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May 2026

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**Govt. Medical College
Thrissur**



**Pandemic Management Plan
2026**

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Message



Kerala Health has consistently recognised that pandemic preparedness is no longer a standalone activity limited to the health sector, but an essential component of public safety, governance resilience, and sustainable development. The experiences of NIPAH outbreaks, COVID-19 pandemic, emerging zoonotic threats, climate-sensitive diseases, and increasing global interconnectedness have clearly demonstrated that future public health emergencies require continuous preparedness, rapid response systems, and strong institutional coordination. In this context, the preparation of comprehensive Pandemic Preparedness Plans by the Department of Health and Family Welfare marks an important landmark towards strengthening Kerala's health security framework.

Today, pandemic management plans must be viewed through the broader lens of the One Health approach, which recognises the interconnectedness of human health, animal health, environmental systems, and ecological balance. Emerging infections are increasingly influenced by environmental degradation, climate variability, urbanisation, migration, and changing human-animal interactions. Therefore, effective preparedness requires coordinated action not only from the Health and Family Welfare Department, but also from departments including Animal Husbandry, Forests, Local Self Government, Disaster Management, Revenue, Education, Transport, Police, Water Resources, and Civil Supplies. Such interdepartmental convergence is critical for surveillance, risk communication, outbreak containment, logistics management, and continuity of essential services during emergencies.

Kerala has always demonstrated exemplary leadership in responding to public health challenges through timely action, scientific decision-making, community participation, and decentralised governance. The integration of pandemic management with disaster management systems further strengthens our capacity to respond to multiple emergencies simultaneously, including outbreaks occurring during floods, heat waves, or other natural disasters. The development of structured protocols, surveillance mechanisms, escalation frameworks, surge planning systems, infection prevention strategies, and institutional coordination models reflects the state's commitment to building a resilient and future-ready health system.

I am informed that Keralam is the only state where the pandemic preparedness plans have been prepared to such a depth right from the Panchayath level to District

and at institutional level upto Medical Colleges. I place on record my sincere appreciation to all those who worked on this endeavour. The dedication, technical expertise, and coordinated efforts demonstrated by the state and district teams are truly commendable. I am confident that these plans will further strengthen Kerala's capacity to effectively prevent, detect, and respond to future public health emergencies while ensuring the safety and wellbeing of our people.

Shri. K Muraleedharan

Minister for Health and Family Welfare and Devasom,
Government of Kerala



Foreword

Kerala Health has been taking efforts to strengthen the Medical Education. Out of various initiatives such as documentation on Medical College developments giving all the details, preparation of Fact Sheets of DME and MCH giving information regarding the outputs and outcomes, Standard treatment protocol, standardization of the units in the Medical Colleges, one more initiative was taken regarding preparedness for health emergencies such as communicable diseases which could transform into an epidemic/ pandemic. COVID has taught us many lessons. But the moot question is, “What learnings have we taken away from the Pandemic, and its aftermath?” Have we understood those learnings and worked on developing the systems for future scenarios?

And now, I say with immense pride that through Kerala Health, every Medical College has excellent pandemic management plans in place.

This preparation of pandemic management plans started with the thought of “What new systems do we need to develop across the State?” The Director of Medical Education and senior Doctors from Community Medicine and other Departments took up the challenge of preparation of plans. An elaborate process was followed by conducting state level meetings. Dr Aravind was asked to prepare a template for the Medical Colleges Plans. That template was validated in the state meeting and shared to all the Government Medical Colleges in the State. After that step, a workshop was conducted at Ernakulam Medical College involving all the teams from Medical Colleges as well as from Apex Cancer Centres. Post this workshop, all the institutions took a series of meetings at their level and completed this commendable work.

It is noteworthy to mention here that after Alappuzha, Thrissur also prepared a comprehensive Pandemic management Plan and Festival management Plan. Unfortunately, during this year's Thrissur Pooram preparations, there was a massive fire accident, but the Thrissur MCH team put the Management Protocol in practice and in a short span of time within 8 minutes, they took care of the fire disaster victims and provided exemplary services. While they were handling the incident, thanks to timely preparation and awareness, they were handling hundreds of emergencies not relating to the disaster during that period. This has clearly demonstrated to all that well-prepared planning and capacity building is the key to mitigating problems.

The Kerala Health program has to keep up with changing times, and so, along with the aforementioned initiatives, we discussed with the Digital University of Kerala

(DuK) to develop Kerala Pandemic Management System. This system envisages end-to-end solution for pandemic management. This will make things easy for the functionaries in the health institutions as well as the field functionaries to update the information. Once the pandemic management plans and Festival management plans are done, the teams will begin developing plans for calamities, other disasters and major accidents.

We are also planning mock drills so as to build the capacities of various teams. This way all the Medical Colleges teams will be well trained to manage any eventuality.

I am confident that all Medical Colleges shall institutionalize updating of plans on a yearly basis, skill building, analysis of any emergency handled and based on the analysis do modifications in the plans. This way it will be a dynamic plan of the Medical College.

For any Health System it is very important to have a system to handle any health emergency, and it is with sense of pride one can say that with the coordinated team work, this huge work was done in exemplary way. It also demonstrates that with shared vision and having 'thinking teams' at state, institution and field level can work on many challenges and deliver results. Therefore, these officers who worked on this project hands-on are mentioned right on the cover page! It is a big achievement for the Kerala Health to lay the foundation of Pandemic Management upon which further developments can be easily done.

I wholeheartedly appreciate the work done by one and all for preparing Pandemic Management Plans.

I am confident that all our Medical Colleges will become centre of excellence and earn recognition for their works. I wish all the success for the future endeavours.

Dr Rajan Khobragade IAS

Additional Chief Secretary
Health & Family Welfare and
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Govt of Kerala.



Message

The health system of Kerala is defined by a mindset of proactive vigilance, a compassionate attitude toward the most vulnerable, and a historic legacy of resilience in the face of public health crises. Our motto for preparedness is simple: to be prepared and proactive is to safeguard the stability and prosperity of our people. This Pandemic Preparedness Plan is not just a technical manual; it is a shared commitment fuelled by the lessons learned from our past encounters with Nipah and COVID-19. These experiences have taught us that rapid mobilization and early detection are our most effective tools in preventing a public health emergency of international concern.

We have designed this strategy to be agile, moving from routine care to emergency surge levels based on real-time data such as ICU occupancy, staff availability, and disease epidemiology. By utilizing advanced diagnostic tools and regional surveillance cells, we aim to identify threats early, ensuring that life-saving interventions begin the moment a patient reaches our doors. Central to this plan is the safety of our workforce; we are committed to providing the training, equipment, and psychological support necessary to prevent burnout and ensure no healthcare worker faces these challenges alone.

Even in the height of a pandemic, our mission to provide essential care for mothers, children, and emergency cases will not waver. Through seamless coordination with district authorities and the private sector, we are building a networked response that maximizes resources for the benefit of every citizen. I am deeply grateful to the faculty and staff whose expertise shaped this document, and I am confident that by following these protocols, we will continue to lead with competence and compassion.

Dr. K. V. Viswanathan

Director of Medical Education
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Purpose of the Document

Government Medical College Thrissur (GMCT) stands as one of Kerala's premier tertiary care teaching institutions and serves as a critical referral hub for central Kerala. Strategically located and equipped with advanced clinical, laboratory, and public health capabilities, the institution plays a pivotal role in managing high-burden, time-sensitive, and complex medical conditions across multiple districts. The institution holds a unique and historic position in India's public health landscape, as the first confirmed case of the COVID-19 pandemic in India was detected and managed at Government Medical College Thrissur in January 2020. This landmark event placed GMCT at the forefront of India's pandemic response from its very inception. The successful containment, clinical management, and coordinated public health response demonstrated the institution's capacity for rapid mobilisation, inter-sectoral coordination, and adherence to evidence-based protocols under unprecedented circumstances.

Definitions

❖ Dual-Track System

- This system minimises the risk of nosocomial transmission by ensuring complete physical and operational separation between infectious and non-infectious patient flows.
- Dedicated staff teams are assigned to each track to avoid cross-deployment and reduce contamination risk.
- Signage, physical barriers, and security personnel are deployed at entry points to strictly enforce track segregation.
- Screening protocols, including symptom checks and exposure history, are conducted at the entry of the Pandemic Track to ensure early identification and containment.

❖ Color-Coded Zoning

- Movement between zones is strictly regulated, with controlled access points and mandatory PPE requirements based on zone classification.

