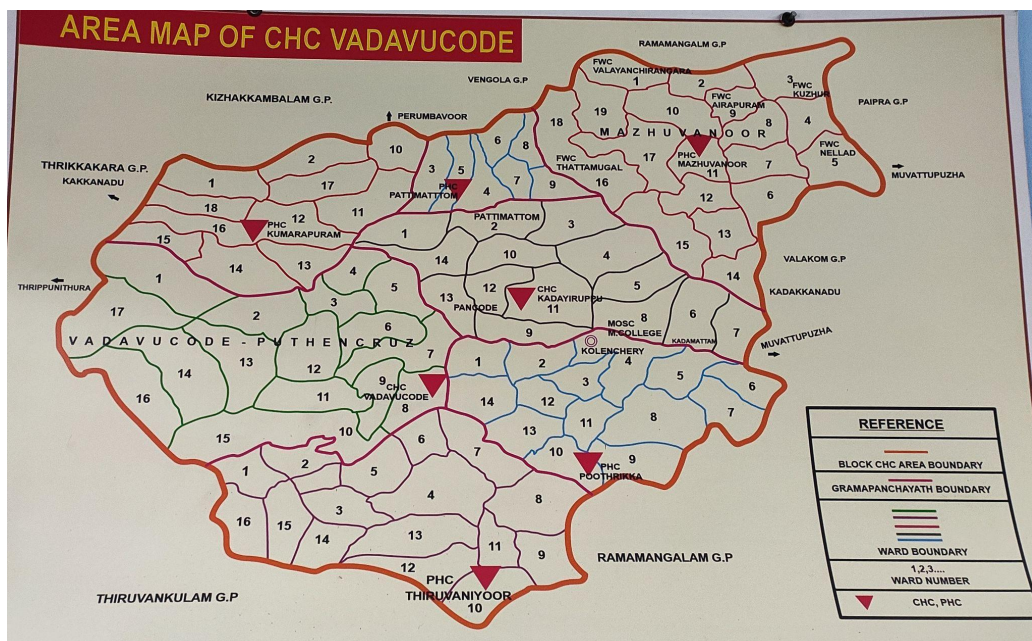
The key objectives of this plan are:

1. **Early Detection and Surveillance:** Establish systems for prompt identification and reporting of potential outbreaks.
2. **Preparedness and Response:** Strengthen medical facilities, ensure availability of essential supplies, and train personnel for effective emergency response.
3. **Risk Communication:** Provide timely, accurate, and clear health information to the community to minimize panic and misinformation.
4. **Community Engagement:** Encourage active participation of residents in preventive measures, vaccination programs, and emergency response activities.
5. **Coordination and Collaboration:** Foster effective coordination among healthcare providers, local authorities, emergency services, and the community for a unified response.
6. **Continuous Monitoring and Improvement:** Regularly review and update the plan based on lessons learned and evolving health threats.

Through these objectives, Vadavucode Block aims to reduce the impact of pandemics, protect vulnerable populations, and build a resilient, informed, and healthy community.

LSGD AT A GLANCE

- **Geographical boundaries with political map** (based on latest delimitation)



Vadavucode Block is an administrative block in **Ernakulam District, Kerala, India**. It falls under the **Kunnathunad Taluk** and comes under the **Kunnathunad Assembly Constituency** and the **Chalakyudi Lok Sabha Constituency**.

Geographical Extent

- The block includes a number of villages and localities such as **Aikkaranad, Kunnathunad, Mazhuvannoor, Poothrikka, Thiruvaniyoor,** and **Vadavucode–Puthencruz** among others.
- Vadavucode village itself is situated approximately **14 km from Perumbavoor** (sub-district headquarters) and **16 km from Kakkanad** (district headquarters).
- The general **latitude and longitude** of the area are around **9.98 ° N latitude and 76.43 ° E longitude**.

Political and Administrative Boundaries

State: Kerala

District: Ernakulam

Taluk: Kunnathunad

Block: Vadavucode Block

Assembly Constituency: Kunnathunad (SC)

Lok Sabha Constituency: Chalakyudi

• Baseline data

1. Population Profile

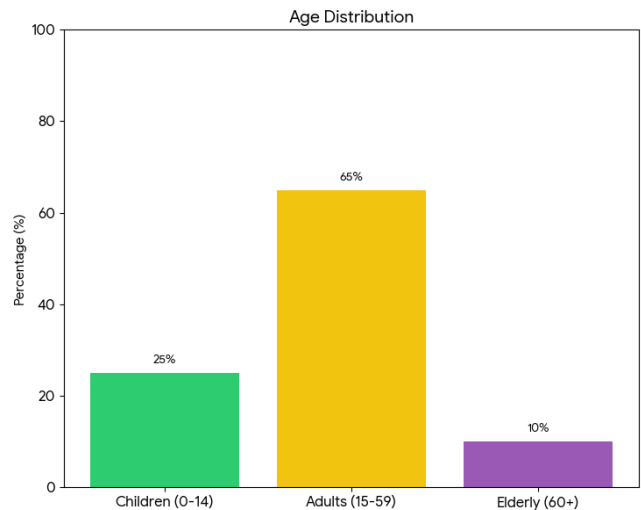
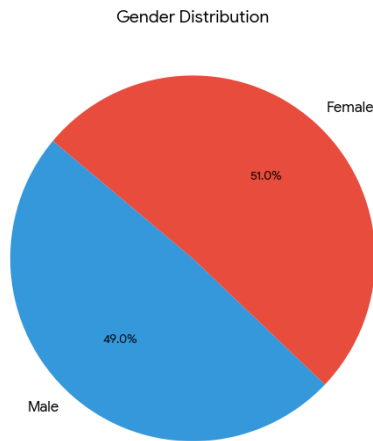
Total Population: 181601

Gender Distribution: ~49% male, 51% female

Population Density: Moderate; varies across villages

Age Distribution:

- Children (0–14 years): ~25%
- Adults (15–59 years): ~65%
- Elderly (60+ years): ~10%



2. Health Infrastructure

- **Primary Health Centers (PHCs):** 5
- **Community Health Centers (CHCs):** 2
- **Sub-centers / Dispensaries:** 33
- **Private Hospitals / Clinics:** Several small- and medium-scale facilities
- **Availability of Ambulance Services:** 5 government + private emergency services

3. Sanitation and Water

- **Access to Safe Drinking Water:** >90% households
- **Sanitation Coverage:** ~95% households with toilet facilities
- **Solid Waste Management:** Block-level program implemented through Panchayats

4. Education and Literacy

- **Number of Schools:** 25–30 (Primary, Upper Primary, and High Schools)
- **Literacy Rate:** ~96% (Kerala state average ~96.2%)
- **Awareness Programs:** Health awareness programs conducted in schools regularly

5. Transport and Connectivity

- **Road Connectivity:** Good; connected to major towns like Perumbavoor, Kakkanad, and Kochi
- **Public Transport:** State-run buses, private buses, and auto-rickshaws
- **Railway Access:** Nearest stations: Aluva, Angamaly, and Thrikkakara

