COVID-19 (nCorona) Virus Outbreak Control and Prevention State Cell

Health & Family Welfare Department

Government of Kerala

HEALTH CARE WORKER RESOURCE MANAGEMENT GUIDELINES FOR CENTRES PROVIDING COVID-19 CARE

No.31/F2/2020 Health, 20th June 2020

1. Introduction

In view of increasing number of COVID-19 cases reported from the state and to prevent the health care workers getting infected, it is essential that the valuable human resources in the health sector are used judiciously. An optimal use of Health Care Providers and Volunteers is essential to manage the system during the pandemic phase. In view of this, the following arrangements are to be made in Health Care Institutions across the State, to ensure the safety of the frontline workers and to enable judicious use of PPEs.

The list of the following categories should be prepared so that duty arrangements shall be done on a need basis:

a. Doctors
b. Nurses (Staff Nurses/Head Nurses/ Nursing superintendents/Nursing Officers)
c. Pharmacists
d. Lab Technicians
e. Nursing Assistants
f. Hospital Attendants
g. Drivers
h. Others

* District Medical Officer shall do the stratification of all categories of staff in the district in different peripheral institutions based on skill (ICU care, Ventilator, Intubation etc) to create a district pool.
* Principals and Superintendents of Medical Colleges and Medical College Hospitals shall also do a similar stratification in their institution.

2. Three tier system of human resource management for COVID care

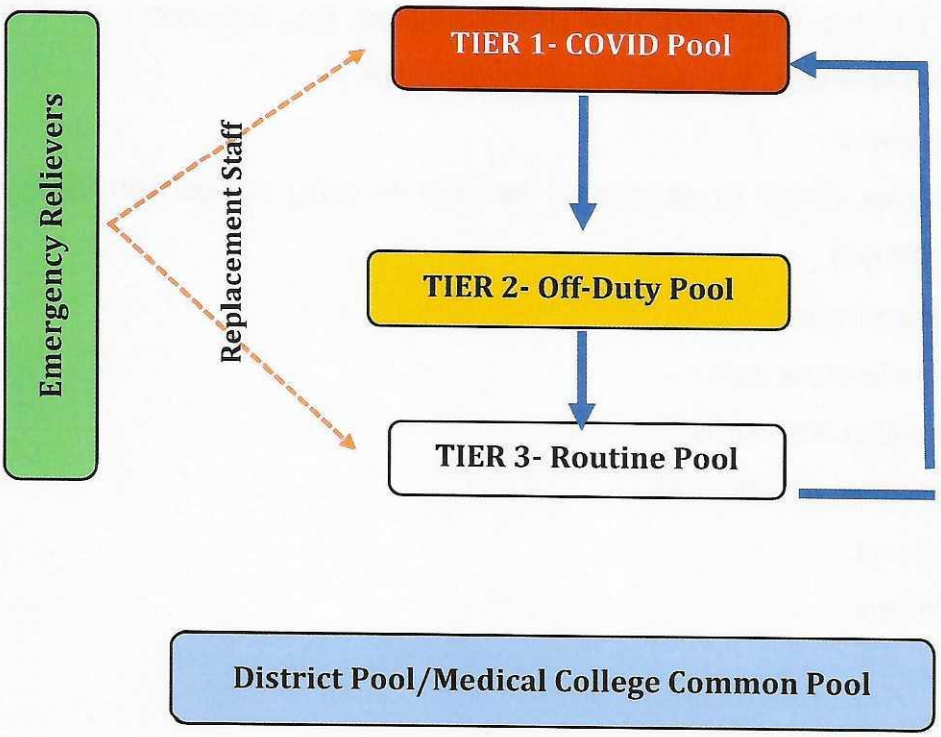
Staff belonging to the above categories should be segregated in to three tiers.