- Each zone has designated healthcare workers, equipment, and waste disposal systems to prevent inter-zone contamination.
- Transition areas (donning/doffing zones) are strategically placed between zones to ensure safe PPE handling.
- Environmental cleaning protocols vary by zone, with Red Zones requiring the highest frequency and level of disinfection.

❖ Red Channel Protocol

- The Red Channel is activated prior to patient movement, with prior intimation to all relevant departments to ensure preparedness.
- Healthcare personnel involved in transport must wear full PPE, including N95 masks, face shields, gowns, and gloves.
- Non-essential staff and patient movement are temporarily restricted during Red Channel use to maintain isolation integrity.
- After transport, a defined downtime is observed following disinfection to ensure adequate contact time for the disinfectant.

Abbreviations

ACH	Air Changes per Hour.
AIIR	Airborne Infection Isolation Rooms
BMW	Biomedical Waste.
DHS	Directorate of Health Services.
DME	Directorate of Medical Education.
ETO	Ethylene Oxide.
ICS	Incident Command System.
IDSP	Integrated Disease Surveillance Programme.
IHIP	Integrated Health Information Platform.
ILI/SARI	Influenza-Like Illness / Severe Acute Respiratory Infection.
IPC	Infection Prevention and Control.
KMSCL	Kerala Medical Services Corporation Ltd.
LMO	Liquid Medical Oxygen
NCD	Non-Communicable Disease.
OMU	Outbreak Monitoring Unit.
OT	Operation Theatre.
PHEIC	Public Health Emergency of International Concern.
PPE	Personal Protective Equipment
RAT	Rapid Antigen Tests.
SOP	Standard Operating Procedure

1. Introduction & Contextual Analysis

1.1 Background & Purpose

Objectives for rapid response within the first week to prevent a PHEIC.

Building on this foundational experience, GMCT evolved into a model pandemic response centre, contributing significantly to:

- Early detection and isolation strategies
- Development and implementation of state-level clinical protocols
- Strengthening of surveillance and reporting systems
- Expansion of critical care infrastructure
- Capacity building and training of healthcare personnel across Kerala

With a strong ecosystem comprising Institutional Medical Boards, VRDL laboratory facilities, intensive care networks, and integrated command systems, GMCT has consistently demonstrated resilience, adaptability, and leadership during public health emergencies.

This Pandemic Preparedness Plan builds upon these experiences and institutional strengths to establish a comprehensive, scalable, and future-ready framework that ensures:

- Early detection of emerging infectious threats
- Rapid and effective clinical and public health response

Protection of healthcare workers and patients

- Continuity of essential health services
- Seamless coordination with district and state health systems

In alignment with Kerala's progressive health system and global best practices, Government Medical College Thrissur is positioned not only as a treatment centre but as a centre of excellence for pandemic preparedness, response, and system innovation

1.2 Institutional Geography

Proximity to city centers, transport hubs (rail, air), and wide road accessibility.

1.3 District-Specific Risk Profile

Analysis of local hazards like floods, migrant labor influx, and endemic trends (Leptospirosis, Dengue, Malaria etc).

1.4 Scope & Objectives

Framework for early warning, intersectoral coordination (DHS, DME, Collectorate), and mortality mitigation.

Scope of the Document

Aligned with Kerala State Pandemic Preparedness Strategy, IDSP, ICMR, and WHO frameworks

- **Serves as a state-level reference and operational guide for pandemic preparedness and response**
- **Applicable across all tiers of healthcare and governance systems in Kerala**
- **Covers policy, surveillance, clinical care, logistics, and coordination mechanisms**
- **Integrates public, private, and community health sectors**
- **Ensures standardised protocols and coordinated response across institutions**
- **Guides preparedness, response, surge management, and recovery phases**
- **Supports interdepartmental coordination and multi-sectoral collaboration**
- **Acts as a unified framework for all stakeholders involved in pandemic management**

The plan is aligned with Kerala State Pandemic Preparedness Strategy, IDSP & ICMR guidelines and WHO emergency response framework

Objectives

- 1. Early detection of emerging infections**
- 2. Rapid triage, isolation, and treatment**

- 3. Protection of healthcare workforce**
- 4. Maintenance of essential hospital services**
- 5. Efficient resource and surge management**
- 6. Integrated coordination with district & state systems**

2. Governance & Command Structure

2.1 Pandemic Preparedness & Response

Leadership roles for the Principal and Medical Superintendent.

Surveillance & early warning system

Surveillance Mechanisms

- RPEID Cell activation
- Syndromic surveillance (OP, Casualty, ICU)
- Mandatory departmental reporting

Priority Alerts

- SARI / ILI
- AES
- Hemorrhagic fevers
- Unknown clusters

Data Integration

- Daily reporting to IDSP
- District Surveillance Unit coordination
- Lab-triggered alerts

The surveillance system at Government Medical College Thrissur is anchored through the RPEID Cell, which functions as the central node for real-time data capture and analysis. Information flows continuously from multiple entry points including outpatient departments, casualty, and intensive care units through syndromic surveillance mechanisms, supported by mandatory reporting from all clinical departments. Priority alerts such as SARI/ILI, Acute Encephalitis Syndrome (AES), hemorrhagic fevers, and clusters of unexplained illness are immediately flagged. These inputs are further strengthened by laboratory-triggered alerts and integrated into daily reporting systems

linked with the IDSP and District Surveillance Unit, ensuring a seamless vertical and horizontal flow of information across institutional and public health networks.

Building on this integrated surveillance architecture, the RPEID Cell undertakes dynamic analysis and predictive modelling to project trends in case load, severity patterns, and resource requirements. Using real-time data streams, the Cell generates forward projections on expected patient inflow, ICU admissions, and ventilator demand, which are communicated to the hospital administration on a daily basis. These predictive insights enable proactive decision-making, including activation of surge capacity, optimisation of bed allocation, oxygen planning, and workforce deployment. Thus, the surveillance system not only supports early detection but also functions as a critical decision-support tool for administrative and clinical preparedness during evolving pandemic scenarios

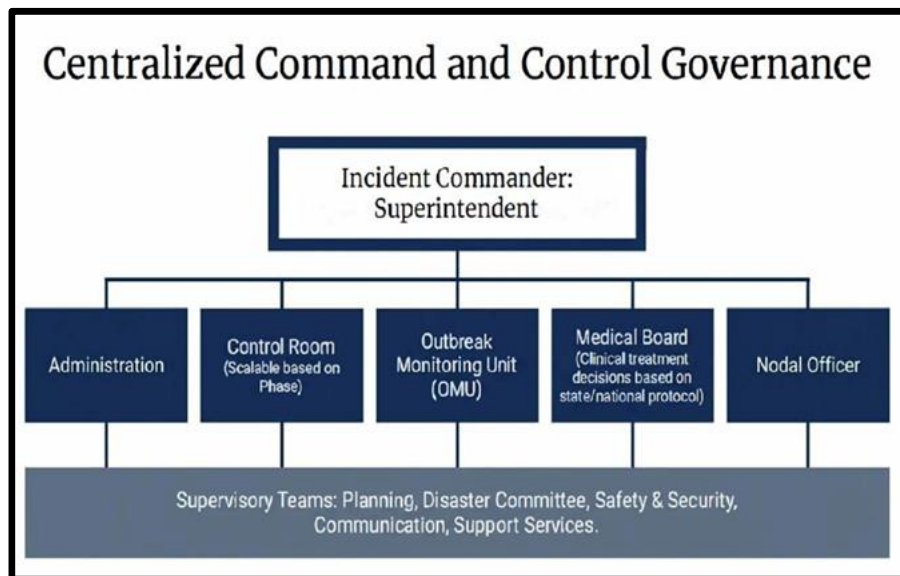
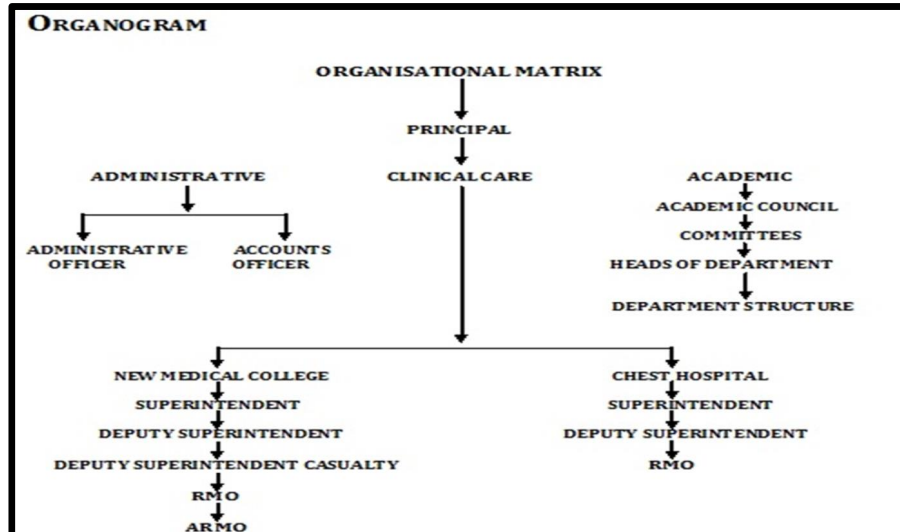
Command & Control System