6. Economic Profile

- **Primary Occupation:** Agriculture, small-scale trade, and services
- **Employment Patterns:** Majority employed in local trade, some commuting to Kochi metro area
- **Key Agricultural Products:** Coconut, banana, tapioca, and vegetables

7. Vulnerable Groups

Elderly population and people with chronic illnesses

Children and pregnant women

Marginalized communities dependent on daily wages

- Ward division -

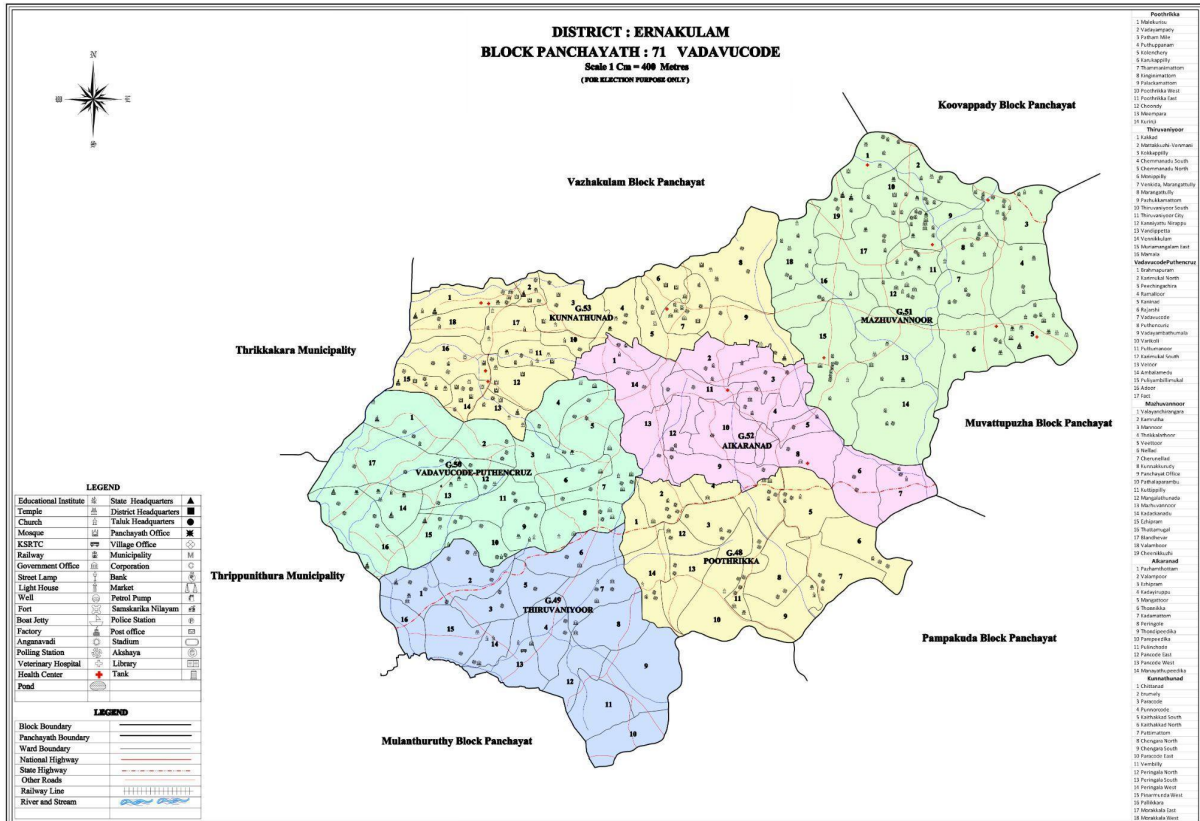
Ward	Houses	Population	Migrants	Wells	Hot spots	Ed. Institutions	Hosp pvt/govt.
101	47043	181601	5578	32283	12	75	24

- 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 VADAVUCODE BLOCK



Vadavucode block is a local self-government unit in **Ernakulam district, Kerala**, it including Aikaranad, Kunnathunad, Thiruvaniyoor, Mazhuvanoor, vadavucode puthencruz and Poothrikka panchayat.

1. Primary & Community Health Facilities

1. Community Health Centre Vadavucode
2. Community Health Centre Kadayiruppu
3. Family Health Center Kumarapuram
4. Family Health Center Mazhuvanoor
5. Family Health Center Pattimattom
6. Family Health Center Poothrikka
7. Family Health Center Thiruvaniyoor

2. Health System Integration & Referral Structures

Kerala's health system integrates **primary care centres, community health centres, and referral linkages** under public health missions like *Aardram Mission* and the **National Health Mission (NHM)**. This includes upgrading pathways from Primary Health Centres (PHCs) to more comprehensive facilities such as Family Health Centres (FHCs).

For pandemic preparedness, these linkages support:

- **Surveillance & reporting** (coordination with district health offices)
- **Risk communication** and community outreach via ASHAs and local volunteers
- **Referral pathways** from local centres to higher-level hospitals (e.g., Taluk or District Hospitals in Kochi/Ernakulam city)

3. Outreach & Preventive Care Nodes

:

- **Health And wellness centers** (local vaccination, maternal & child health services)
- **ASHAs & Community Health Workers** active at ward level for immunisation, TB screening, chronic disease management
- **Mobile camps** and seasonal vaccination campaigns coordinated through local facilities.

These form the “spokes” from community to hub facilities (e.g., CHC). For pandemics, such nodes are crucial for early **case finding, testing support, and immunisation outreach**.