Tier 1: Staff directly involved in care of COVID-19 suspected/confirmed cases and also maintaining the facility (e.g.) isolation ward (COVID pool)

Tier 2: Off-Duty pool

Tier 3: Staff involved in care of Non-COVID patients (Routine Pool)

Duty Rotation



- **Institutional specific rearrangements of duty shall be made by the Superintendent as and when need arises. The same may be communicated with the DMO/DME, as the case may be. Monthly duty roster should be prepared in advance and submitted to DMO/DME.**
- **Any duty exemption to vulnerable staff may be done as per the judicious discretion of the hospital Superintendent/Principal and the same may be communicated to the DMO/DME.**

Table. 1. Health care worker duty matrix

Tier	Duty setting	No. of Shifts per day	Duration of work per day	Number of days continuous duty	Number of off-days following continuous duty
Tier-1	COVID POSITIVE ICU	3	8 hrs (4 hrs with PPE and 4 hrs without PPE)	10	10
Tier-1	COVID POSITIVE ISOLATION WARD	3	8 hrs (4 hrs with PPE and 4 hrs without PPE)	10	7
Tier-1	COVID SUSPECT ICU	3	8 hrs (4 hrs with PPE and 4 hrs without PPE)	7	7
Tier-1	COVID SUSPECT	3	8 hrs	10	7

	ISOLATION WARD		(4 hrs with PPE and 4 hrs without PPE)		
Tier-3	Non-COVID Duty	3	8	As per existing norms	

- The annexure- 2 provides a scenario of how the 8 hours COVID duty can be internally rotated (4 hrs with PPE & 4 hrs without PPE).
- There should also be an additional team which will function as emergency relievers to support the other tier staff in case of increased patient load or if any staff has to be relieved off duty.
- The **Emergency relievers / backup team** for the support of isolation facilities should not be involved in direct patient care in COVID. They can be utilized for reinforcement of training of all category of staff/ Planning of activities/ Hospital Infection Control (HIC) Implementation.
- In addition to the above tier, a staff **District pool** comprising of 15 staff in each category should also be made available in the district level to replace any staff that need to be placed under isolation or staff that are unable to attend work due to a family member being placed under isolation (as per guidelines) or other medical reasons. This district pool should include staff working in peripheral hospitals where the patient load is less. A similar pool should be identified in all Medical Colleges by the Superintendent and report submitted to the Principal and DME

3. Workflow Management

- The staff should be divided into different teams based on the setting and skills. The teams shall work in the isolation wards/ICUs on a rotation basis.
- Each team in the tier must be assigned specific tasks so as to reduce the frequency of staff movement in and out of the isolation wards and ICUs
- All staff working must undergo strict training, implementation of buddy system (see annesure-2) to ensure that they are well versed in donning and doffing of Personal Protective Equipment. Superintendents shall ensure the adequate stock of PPE and usage of PPE in different setting by various category of staff as per guideline No. 31/F2/2020/Health dated 25th March 2020.
- After the COVID duty, staff should take bath in the hospital itself and take necessary personal hygiene measures to prevent possible infection. The head of Institution shall arrange adequate infrastructure arrangements for resting / grooming of staff in duty.
- **Regular quarantine of healthcare workers after performing duty in COVID-19 areas is not warranted** (Reference- Ministry of Health and Family Welfare, Govt. of India)

4. SOP to be followed in case a Health Care Worker reports exposure / breach of PPE

Reference: Advisory for managing Health care workers working in COVID and Non-COVID areas of the hospital. Ministry of Health & Family Welfare Directorate General of Health Services (EMR Division) https://www.mohfw.gov.in/pdf/AdvisoryformanagingHealthcareworkersworkinginCOVIDandNonCOVIDareasofthehospital.pdf

The staff or the buddy allocated to the health care worker must report every exposure to COVID-19 to the concerned nodal officer/ COVID cell of the institution immediately.