- 24×7 Control Room
- Real-time bed/ventilator tracking
- Ambulance coordination
- District authority liaison

Incident Command Structure

- Incident Commander: Principal / Medical Superintendent
- Operations: Clinical & Nursing leads
- Logistics: Biomedical, oxygen, pharmacy
- Planning: Surveillance & forecasting
- Communication: PRO & public interface

Organogram





Pandemic Preparedness Committee

Governance & Leadership Framework

Command Structure Overview

Role	Core Function	Lead Authority	Deputy / Support
Incident Commander	Strategic leadership, intersectoral coordination	Medical Superintendent	RMO
Operations Lead	Clinical services, wards, ICUs, triage	Prof & HoD – General Medicine	Prof – HoD – Anesthesiology / Pulmonology
Logistics Lead	Oxygen, PPE, equipment, transport systems	Deputy Medical Superintendent	ARMO
Planning Lead	Surge forecasting, bed capacity expansion	Prof & HoD – Community Medicine	RPEID Cell Coordinator
Finance Lead	Emergency procurement & budgeting	Accounts Officer	Senior Accounts Assistant

Key Features of Governance Model

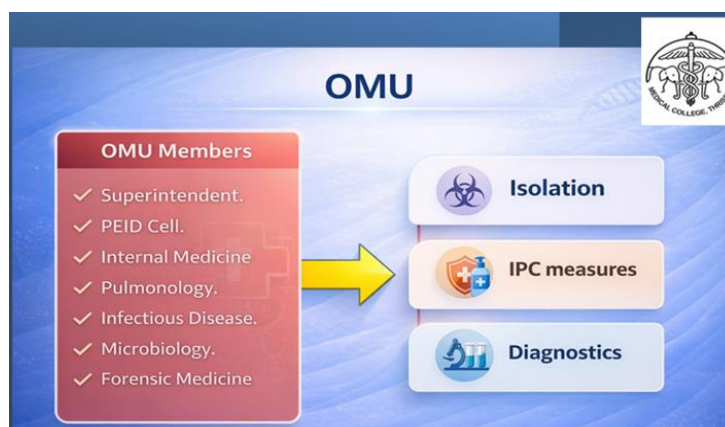
- ✓ Clear Incident Command Structure (ICS-based)
- ✓ Defined accountability at each level
- ✓ Integrated clinical–administrative coordination
- ✓ Real-time surge planning & resource allocation
- ✓ Reduced clutter → only essential words
- ✓ Structured into command org chart
- ✓ Improved alignment → easier to present verbally

2.2 Multidisciplinary Team

Roles for HODs (Medicine, Microbiology, etc.), HICC, Nursing Superintendent, Biomedical Engineering, Oxygen War Room Management and PRO.

2.3 Outbreak Monitoring Unit (OMU)

Specialized cell for identifying emerging/re-emerging infections, triaging, and multiplex PCR diagnostic platforms.



2.4 Institutional Medical Board

Oversight for clinical treatment protocols and discharge policies. Institutional Medical Board constituted as part of pandemic preparedness will perform all functions of pandemic preparedness and response committee

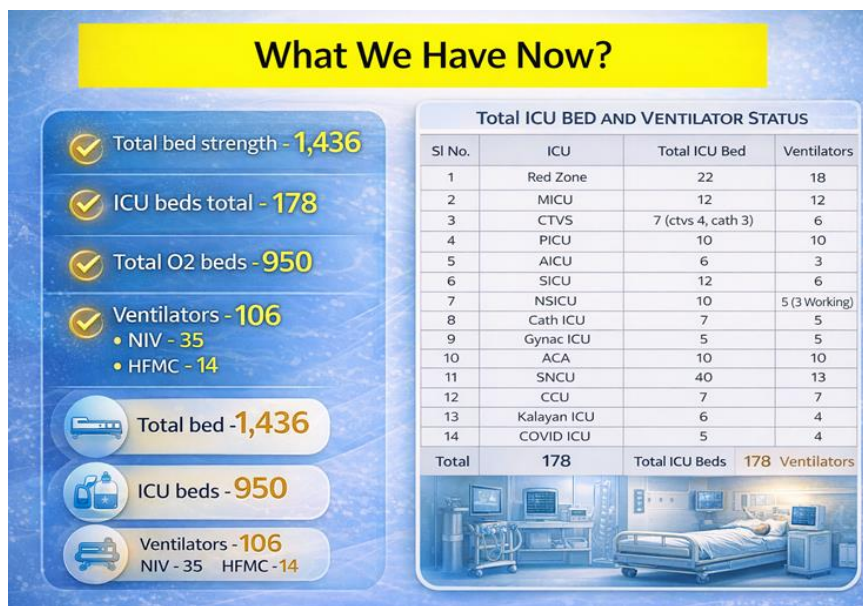
The functions include:

- Daily case load review
- Clinical decision-making
- Bed & oxygen allocation
- Staff deployment
- Surge activation decisions
- Coordination with district administration

3. Situational Analysis & Resource Mapping

3.1 Infrastructure Audit

Comparison of existing vs. required IP/OP blocks, negative pressure rooms, and dedicated infectious disease blocks.



Structural design of medical college thrissur



3.2 Human Resource Pool

Mapping of sanctioned vs. present staff (Professors to temporary staff) and a three-tiered staffing plan (core, reserve, volunteer).

Sl No	Category	Sanctioned	Present	Gaps	Mobilization Strategy
1	Faculty (Clinical)	355	317	38	Call back from leave; redeploy from non-critical depts.
2	Residents (SR/ Academic JR/ NAJR)	487	487	0	Recruit additional temporary doctors through HDS/schemes.
3	Nursing Staff (Permanent)	599	560	39	Shift-based duty (6-8 hr shifts); cancel all leave.
4	Staff (Contract) (HDS & RSBY)	437	437	0	Recruitment of emergency temporary nursing staff.

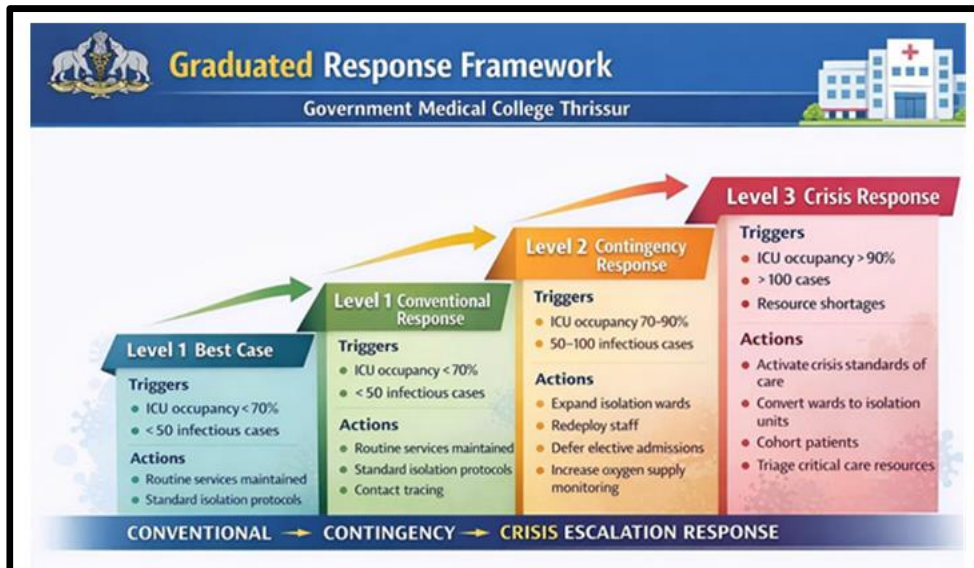
5	ICU/Transplant Trained Nurses				Prioritize for Level 3 (Crisis) ICU surge.
6	Nursing Assistants,	181	179	2	Deploy for high-touch surface cleaning and food delivery.
7	Hospital Attendants (Gr 1 & 2)	222	173	49	Training on 1% hypochlorite use and trolley disinfection.
8	Kudumbasree / Cleaning Staff				Focus on waste management and environmental cleaning.
9	Ancillary (Lab, Rad, Pharm)	135	100	15	Maintain a standby duty roster for 24/7 coverage.
10	Security & Transport Staff				Lead "Red Channel" movement and patient data entry.