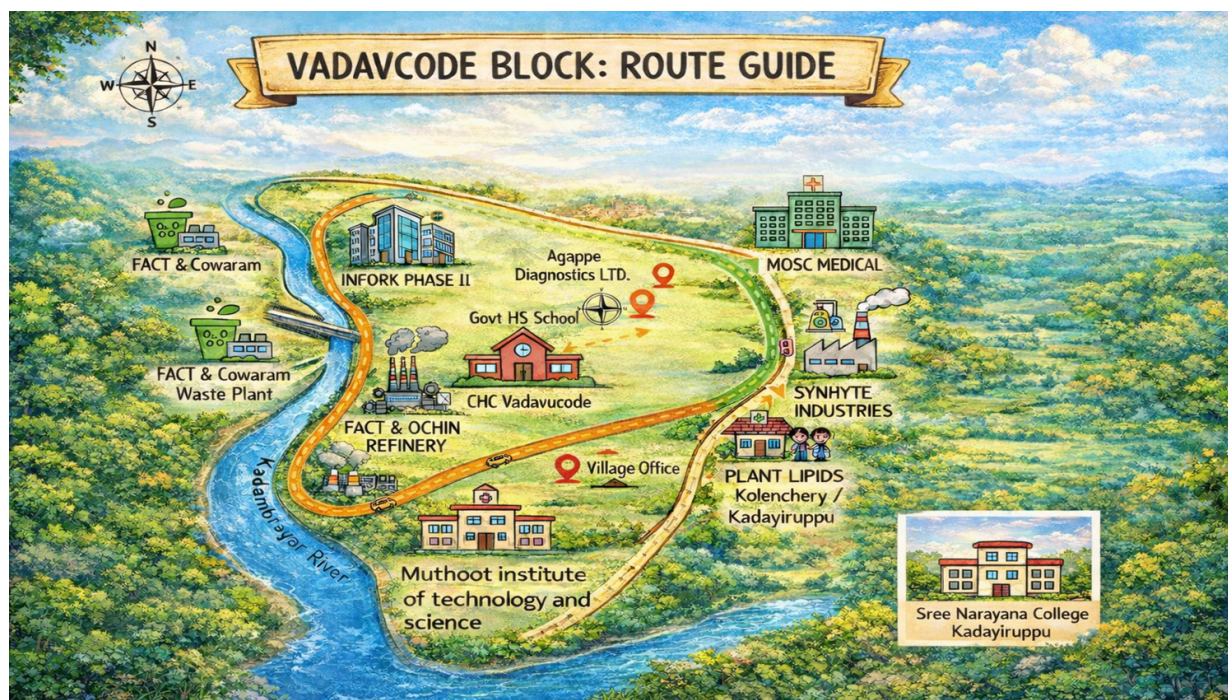
4. Referral & Emergency Linkages

For **specialised care or severe pandemic cases**, patients are typically referred to:

- Taluk/District hospitals in **Ernakulam metropolitan area**
- Other specialised centres (e.g., private hospitals) depending on capacity

This chain should be pre-mapped with clear triage channels during surge periods.

5. Major Establishments Map



GENERAL PROFILE OF THE LSGI'S

Background of the LSGI

The evolution of LSGIs in Kerala gained momentum following the 73rd and 74th Constitutional Amendments, which strengthened Panchayati Raj Institutions and Urban Local Bodies across India. In Kerala, this was further reinforced through the People's Plan Campaign, which enabled local bodies to prepare and implement development plans based on local needs and priorities.

Vadavucode Block Panchayat operates within this framework, acting as a link between the District Panchayat and the Gram Panchayats under its jurisdiction. It is responsible for planning, supervision, and implementation of various schemes related to health, sanitation, infrastructure, social welfare, and livelihood development.

In the context of public health, the LSGI plays a crucial role in supporting healthcare delivery systems, coordinating with the Health Department, and ensuring effective implementation of national and state health programs. Its involvement is especially significant during public health emergencies, where local governance, community participation, and timely decision-making are essential.

Table 1: Background of LSGD

Description	Details
Type (GP/Municipality / Corporation etc.)	Block Panchayath
Block	VADAVUCODE
District	ERNAKULAM
Number of wards	101
Total area (sq. km)	185.95Sq.km
Population(Projected)	181601

Table 1: Background of LSGD

Description	Details
Population density	947
Terrain (coastal/low-lying/backwaters/foothills, etc.)	plain
Number of rivers passing through LSGI	MUVATTUPUZHA RIVER
Number of water bodies in the LSGI	34
Number of educational institutions	75
Factories / small-scale industries	32
Flood-prone wards	9
Landslide-prone wards	NIL
Death Management and Disposal Facilities (mortuaries/crematorium, including electric)	NIL
Auditoriums/Marriage halls/convention centres/community halls	2

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	181601
Male	89980
Female	91621

Description	Details (in numbers)
DEMOGRAPHIC PROFILE	
Transgender	2
Children under 5	7485
Adolescent	18030
Elderly (>60)	28711
SOCIAL/LIVELIHOOD VULNERABILITY	
Previous EPEP family	176
BPL family	10923
Migrant	5578
SC Community	19343
ST Community	99

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 need 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	938
Lactating mothers	1124

Description	Details in numbers
Bedbound patients	611
Patients on Haemodialysis	127
Cancer patients (currently on treatment)	354
Mentally challenged	259
Differently abled	68
Diabetic patients	22491
Hypertensive patients	28342
TB patients	43

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

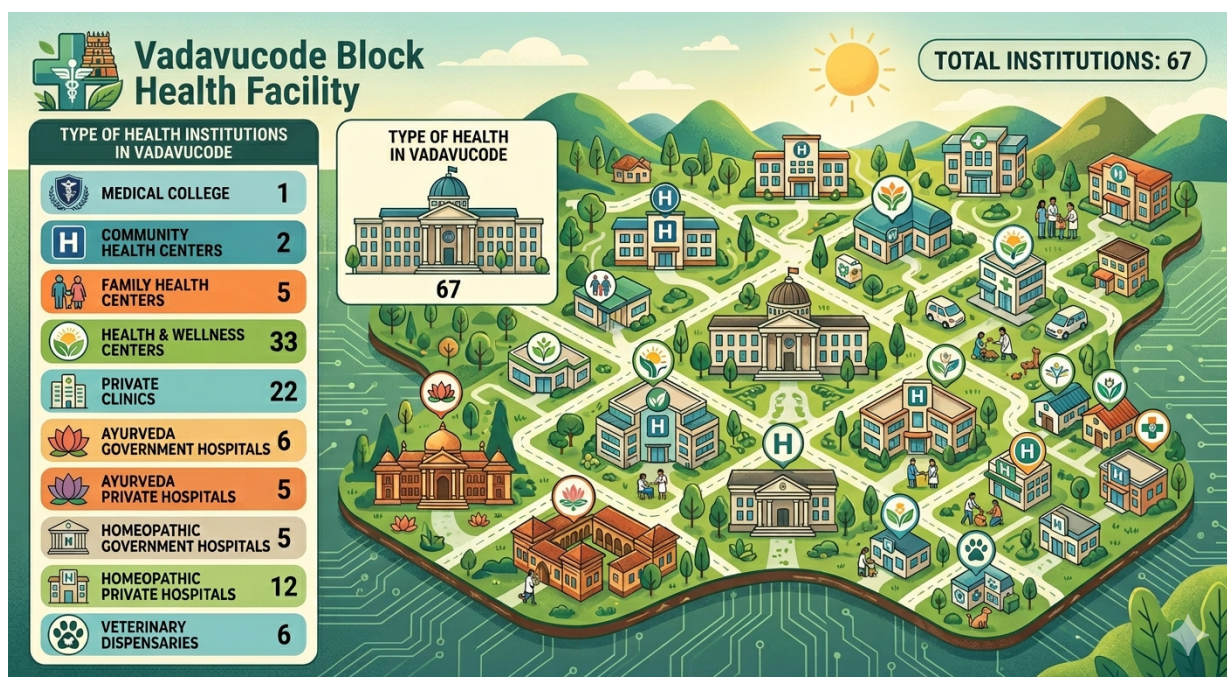
Sl. No.	Name of festival	Month detailing the periodicity
1	KARIKODE TEMPLE, KADAYIRUPPU	FEBRUARY
2	ST. MARY, S CHURCH, VALAMBOOR	FEBRUARY
3	PANCODE SUBHRAMANYA SWAMI TEMPLE	JANUARY
4	KADAMATTOM CHURCH	FEBRUARY, MAY
5	MAHADEVA TEMPLE, KADAMATTOM	FEBRUARY
6	PUTHENKAVU BHAGAVATHY TEMPLE	FEBRUARY
7	KADAMATTOM CHURCH	FEBRUARY
8	KOLENCHERY CHURCH	JULY
9	NJATTUMKALAYIL HILL TOP EVENT CENTER	DECEMBER
10	PUTHENKURISH PATRIKA CENTER FESTIVAL	DECEMBER