The exact details of exposure to ascertain whether the exposure constitutes a high risk or low risk exposure as described below:

High risk exposure:

- HCW or other person providing care to a COVID-19 case or lab worker handling respiratory specimens from COVID-19 cases without recommended PPE or with possible breach of PPE

- Performed aerosol generating procedures without appropriate PPE.
- HCWs without mask/face-shield/goggles:

  - having face to face contact with COVID-19 case within 1 metre for more than 15 minutes

  - having accidental exposure to body fluids

Low risk exposure: Contacts who do not meet criteria of high-risk exposure

The Superintendent / Nodal Officer/ Head of the Department will form a sub-committee to assess the level of exposure and the risk as per assessment format at Annexure I (also accessible as per the reference). As per the assessment:

- **High risk contacts** will be quarantined for 14 days, monitored for development of symptoms, if tested positive will be managed as per the protocol laid down by the state government.

  If they test negative and remain asymptomatic, complete the 14-day quarantine and return to work.

  • **Low risk contacts** shall continue to work. They will self-monitor their health for development of symptoms. In case symptoms develop they should inform the nodal officer and follow the testing protocol.

- If a health care worker is a contact of a positive case in places other than workplace, he/she shall be managed as any other contact as per existing guidelines

5. General Instructions to HCWs:

- The HCWs shall practice frequent hand washing, worker to worker distancing as far as possible while at work and practice transmission-based precautions at all times.
- Off-duty HCWs should also practice frequent hand washing, social distancing and wearing of masks.
- If any staff develops fever and/or respiratory symptoms during duty/quarantine period/off-duty, then they shall be tested and treated as per the guidelines. All hospital should reserve separate isolation facility for health care staff.
- The health status of all staff on duty/quarantine shall be monitored and any physical or psychological issues to be addressed at the earliest with the nodal officer and relevant experts.

6. Food & Accommodation:

- The Head of institution/superintendent shall ensure all staff in tier-1 be provided food and single room accommodation with bathroom facility while on duty days and for those staff undergoing quarantine (because of breach of PPE). Decent and comfortable stay shall be arranged at a facility near to hospital with adequate facilities. The head of institution / superintendent shall arrange for such facilities as per the requirement and the expenses met through the district health administration (DMO & DPM)

- Those staff falling in other tier and who require accommodation facilities may also be provided the same.
- The COVID cell of the institution may opt for the places of stay identified by the District Collectors **OR** they may identify the place convenient to the staff at their level as per the prescribed rates decided by the respective District Collectors.
- DMO and DPM shall coordinate with the COVID Cell of the institution and facilitate the stay and transportation arrangements.

7. Testing:

Testing of health care staff should be done as per the existing COVID testing guidelines of the State. Those having symptoms should be immediately tested for COVID 19. Other staff / those completing quarantine etc may be included for testing in Sentinel/ Sero-Surveillance as the case may be.

8. Hospital Infection Control Committee (HIC):

1. Superintendent should ensure that Hospital Infection Control Committee monitors the infection control practices in the hospital on daily basis. Refresher training to all category of staff should be done routinely. A record of the activities should also be maintained.
2. Any hospital acquired infection reported should be internally audited, appropriate corrective measures to be done and a confidential report should be prepared and submitted to the DMO/DME.
3. DMO/DME should verify the infection control reports submitted from the COVID hospitals and other major hospitals.

9. Human Resources (HR) Management

1. HR gaps should be identified in all institutions and vacancies shall be timely filled by utilising PSC / NHM / Adhoc/HMC/ LSGD/Volunteer Services.
2. Head of institutions/Superintendents should identify a second layer of **Hospital Administration Team** and the list should be communicated to the DMO periodically. In Medical Colleges, a similar list has to be

prepared and submitted to the Principal and DME. This team may be activated in case of the first layer (existing team) becoming exposed to COVID.