11	Volunteer Reserve Pool	/	1113	1113	Undergraduate students studying in various courses can be trained and entrusted with responsibilities according to their field of training
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3.3 Equipment & Logistics:

Inventory for ventilators, HFNCs, oxygen beds, LMO capacity (KL), and PPE buffer stocks.

4. Graduated Response Framework (Three-Level Model)



- Level 1 – Routine preparedness
- Level 2 – Moderate surge
- Level 3 – High surge
- Level 4 – Full emergency activation

Functional Zoning

- Red Zone – Confirmed cases
- Yellow Zone – Suspects
- Green Zone – Non-COVID services

Isolation Infrastructure

- Dedicated isolation blocks
- Separate ICU for infectious diseases
- Emergency triage area

Surge capacity plan

Bed Capacity Expansion

- Base ICU beds: 77
- Total surge capacity: ~845 beds

4.1 Escalation Triggers

Defined by disease epidemiology (R_0), ICU occupancy, bed availability, and staff absenteeism.

Primary Escalation Triggers

- Disease epidemiology: Basic reproduction number [R_0]
- ICU occupancy
- Isolation Bed availability
- Staffing levels
- Resource Strain

Escalation strategy overview

Response	Scenario	ICU occupancy	Emerging infection cases	Response
Conventional response	Best case scenario	$\leq 70\%$	$< 50/\text{day}$ reaching ER	Conventional – Tier 1 <i>Business as usual</i> Operate within normal facility standards Minor adjustments to space and staff Standard care fully
Contingency response	Moderate case scenario	70-90%	50-100/day	Contingency- Tier 2 <i>Functionally equivalent</i>

				Adapt space, staff and supplies Surge annexes activated Care is functionally equivalent to standards
Crisis response	worst case scenario	90%	>100/day	Crisis- Tier 3 <i>Sufficiency of Care</i> Extreme resource scarcity Maximize population benefit Crisis standards of care active

Pandemic response level

	Level 1- Conventional	Level 2-Contingency	Level 3- Crisis
Definition	Usual standard of care	Demand exceeds standard resources	Resource severely depleted
Function	Hospital functions within designed capacity with minor adaptations	Adaptive spaces/staffing used to maintain equivalent outcomes	Focus shifts to population-based outcomes. Crisis standards of care (CSC) activated
Key metrics	ICU occupancy $\leq 70\%$ Supply days ≥ 30 Absenteeism $< 10\%$	ICU occupancy 70-90% Supply days 7-29 Absenteeism 10-20%	ICU occupancy 90-95% Supply < 7 Absenteeism $< 20\%$

Operational status	Elective surgery ongoing Standard staff ratios Normal visitor policy	Emergency Medicine boarding >4 hours Surge annexes activated Electives prioritized/paused	O2/ ventilator constrain Crisis standard of care active Non traditional spaces
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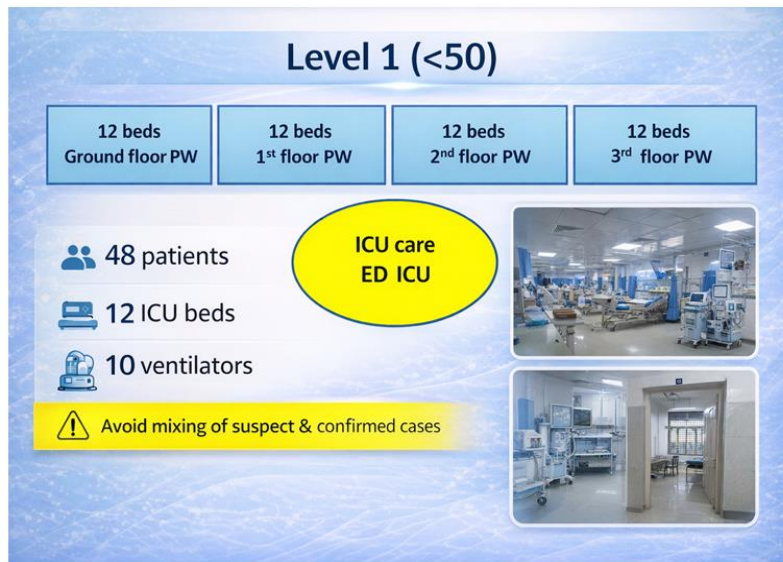
4.2 Level 1 – Conventional (Best Case)

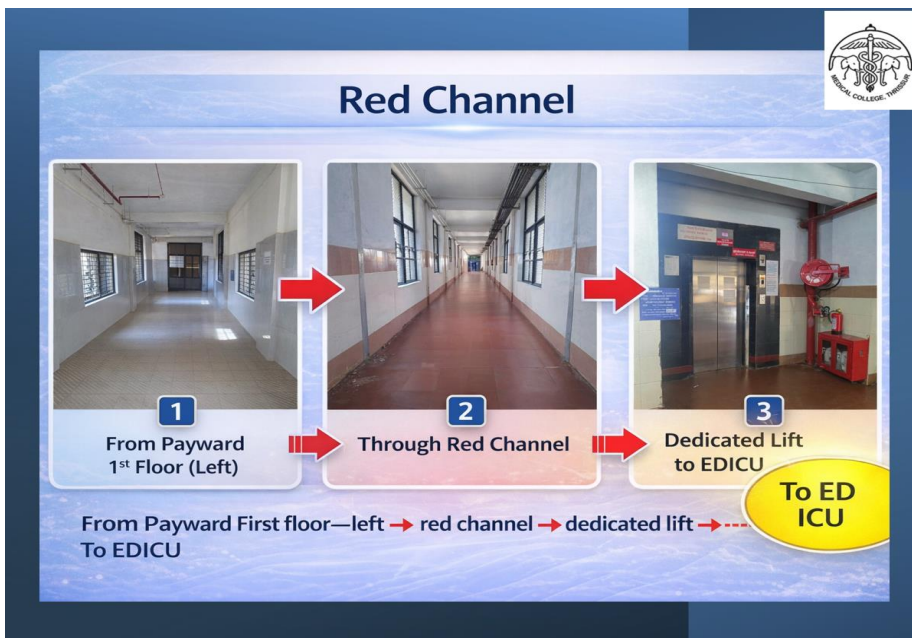
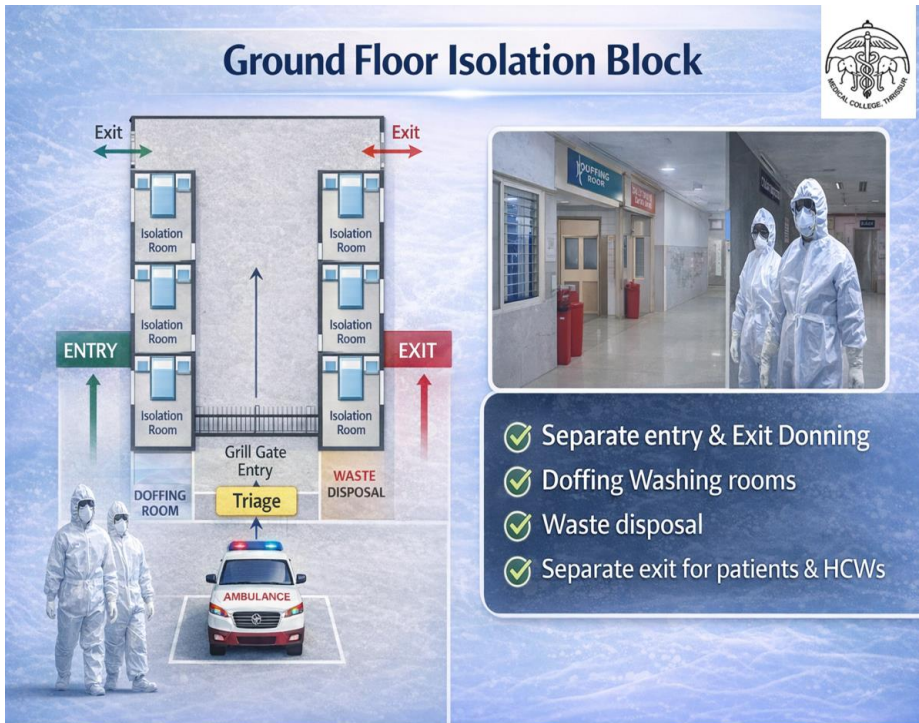
Standard facility standards, minor staff adjustments, and full maintenance of elective services.