INFRASTRUCTURE & RESOURCE INVENTORY

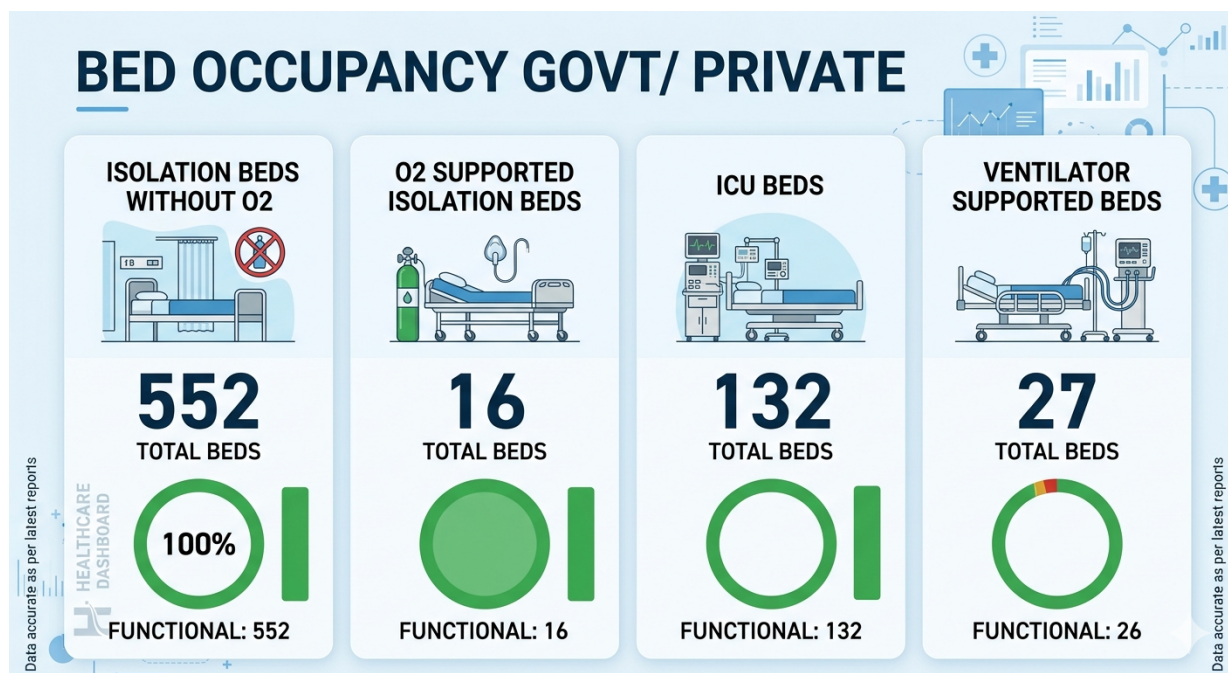
Health Facility Directory & Basic Capacity in the LSGD

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.



Specialized Services & Emergency Inventory

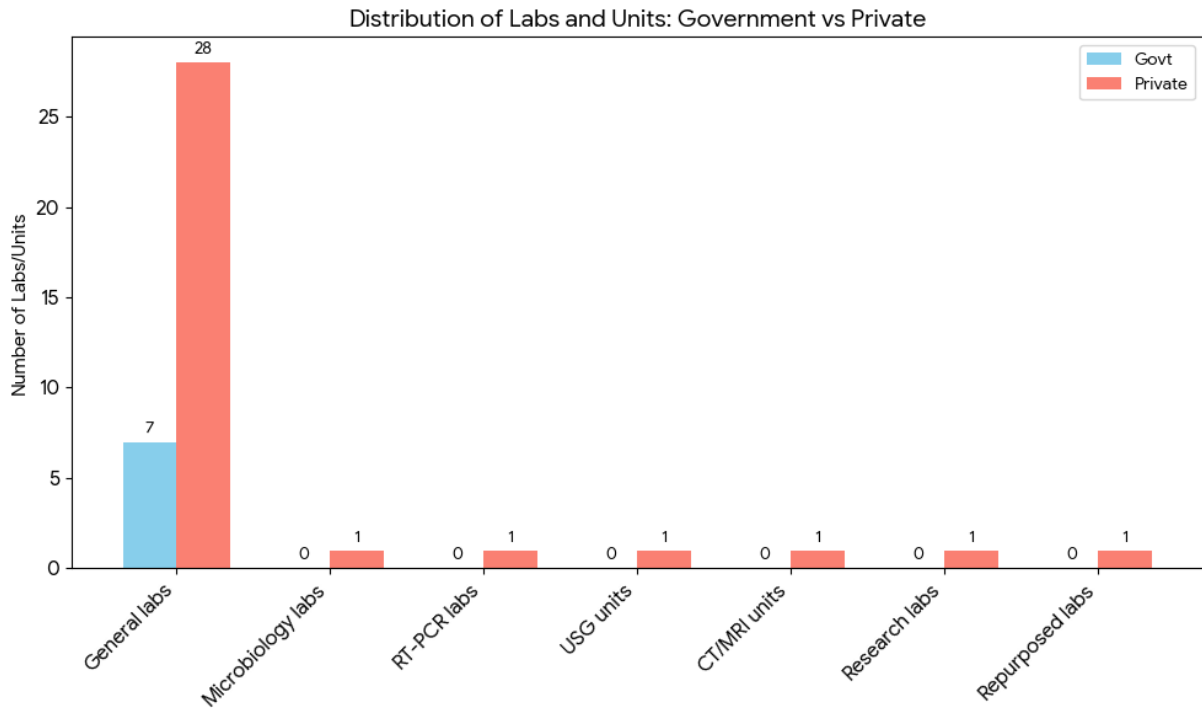


Diagnostics facility mapping at the LSGI level

The diagnostic capacity of the block 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	7	28	0	
Microbiology labs	0	1	0	1
RT-PCR labs	0	1	0	1
USG units	0	1	0	1
CT/MRI units	0	1	0	1
Research labs	0	1	0	1

Labs of other departments that can be repurposed	0	1	0	1
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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	HI-TECH LAB	PRIVATE	MOOSARIPADY	7736232999	NO	NO
2	HRD LAB	PRIVATE	KOLENCHERRY	8606261000	NO	NO
3	BIO-DIAGNOSTIC LAB	PRIVATE	KOLENCHERRY	9446929855	NO	NO
4	J&J DIAGNOSTIC CENTRE	PRIVATE	KADAYIRUPPU	9446492734	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
Educational Institutions	
Anganwadis	155
Schools	67
Colleges	9
Healthcare Educational Institutions	
Medical colleges (Govt/Private)	1
Nursing colleges (Govt/Private)	2
Dental colleges (Govt/Private)	0
Paramedical institutes (Govt/Private).	1
Community Gathering Spaces	
Community halls	12
Auditoriums	3
Religious buildings	6
Vulnerable Group Support Facility	
Destitute homes	7
Elderly homes	9

LSGD owned other buildings	16
Mass Fatality Management (MFM) Infrastructure	
Mortuary	1
Crematorium	20

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.