Operational Goal: Maintain standard of care without dilution of expertise while maximizing routine elective services.

Trigger Points	Institutional Action Points
Cases: No confirmed local cases OR sporadic imported cases without local transmission.	Surveillance: Activate ILI/SARI screening at entry points and mandatory IHIP reporting.
Admission: Baseline hospital and ICU admission levels.	Infrastructure: Identify "Red Channel" entry points and start planning for expansion of oxygen beds and ICUs by 20% .
Staffing: Absenteeism <10%.	Training: Conduct refresher training on IPC, PPE donning/doffing, and simulation mock drills.

Logistics: PPE and drug supply days >30.	Logistics: Assess and enhance centralized/decentralized Liquid Medical Oxygen (LMO) to full reserve capacity.
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4.3 Level 2 – Contingency (Moderate Case)

Containment Activation of surge annexes, prioritizing/pausing electives, and adaptive staffing.

Operational Goal: Adapt space, staff, and supplies to maintain care functionally equivalent to standard care.

Trigger Points	Institutional Action Points
Cases: Confirmed local transmission and rising suspected cases in OP/IP departments.	Hospital Reorganization: Activate surge annexes (e.g., Ward 9/10 or Paywards) and create barricaded triage areas.
ICU Occupancy: 70–90%.	Clinical Operations: Regulate non-pandemic care and pause/reduce non-urgent elective surgeries.
District Load: Hospital admissions due to the pandemic reaching 10% of total district admissions.	HR Strategy: Implement shift-based duties (6–8 hours) and deploy float pools or tiered staffing models.
Logistics: PPE supply days 7–29; ventilator/O2 constraints beginning.	Logistics: Fill 100% of oxygen reserve capacity and look for potential sources of capacity enhancement.

Level 2 (50-100)

20 beds Green Zone Block

MDICU
60 beds ward 1
MDICU-20
20 ventilators

+ 100 additional beds

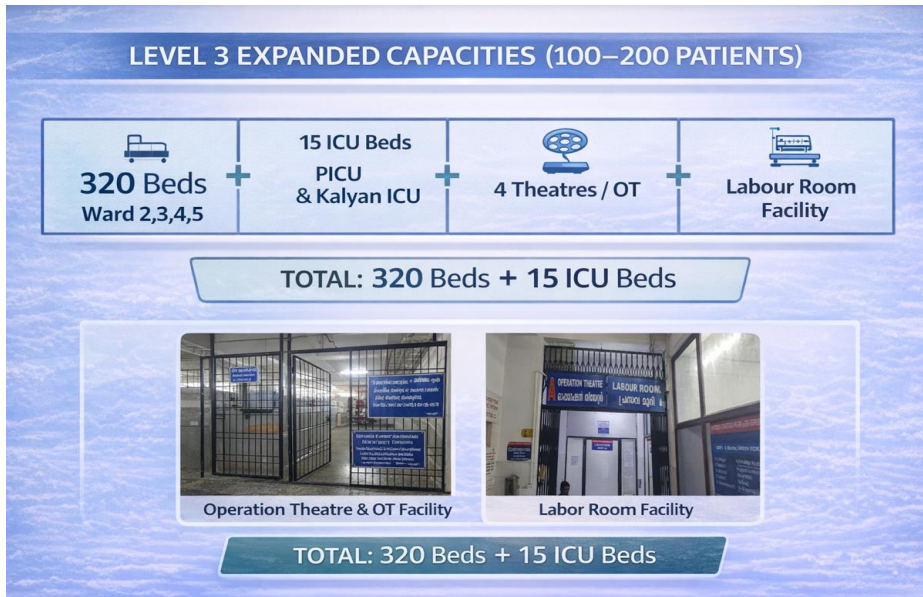


4.4 Level 3 – Crisis (Worst Case)

Activation of Crisis Standards of Care (CSC), extreme resource scarcity, and use of non-traditional spaces.

Operational Goal: Maximize population benefit under extreme resource scarcity; activation of Crisis Standards of Care (CSC).

Trigger Points	Institutional Action Points
Cases: Surge in confirmed admissions; OP load crosses the threshold level.	OP/IP Reorganization: Stop general OP services; convert waiting or non-patient areas into makeshift wards.
ICU Occupancy: >90% (System Overwhelmed).	Critical Care: Activate earmarked pandemic beds in private institutions for government-referred patients.
District Load: Pandemic admissions reaching 25% of total hospital admissions in the district.	Services: Switch to emergency non-pandemic care only ; discharge all stable/recovering patients.
Staffing: Absenteeism >20%.	HR Strategy: Large-scale recruitment of temporary staff; redeployment of non-clinical/academic staff to clinical work.
Logistics: PPE supply <7 days; spare ventilator capacity <10%.	Networking: Full district ICU pooling and activation of field hospitals/CSLTCs.



LEVEL 4 WORST CASE SCENARIO (>200 PATIENTS)

+ 320 BEDS

- Ward 8: 80 Beds
- Ward 9: 80 Beds
- Ward 10: 80 Beds
- Ward 11: 80 Beds

+ 30 ICU BEDS

30-Bed ACA & Isolation ICU)

All Beds Equipped with Oxygen Supply



Oxygen Supply to All Beds



+ 30 ICU BEDS

30-Bed ACA & Isolation ICU

Over 200 Beds Prepared for Critical Care

EXTREME CRISIS PHASE

+815 BEDS

Remaining Surge Capacity

+72 ICU BEDS

Remaining Intensive Care Capacity

+72 ICU BEDS

Remaining Intensive Care Capacity

Additional Surge of Beds Available At:



Chest Hospital



ESI Hospital



Nursing College



Dental College



Hostels



Hostels



Auditoriums



Sport Complex

5. Operational Standard Operating Procedures (SOPs)

5.1 Triage & Red Channel Protocol

Dual-stream triage (Green/Red zones), dedicated transport routes, and lift/trolley disinfection with 1% hypochlorite.

5.2 Patient Care Equipment

SOPs for dedicated instruments, decontamination of heat-stable/sensitive items, and PPE for reprocessing.

5.3 Infection Prevention & Control (IPC)

Manuals for hand hygiene, cough etiquette, donning/doffing training, and staff safety monitoring.

5.4 Environmental & Engineering Controls

HEPA filtration, negative pressure maintenance and 12 Air Changes per Hour (ACH) for AIIRs.

5.5 Makeshift Isolation Enclosures

Guidelines for temporary cubicles/tents with localized negative pressure.

5.6 COVID/Pandemic Operation Theatre

Converting re-circulatory HVAC to 100% once-through systems with independent exhaust blowers.

6. Specialized Service Guidelines

6.1 Dialysis Units

Testing frequency (e.g., every 10 days), surface disinfection, and staff PPE requirements.

6.2 Management of Deceased

Handling protocols (Standard Precautions), plugging orifices, 1% hypochlorite bag disinfection, and family counseling.

Dead body & mortuary management

The freezer facility at Government Medical College, Thrissur is designed as a tiered and surge-responsive system to ensure dignified and safe management of deceased bodies during routine operations as well as public health emergencies. At the primary level (Level 1), the NMCH mortuary provides a baseline capacity of 14 freezer units, catering to standard institutional requirements. As demand escalates, Level 2 capacity is activated through integration with additional facilities, including the Forensic Department (16 units) and the Chest Hospital (6 units), thereby significantly expanding the storage capability while maintaining operational continuity and adherence to medico-legal and biosafety standards.

In extreme surge scenarios, the system incorporates Level 3 contingency measures, wherein additional space is created by converting designated rooms near the NMCH cold storage area to accommodate approximately 20 additional bodies with appropriate cooling arrangements. Beyond institutional boundaries, further resilience is ensured through coordination with local self-government bodies, including the availability of crematorium facilities such as those at Avanoor Grama Panchayat, enabling timely and respectful last rites. This multi-layered approach reflects a pragmatic blend of infrastructure planning, interdepartmental coordination, and community linkage, ensuring that even under peak stress conditions, the system remains humane, organized, and responsive.