Cadre	Govt (No.)	Private (No.)	Total
Doctors—Modern Medicine	19	98	117
Doctors – AYUSH	12	17	29
Doctors – Veterinary	12	4	16
Doctors – Dental	1	24	25
Nursing officers	24	700	724
Lab technicians	3	12	15
Optometrist	1	2	3
Pharmacists	9	17	26
Psychologists	0	3	3
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)	0	0	0
HI (Health Inspectors)	4	0	4
LHS (Lady Health Supervisor)	1	0	1
LHI (Lady Health Inspectors)	1	0	1
JPHN (Jr Public Health Nurses)	26	0	26
JHI (Jr Health Inspectors)	17	0	17
MLSP (Mid-Level Service Providers)	32	0	32
Palliative Nurses	8	0	8
RBSK Nurses	6	0	6
PRO	1	0	1

Cadre	Health services	Municipal common services	Total
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.

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.

Cadre	Number
ASHA Workers	98
AWW (Anganwadi Workers)	154
Emergency Medical Volunteers (Trained)	17
Kudumbashree	33

Cadre	Number
Kudumbashree SHGs	4
MNREGS	12
Purusha Swayam Sahaya Sangham	4
Ex-Servicemen	14
Retired Police Officers	27
NCC/NSS Volunteers	38

Category	Total Count
NGOs	1
Religious based organizations	0
Foreign based organizations	0
Sports Club/youth clubs	14
Kudumbashree SHGs	166
Ayalkootams	172
Political organizations	4
Residential organizations	14

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	3	04842760264
Fire & Rescue Stations	2	04842687115
Water Pumping Points	24	0471-2738300
Public Distribution System (PDS)	21	1800-425-1550

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	19
Crane	5
Heavy Trucks	26
Tractor	7

Ambulances	18
Mobile mortuaries	9
Boats	0
Taxi service	70

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.

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)	1452	ALL WARDS
	Pet Animals (Dogs/Cats)	2146	ALL WARDS

Category	Item	Estimated Population	Wards
	Stray Dog Population	22	ALL WARDS
	Pig Farms (Number of heads)	1	V
	Small Units (Sheep / Goats – clustered)	752	ALL WARDS
Bird Population	Poultry Units (Birds)	1436	ALL WARDS
	Poultry- (FOWL)	9575	ALL WARDS
	Wild/Migratory Birds (Observed)	0	0
	Crow Mortality Events (Reported)	0	0

The stray dog population in **market areas, fish landing sites, bus stations** continues to be a substantial problem for rabies surveillance and bite prevention. There is a considerable risk of avian influenza introduction and amplification during **November - December** due to the seasonal presence of migratory and resident water birds near **ponds/ canal / river / backwater / paddy field**. Clusters of pig farms and animal shelters vulnerable to flooding further raise the risk of leptospirosis and other zoonoses mediated by the environment, especially during monsoon floods.

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.

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)
Government Veterinary Doctors	12	Govt
Private Veterinary Doctors	4	Pvt
Livestock Inspectors	0	0
Para-veterinary Staff / Attenders	19	0
Contract / On-call Veterinary Support (if any)	0	0

High-Risk Interface Points (Surveillance Sites)

High-risk interface points for zoonotic disease surveillance in Vadavucode block 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.

Category	Total Count	Key Locations (wards)
Poultry Farms	9	ALL WARDS
Backyard / Clustered Poultry Units	0	0
Duck Rearing Units (open water access)	0	0
Slaughterhouses/ Slaughter Points	0	0
Meat/Fish Markets	3	1,8,10
Live Bird Sale Points	4	2,3,8,7
Cattle Markets / Weekly Animal Fairs	0	0
Pet Shops / Breeders	7	1,9,8,4,7,3,14
Animal Shelters / Pet Homes	4	12,17,6,5
Waste Disposal Sites near Animal Units	3	11,8,19

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*.

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	0	0	0	0
Leptospirosis	NOVEMBER	0	0	0
Dengue/Chikungunya	AUGUST	0	0	0
Acute Diarrheal Diseases	0	0	0	0
Rabies	0	0	0	0
Anthrax (rare)	0	0	0	0

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	VIII	PERUVUMUZH	LOW
Wetland-adjacent communities	0	0	0
Backyard poultry / duck rearing households	0	0	0
Livestock-rearing households	0	0	0
Slaughterhouse & meat market workers	0	0	0

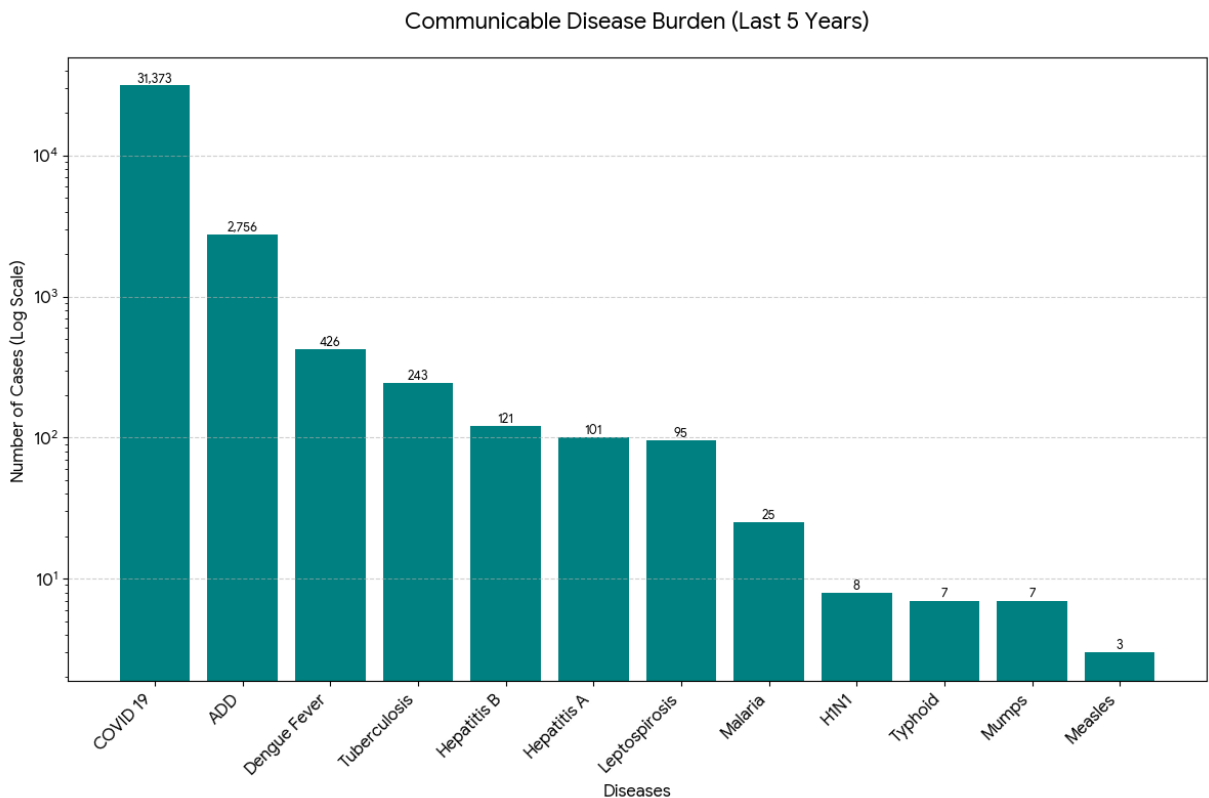
Fisherfolk & fish market workers	0	0	0
Sanitation workers	0	0	0
Daily wage / migrant workers	0	0	0
Elderly & chronically ill populations	0	0	0
Pregnant Women	0	0	0
Children (schools, Anganwadi's)	0	0	0
Limited access to safe water & sanitation	0	0	0

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.



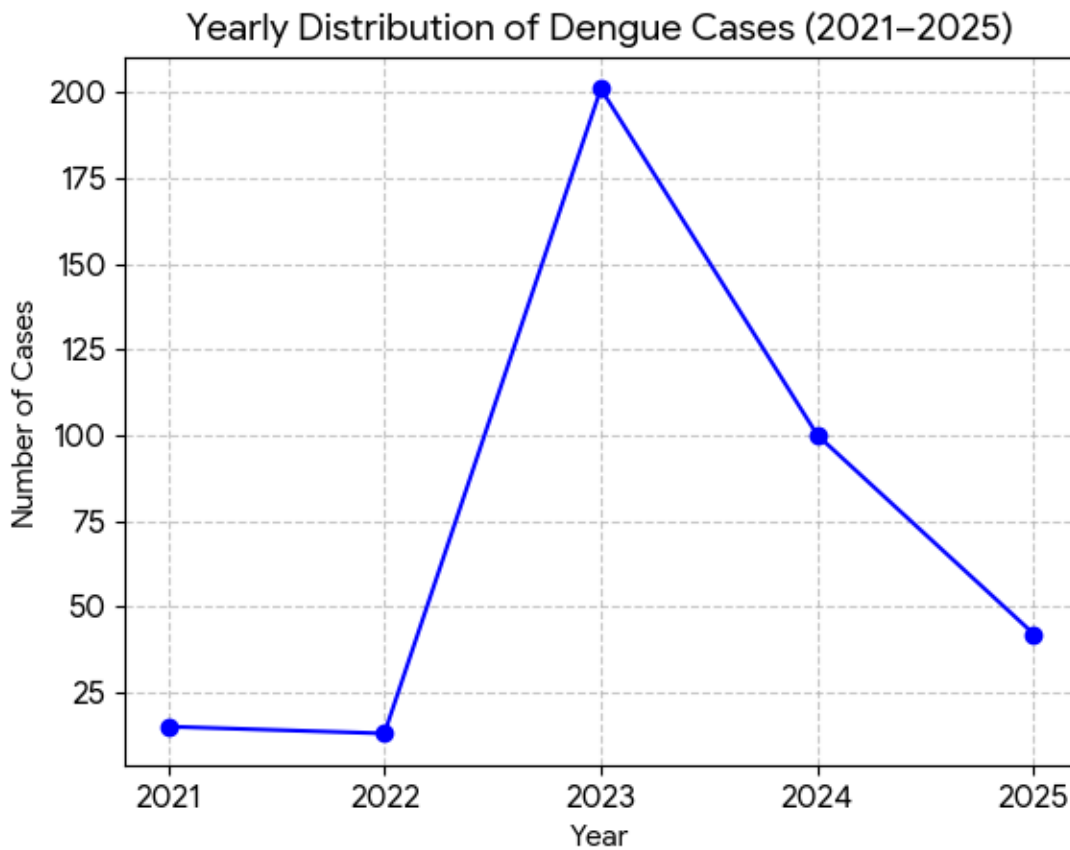
Seasonal Trend Analysis

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: 2023



LEPTOSPIROSIS

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

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

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)

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	6 (3 Dengue cases & 3 malaria Cases)	0
Water Borne Diseases	2 Hepatitis A cases	0
Air Borne Diseases	43 (12 TB Cases & 31 TB Cases)	0
Blood Borne Diseases	5 Hepatitis B Cases	0
Food Borne Diseases	0	0

Vector-Borne Disease

Disease	No. of Cases	No. of Deaths
Dengue	3	0
Malaria	3	0
Chikungunya	0	0

Water Borne Disease

Disease	No. of Cases	No. of Deaths
Cholera	0	0
Typhoid	0	0
Hep- A	2	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	12	0
Chickenpox	31	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	5	0
Hep- C	0	0

Zoonotic Disease

Disease	No. of Cases	No. of Deaths
Rabies	0	0
Leptospirosis	0	0
Avian influenza	0	0

West Nile	0	0
Anthrax	0	0
Nipah	0	0
Scrub Typhus	0	0

PREVIOUS DISASTER HISTORY

Sl. No	Disaster	Year	Impact
1	FACT Gas leak and Fire	1984	Severe (4 death
2	Canal flooding	1990	70 ha affected
3	FACT fire	1993	Major
4	Heavy rainfall & floods	2016	250 families
5	Sulphur leakage	2019	100 families
6	FACT construction accidents (inside)	2015–2018	40 families
7	FACT construction accidents (outside)	2015–2018	45 families

8	Carbon black emission	2001	Large-scale
9	Water contamination	2013	50 acres
10	FACT acid tar leakage	2010	150 affected
11	Acid leakage & fish death	2011	200 affected
12	Benzene leakage	2005	2 houses damaged
13	Brahmapuram plastic fire	2011, 2018	3500 affected
14	Drought	2018,2019	350 affected
15	Water scarcity	2018,2019	400 affected
16	Flood & waterlogging	2019	1000 affected
17	Fire incidents	2019	150 affected
18	Roadside fire hazards	Recurrent	—
19	Brahmapuram plastic fire	Recurrent	Large-scale
20	Flood	2018	Large-scale
21	Covid-19 pandemic	2022	Large-scale
22	Cochin Refinery underground electrical line incident	2025	40–60 families

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	Designation	Department/Institution	Role in Committee
1	President	LSGD	President
2	Medical Officer (CHC)	Health Dept	Member Secretary
3	Veterinary Officer	Animal Husbandry	Member
4	Epidemiologist	Health Dept	Member
5	Health Inspector/PHN	Health Dept	Surveillance
6	ASHA Supervisor	Health Dept	Community link
7	ICDS Supervisor	Social Welfare	Vulnerable groups
8	Police Station Officer	Police Dept	Law & order
9	Ward Councillor Representative	LSGD	Community coordination
10	Kudumbashree CDO	Kudumbashree	Community mobilisation
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 Responsibilities	Team Leader
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
Logistics & supply chain Team	LSGD staff, Storekeepers, Drivers 3	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