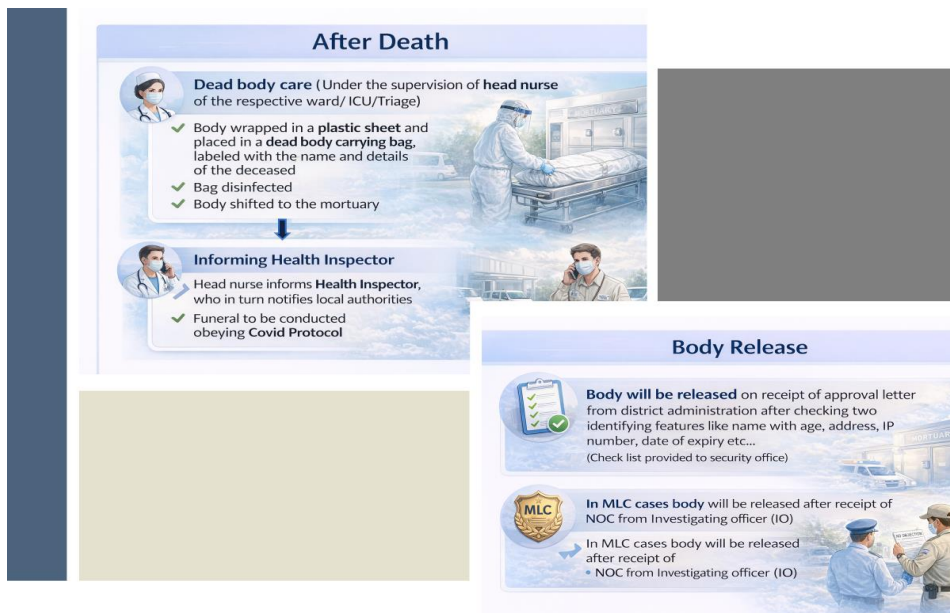
- Multi-level cold storage system
- Expansion plan during surge



The post-mortem care pathway at Government Medical College, Thrissur is governed by a meticulously structured protocol that upholds dignity, biosafety, and regulatory compliance. Following confirmation of death, the responsibility of dead body care is undertaken under the direct supervision of the head nurse of the respective ward, ICU, or triage area, ensuring adherence to standardized infection prevention and control practices. The body is respectfully prepared by wrapping in a protective plastic sheet and placed within a designated dead body carrying bag, which is clearly labeled with the name and identifying details of the deceased to prevent any errors in identification. The exterior of the body bag is thoroughly disinfected as per protocol, after which the body is safely transported to the mortuary through designated pathways that minimize exposure risks. This process reflects a careful balance between clinical prudence and humane handling, particularly in the context of infectious disease scenarios.

Simultaneously, a defined communication and administrative chain is activated. The head nurse promptly informs the Health Inspector, who in turn notifies the appropriate local authorities, ensuring that all statutory and public health requirements are fulfilled. Funeral arrangements are carried out in accordance with prevailing public health guidelines, including disease-specific protocols such as those mandated during COVID-19, thereby

safeguarding both family members and the community. The release of the body is governed by a stringent verification process, wherein approval from the district administration is obtained and identity confirmation is ensured through multiple parameters including name, age, address, inpatient number, and date of death, as per a standardized checklist maintained by the security office. In medico-legal cases (MLC), an additional layer of legal clearance is required, and the body is released only upon receipt of a No Objection Certificate (NOC) from the Investigating Officer (IO). This comprehensive and dignified framework ensures that post-death procedures are conducted with sensitivity, transparency, and unwavering adherence to legal and public health mandates.



6.3 Maternal & Child Health

Specific admission/transfer rules if both mother and child are admitted.

7. Logistics & Ancillary Services

7.1 Supply Chain Management

Real-time tracking via automated inventory systems and KMSCL coordination.

Oxygen Pharmacy & Supply chain

Government Medical College, Thrissur has established a resilient and scalable oxygen ecosystem, recognizing oxygen as the cornerstone of life-saving therapy in respiratory and critical care emergencies. The institution is supported by two high-capacity 10 KL Liquid Medical Oxygen (LMO) tanks, ensuring uninterrupted bulk supply, complemented by a Pressure Swing Adsorption (PSA) plant with a generation capacity of 1500 L/min that provides an additional layer of on-site oxygen security. This is further reinforced by a robust cylinder backup system comprising approximately 250 cylinders, strategically maintained to serve as a contingency buffer during surges or supply disruptions. Together, this multi-tiered oxygen architecture enables redundancy, flexibility, and rapid scalability, ensuring that no patient is denied timely oxygen therapy even under peak demand conditions.

This infrastructure is underpinned by a vigilant monitoring and governance mechanism, wherein daily oxygen consumption audits are conducted to track utilization patterns, identify inefficiencies, and optimize distribution across departments. A dynamic forecasting system anticipates future demand based on case load trends, ICU occupancy, and disease severity projections, enabling pre-emptive resource planning. In parallel, pharmacy preparedness has been strengthened through the maintenance of essential drug buffer stocks and the activation of an emergency procurement system capable of rapid replenishment during crises. Notably, during public health emergencies, a centralized Command War Room was operationalized, functioning as the nerve centre for real-time monitoring, strategic planning, procurement coordination, and liaison with higher authorities. This integrated command structure ensured agile decision-making, seamless interdepartmental coordination, and a proactive response framework, thereby safeguarding continuity of care in even the most challenging scenarios.

Oxygen Infrastructure

- 10 KL Liquid Oxygen Plants (2)
- PSA Plant (1500 L/min)
- Cylinder backup (250 units)

Monitoring

- Daily consumption audit
- Forecasting system

Pharmacy Preparedness

- Essential drug buffer stock

Essential drugs

- Remdesivir
- Tocilizumab.
- Methyprednisolone
- Dexamethasone.
- Oseltamavir.



- PPE
- Gloves
- N95 masks
- Triple layer



- Emergency procurement system



Oxygen Supply

- 10 KL liquid O2 plant-2
- PSA plant 1500 L/mt -1
- Manifold plant 40x2 =2
- 250 O2 cylinders provision

Total O2 consumption -65000 cubic meter/m
Total O2 beds 950
2016 -82

Daily audit
Consumption forecasting

7.2 Linen & Laundry

SOPs for leak-proof containers, negative pressure laundry areas, and avoiding double-bagging.

7.3 Biomedical Waste Management

Double-layered yellow bags, dedicated "X Waste" labeling, and separate record keeping.

7.4 Support Services

Dietary coordination with LSGD, psychological support (Psychiatry dept), and social work teams.

8. Communication, Monitoring & Research

8.1 Surveillance Systems

Integration with IHIP, IDSP, ICMR, and AI-assisted epidemiologic modelling.

8.2 Media & Risk Communication

Designated spokesperson, accurate status reports, and designated locations for media updates.

Communication strategy

- Centralised PRO communication
- Daily reporting dashboard
- Public awareness campaigns
- Media coordination
- **Communication Strategy and Command Coordination**

An integrated and hierarchical communication strategy has been institutionalized at Government Medical College, Thrissur to ensure seamless coordination across all levels of the healthcare system during routine operations and crisis scenarios. At the apex, a Central Command mechanism functions as the strategic nerve centre, facilitating real-time coordination between the State, District administration, and the Medical College. This centralized framework enables rapid information flow, situational awareness, and synchronized decision-making, ensuring that policy directives, resource allocation, and emergency responses are aligned across all tiers. The command system dynamically monitors evolving scenarios, consolidates data inputs from multiple sources, and translates them into actionable strategies, thereby minimizing delays and enhancing system responsiveness during public health emergencies.



8.3 Control Room Operations

Coordination of patient arrivals, duty roster management, and daily review meetings.

Complementing this is a Public Relations Officer (PRO)-centred hospital command system that operates at the institutional level, acting as the operational hub for internal coordination and external communication. This system ensures timely dissemination of accurate information to stakeholders, including patients, attendants, media, and administrative authorities, thereby preventing misinformation and fostering public trust. Simultaneously, it monitors key functional domains such as patient flow, bed availability, resource utilization, and grievance redressal, providing real-time support to clinical and administrative teams. Through this dual-layered communication architecture—strategic at the central level and operational at the institutional level—the hospital ensures a cohesive, transparent, and agile response to both routine healthcare demands and complex crisis situations.



8.4 Research Collaboration

Clinical trials, outcome analysis, and veterinary/environmental science coordination.

9. Recovery & De-escalation

9.1 Discharge & Back Referral

Criteria for shifting mild/moderate cases to Taluk or District hospitals.