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:**
2. **Event-based triggers (to be monitored and reported):**
3. **Zoonotic and animal health surveillance**
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 – numbers
 - Pulse oximeters – ____ numbers
 - Hand sanitizers – ____ litres
 - 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:
 - Admission and discharge
 - Food, water, sanitation
 - 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 early 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)

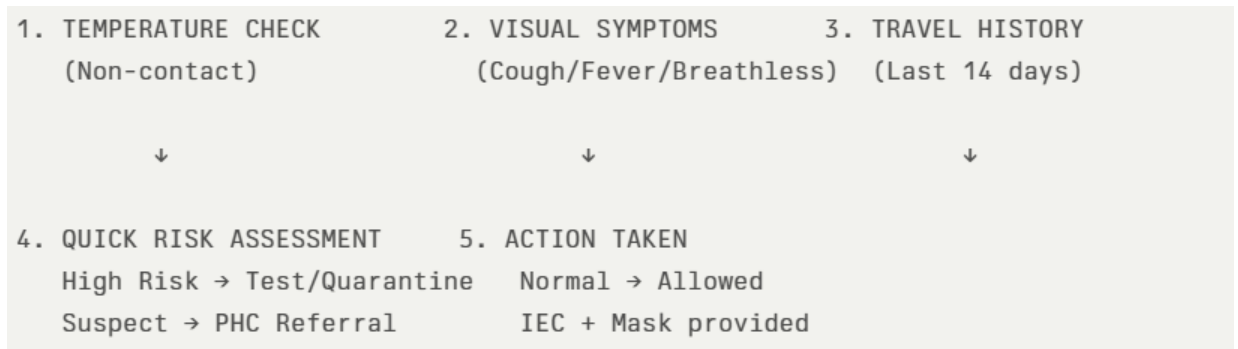
2. Screening Checkpoints

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 One ASHA One health Mentors	1.Swab Collection. 2. Blood smears collection (RDT) 3.Thermal Scanners	Surveillance Nodal Officer in control room
Market entry	Market	One JHI One ASHA Male health volunteers	1.Swab Collection. 2. Blood smears collection (RDT) 3.Thermal Scanners	Surveillance Nodal Officer in control room
Boat jetty	Water transport	One JHI One ASHA Male health volunteers	1.Swab Collection. 2. Blood smears collection (RDT) 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 LS GD teams, health facilities and community sources to enable rapid response decisions.

Control Room Infrastructure and Location

Primary Location: Panchayath Office.

Backup Location: Community Hall in G.P.

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	DR.GEEN A	MEDICAL OFFICER	9847480610	Overall coordination, decision-making, and reporting to the District level.

Data Entry Operator	—	—	—	Managing the line list, updating dashboards, and tracking testing results.
Communication Officer	—	—	—	Handling the public helpline, coordinating ambulance dispatch, and contact tracing calls.
Logistics Coordinator	—	—	—	
Technical Support (IT/Data)	—	—	—	—

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 / delay in reporting / unusual testing trends	Review the sample collection 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	HI	
Social media	—	—
Local Cable TV/Radio	—	—

- All 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:**
- **Contact Number:**

Reporting Schedule and Protocols:

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

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	0471 - 2945600
PPE Kits/Masks/Gloves	Local Vendors	9895447182
Oxygen Cylinders/Concentrators	KMSCL	0471 - 2945600
Medicines/Antivirals	KMSCL	0471 - 2945600
Medicines/Antivirals	Neethi Shops	0484 273 0080
Test Kits (RTPCR/Rapid)	KMSCL	0471 - 2945600

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	YMCA	Chairman

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 :	Case management	
Veterinary	Veterinary Surgeon:	Animal surveillance	
ICDS	Supervisor:	Nutrition support	
Education	Head Teacher:	School coordination	
Police		Containment enforcement	_____
Water Authority	_____	Water supply	_____
LSGD Engineering	_____	Quarantine infrastructure	_____

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.

- 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 vadavucode 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

SCENARIO 1: Suspected Infectious Disease Case in Community

Situation

An individual from Ward 7 presents to CHC with:

- High fever
- Breathlessness
- Recent travel history to affected district

Objectives

- Test early detection & triage system
- Check isolation protocol activation
- Verify reporting chain

Actions to Simulate

1. Screening at facility entrance
2. Immediate isolation room activation
3. PPE donning/doffing protocol
4. Notification to:
 - o Medical Officer
 - o Block Medical Officer
 - o District Surveillance Unit
5. Contact listing & ASHA field verification
6. Sample collection & transport logistics

Evaluation Points

- Time taken from entry to isolation
- Accuracy of documentation
- PPE compliance
- Communication clarity

SCENARIO 2: Cluster Outbreak in a School

Situation

Five students in a local school report fever and rash within 48 hours.

Objectives

- Test outbreak investigation

- Activate Rapid Response Team (RRT)
- Community containment readiness

Actions to Simulate

1. Immediate field visit by health inspector
2. School closure decision-making
3. Line listing of students & teachers
4. Home quarantine instructions
5. Public announcement management (avoid panic)
6. Disinfection of premises

Evaluation Points

- Speed of response
- Community cooperation
- Rumor control effectiveness
- Documentation quality

SCENARIO 3: Oxygen Demand Surge at CHC

Situation

Sudden rise in respiratory cases requiring oxygen support.

Objectives

- Assess oxygen stock management
- Bed surge capacity testing
- Referral system efficiency

Actions to Simulate

1. Oxygen cylinder audit
2. Activation of emergency procurement
3. Conversion of general ward into isolation ward
4. Referral coordination with higher centers
5. Ambulance readiness check

Evaluation Points

- Oxygen availability duration
- Referral turnaround time
- Staff workload management

SCENARIO 4: Mass Vaccination Drive Under Surge Conditions

Situation

State announces urgent vaccination campaign in Panchayat due to new variant detection.

Objectives

- Test mass vaccination logistics
- Crowd control

- Cold chain management

Actions to Simulate

1. Site setup at CHC & outreach camp
2. Cold chain temperature monitoring
3. Digital registration & manual backup
4. Adverse Event Following Immunization (AEFI) preparedness
5. Crowd flow management

Evaluation Points

- Vaccination throughput per hour
- Cold chain integrity
- AEFI response time

SCENARIO 5: Rumor & Panic Management

Situation

Social media rumor claims “CHC is spreading infection.”