Back Referral Policy

The Back Referral Policy is a key system-strengthening innovation that ensures continuity of care while preventing unnecessary congestion at tertiary care centres. After stabilization and completion of advanced interventions, patients are systematically referred back to appropriate secondary or primary care facilities for ongoing management, rehabilitation, and follow-up. This policy is supported by clear clinical criteria, structured communication between institutions, and coordinated transport mechanisms. By redistributing patient load in a rational manner, it enhances system efficiency, reduces patient waiting times, and reinforces the role of peripheral healthcare institutions within the broader care continuum.

DE-Escalation plan

The de-escalation strategy at Government Medical College, Thrissur is conceived as a calibrated and data-driven transition from emergency pandemic response to normalized healthcare delivery, ensuring that gains achieved during crisis management are preserved while routine services are safely restored. Central to this approach is the gradual reduction of designated COVID care beds, guided by declining caseloads, test positivity rates, and hospital occupancy trends. Rather than abrupt withdrawal, bed capacity is strategically tapered in phases, maintaining a buffer for potential resurgence while simultaneously releasing infrastructure for non-COVID care. This measured approach ensures preparedness is retained even as pressure on the system eases.

Parallely, the restoration of routine healthcare services is undertaken in a prioritized and structured manner, with special emphasis on elective procedures, outpatient services, and management of non-communicable diseases that may have been deferred during the surge period. Workforce normalization is carefully orchestrated by redeploying staff from COVID-specific duties back to their parent departments, addressing fatigue through appropriate rest cycles, and re-establishing standard duty rosters. At the same time, resources—including oxygen infrastructure, equipment, and critical drugs—are judiciously redistributed across

departments to align with evolving service demands. This holistic de-escalation framework ensures that the institution transitions smoothly from crisis mode to comprehensive care delivery, while remaining vigilant and resilient against future public health contingencies

- Gradual reduction of COVID beds
- Restoration of routine services
- Workforce normalization
- Resource redistribution



9.2 Financial Plan

Establishing a dedicated emergency response fund.

9.3 After-Action Reviews

Policy audits and post-pandemic evaluations for iterative improvement.

Monitoring & evaluation

A rigorously structured system of daily dashboard review forms the analytical backbone of operational decision-making at Government Medical College, Thrissur, transforming raw data into strategic foresight. This dynamic dashboard serves not merely as a repository of numbers but as an instrument of anticipatory governance, enabling leadership to discern patterns, pre-empt crises, and calibrate responses with precision. Key performance indicators—including bed occupancy, ICU utilization, oxygen consumption, and mortality rates—are meticulously tracked and interpreted within a contextual framework of disease trends and service demand. Bed occupancy provides a real-time barometer of system load, while ICU utilization reflects the severity spectrum and critical care burden, guiding escalation or de-escalation of resources.

Equally pivotal is the continuous monitoring of oxygen consumption, which functions as a sensitive surrogate marker for both patient acuity and infrastructure strain, necessitating proactive supply chain management and conservation strategies. Mortality rates, examined with clinical granularity, offer insights into disease progression, treatment efficacy, and potential systemic gaps, thereby informing quality improvement initiatives. Through this integrated dashboard approach, the institution transcends reactive management and embraces a culture of data-driven stewardship, where every metric is not merely observed but interpreted, and every trend translated into timely, evidence-based action.

- Daily dashboard review
- Key indicators:
 - Bed occupancy
 - ICU utilization
 - Oxygen consumption
 - Mortality rates

10. Index of Standard Operating Procedures (SOPs) & Guidelines

This section serves as a repository of all mandatory protocols.

10.1 Clinical & Triage Protocols

- **Dual Stream Triage:** Segregation of ILI/SARI cases from general patients at entry. *(Management of increasing Fever Cases - Kerala State Treatment Guidelines for ILI & SARI cases in the context of co-circulation of SARS-COV-2 and Influenza virus - Health & Family Welfare Department; G.O.(Rt)No.1489/2023/H&FWD Dated,Thiruvananthapuram, 23-062023)*
- **Red Channel Protocol:** Step-by-step movement of positive patients, including lift blocking and security coordination. *(COVID-19 (nCorona) Virus Outbreak Control and Prevention State Cell Health & Family Welfare Department Government of Kerala Reference Guide for Converting Hospitals into Dedicated COVID Hospitals.)*
- **Patient Admission & ID Banding:** Mandatory ID bands and registration of bystanders/vehicle details. *(COVID 19 treatment guidelines Ref No 31/F2/2020/ H&FWD dated 15th August, 2020, Govt. of Kerala)*
- **Testing Strategy:** 10-day testing cycle for routine dialysis patients and use of Rapid Antigen Tests (RAT). Testing strategy to be optimized based on the pathogen characteristics. *(Advisory on purposive testing strategy for COVID 19; No 46/31/F2/2020/ H&FWD dated 11th Jan, 2022, Govt. of Kerala)*

10.2 Infection Prevention & Control (IPC)

- **Donning & Doffing:** Mandatory refresher training for all staff levels, including housekeeping and drivers. *(COVID 19 - PPE use. Reg. No 31/F2/2020/ Health - dated 25th March , 2020, F &FW, Govt. of Kerala)*
- **Hand Hygiene & Cough Etiquette:** Standardized practices as per the Institutional IPC Manual. *(COVID -19 Infection Prevention and Control Manual, Govt Medical College, Thiruvananthapuram date of issue 16.4.2020)*
- **Environmental Cleaning:** Two-hourly cleaning of high-touch surfaces (switches, handles) with 1% hypochlorite. *(Standardized practices as per the Institutional IPC*

Manual.(COVID -19 Infection Prevention and Control Manual, Govt Medical College, Thiruvananthapuram date of issue 16.4.2020)

- **Patient Equipment Reprocessing:** Sterilization of heat-sensitive (ETO/Sterrad) and heat-stable (Autoclave) items. (Standardized practices as per the Institutional IPC Manual.(COVID -19 Infection Prevention and Control Manual, Govt Medical College, Thiruvananthapuram date of issue 16.4.2020)

10.3 Engineering & Infrastructure SOPs

- **AIIR Conversion:** Guidelines for blocking return air vents and achieving 12 Air Changes per Hour (ACH).
- **Operation Theatre (OT) Modification:** Converting to 100% once-through HVAC systems for pandemic surgeries.
- **Makeshift Enclosures:** Setting up temporary cubicles or tents with localized HEPA filtration.

10.4 Logistics & Waste Management

- **Biomedical Waste (BMW):** Use of double-layered yellow bags and specific "X Waste" labeling. Hospital Waste management guidelines annexed
- **Linen & Laundry:** Protocol for leak-proof containers and avoiding double-bagging to reduce waste.

Instructions For Safe Use of Linen

Packing and transporting linen and laundry from isolation areas

Place soiled linen directly into containers or bags in the isolation room or area.

- Contain the soiled linen in a manner that prevents the containers or bags from opening or bursting during transport.
- One layer of packing is adequate, provided that the soiled linen can be placed in the bag without contaminating the outside of the bag. Double-bagging is unnecessary.

- Ensure that all persons who handling the soiled linen must use Standard Precautions, and perform hand hygiene after removing PPE.
- Heavy-duty tasks (e.g. cleaning of the environment) require more resistant PPE (e.g. rubber gloves and apron, and resistant closed shoes). Best practices for linen (and laundry) handling
- Always wear reusable rubber gloves prior to handling soiled linen (e.g., bed sheets, towels, curtains).
- Never carry soiled linen against the body. Always place it in the designated container.
- Carefully roll up soiled linen to prevent contamination of the air, surfaces, and cleaning staff. Do not shake it.
- If there is any solid excrement on the linen, such as feces or vomit, scrape it off carefully with a flat, firm object and put it in the commode or designated toilet/latrine before putting linen in the designated container
- Place soiled linen into a clearly labelled, leak-proof container (e.g., bag, bucket) in the patient care area. Do not transport soiled linen by hand outside the specific patient care area from where it was removed.
- Reprocess (i.e., clean and disinfect) the designated container for soiled linen should be reprocessed after each use
- If reusable linen bags are used inside the designated container, do not overfill them, tie them securely, and launder after each use Always use and maintain laundry equipment according to manufacturer's instructions. Always launder soiled linens from patient care areas in a designated area, which should:
- Be a dedicated space for performing laundering of soiled linen
- Have floors and walls made of durable materials that can withstand the exposures of the area (e.g., large quantities of water and steam)

- Have a separation between the soiled linen and clean linen storage areas, and ideally should be at negative pressure relative to other areas
- Have hand washing facilities
- Have Structured Operating Protocols (SOP) and other job aids to assist laundry staff with procedures
 - **Oxygen War Room:** Real-time oxygen mapping and reserve capacity enhancement.

10.5 Specialized & Support Service Guidelines

- **Dialysis Unit SOP:** Use of dedicated tubings for positive patients and face shield requirements.
- **Management of the Deceased:** Disinfection of body bags with 1% hypochlorite and plugging of orifices.

PROTOCOL FOR HANDLING OF DECEASED DURING PANDEMICS [PROTOTYPE-COVID 19]

The main driver of transmission of COVID-19 is through droplets. There is unlikely to be an increased risk of COVID infection from a dead body to health workers or family members who follow standard precautions while handling body. But in case of diseases like Ebola, Marburg, CCHF etc HCW can get infections from the deceased as well. Only the lungs of dead COVID patients, if handled during an autopsy, can be infectious. Standard Precautions to be followed by health care workers while handling dead bodies of COVID. Standard infection prevention control practices should be followed at all times.

These include:

1. Hand hygiene.
2. Use of personal protective equipment (e.g., water resistant apron, gloves, masks, eyewear).
3. Safe handling of sharps.
4. Disinfect bag housing dead body; instruments and devices used on the patient.

5. Disinfect linen. Clean and disinfect environmental surfaces.

Training in infection and prevention control practices

All staff identified to handle dead bodies in the isolation area, mortuary, ambulance and those workers in the crematorium / burial ground should be trained in the infection prevention control practices.

Removal of the body from the isolation room or area

- The health worker attending to the dead body should perform hand hygiene, ensure proper use of PPE (gloves, N95 mask, goggles, water resistant apron).
- All tubes, drains and catheters on the dead body should be removed.
- Any puncture holes or wounds (resulting from removal of catheter, drains, tubes, or otherwise) should be disinfected with 1% hypochlorite and dressed with impermeable material.
- Apply caution while handling sharps such as intravenous catheters and other sharp devices. They should be disposed into a sharps container.
- Plug oral, nasal orifices of the dead body to prevent leakage of body fluids.
- If the family of the patient wishes to view the body at the time of removal from the isolation room or area, they may be allowed to do so with the application of Standard Precautions.
- Place the dead body in leak-proof plastic body bag. The exterior of the body bag can be decontaminated with 1% hypochlorite solution. The body bag can be wrapped with a mortuary sheet or sheet provided by the family members.
- The body will be either handed over to the relatives or taken to mortuary.
- All used/ soiled linen should be handled with standard precautions, put in biohazard bag and the outer surface of the bag disinfected with hypochlorite solution.
- Used equipment should be autoclaved or decontaminated with disinfectant solutions in accordance with established infection prevention control practices.

- All medical waste must be handled and disposed of in accordance with Biomedical waste management rules.
- The health staff who handled the body will remove personal protective equipment and will perform hand hygiene.
- Provide counselling to the family members and respect their sentiments. Environmental cleaning and disinfection All surfaces of the isolation area (floors, bed, railings, side tables, IV stand, etc.) should be wiped with 1% Sodium hypochlorite solution; allow a contact time of 30 minutes, and then allowed to air dry. Handling of dead body in Mortuary
- Mortuary staff handling COVID-19 dead body should observe standard precautions.
- Dead bodies should be stored in cold chambers maintained at approximately 4°C.
- The mortuary must be kept clean. Environmental surfaces, instruments and transport trolleys should be properly disinfected with 1% Hypochlorite solution.
- After removing the body, the chamber door, handles and floor should be cleaned with sodium hypochlorite 1% solution.

Transportation

- The body, secured in a body bag, exterior of which is decontaminated poses no additional risk to the staff transporting the dead body.
- The personnel handling the body may follow standard precautions (surgical mask, gloves).
- The vehicle, after the transfer of the body to cremation/ burial staff, will be decontaminated with 1% Sodium hypochlorite.
 - **Psychological Support:** Counseling for families and staff to manage burnout and anxiety.
 - **Food & Dietary Services:** Coordination with Local Self-Government Departments (LSGD) for timely patient meals.

- **Maternal & Child Health SOP**

Innovations (GMCT Models)

PRAANA 3.0

The PRAANA (Proactive Respiratory and Advanced Network for Acute care) Initiative represents a forward-looking, systems-based approach to respiratory and critical care preparedness at Government Medical College, Thrissur. Conceived during periods of heightened respiratory disease burden, PRAANA integrates early detection, standardized treatment pathways, oxygen optimization, and escalation protocols into a unified framework. It emphasizes timely triage, early initiation of oxygen therapy, rational use of ventilatory support, and continuous monitoring of patient outcomes. By combining clinical protocols with real-time data tracking and multidisciplinary coordination, the initiative ensures that patients receive the right level of care at the right time, thereby reducing morbidity, mortality, and unnecessary ICU admissions.

Hub-and-Spoke ICU Model

The Hub-and-Spoke ICU Model is an innovative organizational strategy designed to optimize critical care delivery across multiple units and facilities. In this model, the central ICU (hub) at the medical college functions as the apex centre of expertise, providing advanced care, specialist input, and decision support, while peripheral ICUs and high-dependency units (spokes) manage stable or moderately critical patients under guided supervision. This structure allows for efficient utilization of limited ICU resources, prevents overcrowding at tertiary centres, and ensures continuity of care through coordinated referrals and tele-mentoring. It also enhances capacity building at peripheral units, creating a distributed yet interconnected critical care network.

Bivalved ICU Ventilation

Bivalved ICU Ventilation is an adaptive engineering solution developed to enhance ventilation efficiency and infection control within critical care settings, particularly during airborne infectious outbreaks. This model involves structural modification of ICU spaces using partitioned (bivalved) airflow systems that allow controlled segregation of patient zones while maintaining optimal air exchange and negative pressure dynamics where

feasible. It minimizes cross-infection risk among patients and healthcare workers while enabling scalable ICU expansion during surge situations. The innovation reflects a pragmatic blend of clinical need and infrastructural ingenuity, tailored to resource-constrained environments.

Ashley Hood for OT Safety

The Ashley Hood is an indigenous, low-cost protective innovation designed to enhance safety for healthcare workers during aerosol-generating procedures in operation theatres. Acting as a transparent barrier enclosure around the patient's head and upper torso, it reduces the dispersion of infectious aerosols during procedures such as intubation, thereby providing an additional layer of protection beyond standard PPE. Its design ensures visibility, ease of use, and compatibility with routine surgical workflows, making it both practical and effective. This innovation underscores the institution's commitment to developing context-appropriate, scalable solutions that prioritize both patient care and healthcare worker safety.

Index of Annexures

All the major institutions shall keep the following Annexures with all details ready at their respective institution level. The SoPs shall be updated / modified as per the research and information available regarding the respective pathogens..

1. Triage and Red channel protocol
2. Patient transport protocol during pandemics
3. SOP for Patient care equipment
4. SOP Hand hygiene
5. SOP Cough etiquette
6. Personal safety measures and PPE use
7. SOP for environmental cleaning
8. Environmental and Engineering controls
9. SOP for Makeshift Isolation enclosures
10. SOP for pandemic operation theatre
11. Guidelines for Dialysis units
12. Protocol for handling of deceased
13. Guideline on dead body management in context of COVID 19
14. SOP for Safe Linen Use
15. Biomedical Waste Management [BMW] Protocols in Isolation wards:
16. Medical Board Constitution
17. SOP for transporting a Suspect/ Confirmed case
18. CPCB Guidelines – Biomedical Waste Management
19. Mapping of laboratories
20. Infection Prevention and Control Manual-GMCH

Contact Details

Name of college	Contact Points	Contact Number
GMC Trivandrum	Information counter	4712528225
	General enquiry	4712528083
	Duty PRO	8281529159
GMC Kollam	Control Room	4742575050
GMC Konni	Control Room	4682344888
GMC Alappuzha	Control Room	4772281000
	Duty PRO	8281002947
GMC Kottayam	Control Room	9188528533
GMC Idukki	Casualty	04862232444
	Control Room	4862232555
GMC Ernakulam	Control Room	04842754000 04842751001 8075774769
	Duty PRO-	9778082825
GMC Thrissur	Control Room	04872472002 8075011853
	Duty PRO-	9383400082
GMC Manjeri	Control Room	8078253515
GMC Kozhikode	Control Room	4952350349
	Duty PRO-	9497669040
	IMCH Control room	4952350395
GMC Wayanad	Duty PRO-	8129428785
GMC Kannur	Control Room	04972882200, 8078041358
	General enquiry-	4972882100
	Duty PRO-	04972882390 9048600970
GMC Kasaragod	Control Room	8289908320