Objectives

- Test risk communication strategy
- Community leadership engagement

Actions to Simulate

1. Panchayat President press briefing
2. Verified information circulation
3. Ward-level awareness meeting
4. Monitoring misinformation

Evaluation Points

- Time to issue official clarification
- Public response stability
- Media coordination effectiveness

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 Vadavucode Block Panchyath

Sl.No	Name	Post	Contact number
1	Amritha Sanoop	President	8606361978
2	Adv. Biju K.George	Vice President	9074309048
3	Sandhya K.N	Sectory	9447508810
4	Sabhitha Abdul Rahman	Chairperson of the Development Affairs Standing Committee	9048466323
5	P.P Abubakar	Chairperson of the Welfare Affairs Standing Committee	7034790582
6	Indu P.K	Chairperson of the Health and Education Standing Committee	9747640076

7	Nirmala Siju	Member	9605136701
8	Babitha Eldo	Member	9961813593
9	Binsi Baiju	Member	6238441694
10	Jinsi Jinu	Member	9496300336
11	P.T Aippu	Member	9946904825
12	John P.V	Member	9447222014
13	Sherin C.Paul	Member	9947683574
14	Jayan C.K	Member	9447505184
15	Joy C.M	Member	9447232381

1.3. Important offices of grama panchayat/municipality/ corporation

Sl.No	Name of the office	Contact person	Contact number
1.	Village Office	Village Officer	8547610009
2.	Agriculture Office	Agriculture Officer	04842730124
3.	Animal Husbandry Office	Animal Husbandry Doctor	7947427734
4.	Police Station	Police Officer	04842760264

5.	BSNL Office	Officer	8289836067
6.	Block Office	Officer	0484-2760249
7.	KSEB Office	Officer	0484-2730060
8.	Fire and Rescue	Officer	914842687115

1.4. Health Services

Sl. No	Name of the hospital/institution	Location	Phone number
1.	Government hospitals/ CHC	Vadavucodde	0484 2730251
2.	Private hospitals	MOSC KOLENCHERRY	04842885000
3.	Clinical laboratories	4	
4.	Chemist/pharmacy	5	
5.	Blood donors	1	
6.	Other language experts (Bihari, Hindi, Bengali, Asamees)	NIL	

1.5. Veterinary Services

Sl. No	Name of the Clinic	Place/location	Phone number
1	Govt. Veterinary Hospital	Kolenchery	7947427734

1.6. Helpline numbers

Helpline	Phone number
Police	04842760264
Fire and Rescue	04842687115
KSEB	04842760399

Annexure 1: LSG Baseline Data Collection Format

A. Baseline data

Sl. No.	Indicator / Field	Baseline Data	Source / Remarks
1	Name of LSG	VADAVUCODE	
2	District	ERNAKULAM	
3	Block / Taluk	VADAVUCODE	
4	Type of LSG (Gram Panchayat / Municipality / Corporation)	GRAMAPANCHAYATH	
5	Area (sq. km)	185.95	
6	No. of wards	101	
7	GIS boundary file available	(Yes/No) YES	
8	Key contact person & phone	BLOCK PRESIDENT	8606361978

B. Demography

Indicator / Field	Baseline Data	Source / Remarks
Total population	181601	
Males	89980	
Females	91621	
Transgender population	2	
No. of households	47043	
Population density (persons/sq.km)	947	
No. of migrant workers	5578	

C. Vulnerable Populations & Social Risks

Sl. No.	Indicator / Field	Baseline (Value / Description)	Data /	Source / Remarks
1	No. of elderly (≥ 60)	18030		—
2	No. of persons with disability	85		—
3	No. of bedridden persons	611		—
4	No. of chronic disease cases (DM/HTN/COPD/CKD etc.)	4687		—
5	Pregnant women (current estimate)	938		—
6	Children <5 years	7485		—
7	Tribal population (if any)	NO		—
8	Fisherfolk / coastal vulnerable groups (if any)	NO		—
9	Urban slums / unnotified settlements (if any)	NO		—
10	Homeless population	NO		—
11	Orphanages / old age homes (number & capacity)	ORPHANAGE-1 OLDAGE HOME-5		—

12	Hostels / prisons / shelters (number & capacity)	HOSTEL-2	—
13	Poverty / BPL estimate		—
14	Food insecurity hotspots	NO	—
15	Any history of stigma/discrimination issues (Yes/No)	NO	—

D. HEALTH CARE INSTITUTION

Type of Health Institutions	Number
Medical College	1
Community Health Center	2
Family Health Centers	5
Health and Wellness Center	33
Private Clinics	22
Ayurveda Government Hospital	6
Ayurveda Private Hospital	5
Homeopathic Government Hospital	5
Homeopathic Private Hospital	12
Veterinary Dispensary	6

E. Points of Entry & Mobility

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

10	Factories / large workplaces (number)	7	—
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F. Water, Sanitation & Hygiene (WASH)

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Major drinking water sources (piped / wells / borewells / springs)	4964 WELL	—
2	No. of public wells	32	—
3	No. of households with piped water connection	524	—
4	Water quality testing routine (Yes/No)	YES	—
5	Common contamination risks (flooding, salinity, industrial waste)	FLOODING	—
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	NO	—
10	Handwashing stations in public places (Yes/No)	YES	—

G. Zoonotic Risks & One Health

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Livestock population (cattle/goats/pigs/poultry) – estimates	1452	—
2	No. of dairy farms / poultry farms / pig farms	4+14+0	—
3	Slaughterhouses / meat shops (number)	5 MEAT SHOP	—
4	Animal markets (Yes/No, details)	NO	—
5	Veterinary dispensaries (number)	1	—
6	History of zoonotic outbreaks (rabies, leptospirosis, avian flu etc.)	NO	—
7	Stray dog population management measures (Yes/No)	YES	—

8	Rodent infestation hotspots (Yes/No)	NO	—
9	Wetlands / waterlogged areas prone to leptospirosis	NO	—
10	Bat roosting areas / caves / fruit orchards (if any)	NO	—
11	Human-animal interface hotspots (farms near residences)	NO	—

H. Climate & Disaster Risks (Pandemic Amplifiers)

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Flood-prone wards (list)	VIII	-----
2	Landslide-prone wards (list)	NIL	—
3	Cyclone/sea surge risk (Yes/No)	NO	—
4	Heatwave risk zones (Yes/No)	NO	—
5	Waterlogging areas (list)	NO	—
6	Shelter homes / relief camps (number, capacity)	1 RELIEF CAMP	—
7	Past disaster displacement history	----	—
8	Disruption to water supply/transport common (Yes/No)	NO	—

I. Critical Infrastructure & Logistics

Sl. No.	Indicator / Field	Baseline Data (Value / Description)	Source / Remarks
1	Schools (number)	10	---
2	Anganwadis (number)	21	---
3	Colleges (number)	2	---
4	Community halls (number)	2	---
5	Places of worship with large gatherings (number)	2	---
6	Large markets / shopping areas (number)	0	---
7	Warehouses / cold storages (number)	0	---
8	Telecom/mobile network coverage gaps (Yes/No)	YES	---
9	Power outage frequency (high/medium/low)	---	---

10	Availability of generators in key facilities	-----	---

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 WHATSAPP GROUPS	---
7	Rumour tracking mechanisms (Yes/No)	YES	---

8	Languages spoken / literacy considerations	YES	----
9	Vulnerable groups communication strategy available (Yes/No)	YES	----

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 (FLOOD,COVID)	----
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)	YES	----
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/average/poor)	GOOD	----
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 (Value / Description)	Data / Source / Remarks
1	Key challenges perceived by LSG	—	—
2	Top 5 high-risk wards (reason)	—	—
3	Any unique local risks (industrial pollution, refugee camps, etc.)	—	—
4	Recommendations for preparedness strengthening	—	—