3. Duty report must be given by each team at the end of the day's duty to the Superintendent. The Superintendent should submit a daily summary from the institution encompassing the major events in the hospital/ status of patients/ staff and daily statistics to the DMO. In Medical Colleges, a similar report has to be prepared and submitted to the Principal and DME.
4. District level Health administration should also identify a stand by team in case of occurrence of any unforeseen events

10. Stress Management & Motivation Enhancement among Health Personnel

Interventions should be done at three levels

A. Individual level
B. Institutional level
C. Departmental level

A. Individual Level

i. Adoption of Self-care strategies and **healthy life style** which includes
   - sleep hygiene
   - adequate hydration
   - healthy food
   - exercise and yoga
   - spending quality time with family and peers
   - engaging in stress buster activities

ii. Ensure **adequate breaks** in between the work.

iii. Appropriate **communication skills**- Stress usually aggravates communication issues and interpersonal conflicts which in turn increases the stress. Improving the communication skills will help in creating a better working environment. Professional help from Mental Health Programme can be sought in this regard.

iv. Enhancing **health seeking behaviour**

v. Improving **coping skills** with professional help

B. Institutional Level

i. Increasing **awareness** about the symptoms of stress and need of stress management.
ii. Enhancing **health seeking behaviour** among staff.
iii. A system for **regular Screening** at workplace with the help of Mental Health Programme.
iv. **Interventions** for those in need, thereby improving interpersonal relationships and productivity
v. Providing time for discussion on **Positive Mental Health** in staff meetings.
vi. Providing **peer support** for those in need.

C. Departmental Level

i. A dedicated **Helpline number and Email (dhsgrievance@gmail.com)** for Health Personnel by PSS Team, district wise. This facility may be utilised by all health staff for psychological support.

PSYCHOLOGICAL SUPPORT TO HEALTH PERSONNEL
HELPLINE NUMBERS
(Mental Health Programme, Dept of Health Services)

DISTRICT	HELPLINE NUMBERS
Thiruvananthapuram	9946463466
Kollam	9447005161
Pathanamthitta	9048804884
Alappuzha	9400415727
Kottayam	9847220929
Idukki	9188377551
Ernakulam	9446172050
Thrissur	8086007999
Palakkad	8547338442
Malappuram	9745843625
Kozhikode	8281904533
Wayanad	7025713204
Kannur	8593997722
Kasargod	9946895555

Helpline Numbers will be available from 9am to 4 pm.

State Helpline Number DISHA 0471 2552056, 1056 (Toll Free Number) will be available24x7

ii. Enhancing **health seeking behaviour** among staff.

iii. It is proposed to have a **buddy system** to those with heavy work load, where a less experienced personnel are paired with experienced one as a buddy. It helps to provide support, monitor stress and reinforce safety procedures. It also helps to improve skills in the less experienced one. Doctors, Nurses, Paramedical Staff and Other Government Staff with low work load during the present time can be deployed in this manner.

iv. **Effective breaks** during long hours of work should be implemented in all categories.

v. It is proposed to focus/measure work output rather than attendance/duration of work in Health System. The Personnel should also be allowed **flexible working hours** without affecting the functioning of the institution/system.

vi. **Appreciation** (written/verbal) from higher authorities and local administration helps to boost the morale of the personnel.

vii. It is proposed to have an additional **cultural** group for each official team to share personal/social space to enhance cohesion between the members. The discussions should be healthy and strictly as per code of conduct of Government servants.

All the COVID Cell in the respective Health Institutions, Director of Health Services and Director of Medical Education shall ensure that the above mentioned guidelines are followed and arrangements are ensured in all the Centres providing COVID19 care.

Principal Secretary

Annexure I

COVID-19 Virus Exposure Risk Assessment Form for Health Care Workers (HCW)

1. Health Care Worker Information	
A. Name :	B. Department
C. Phone number	D. Age (in completed years) E. Gender
F. Current place of stay (Complete address)	
G. Type of HCW (specify), & Designation (Doctor, Nurse, Technician, others)	
2. HCW interactions/ activities performed on COVID-19 patient information	
A. Date of exposure to confirmed COVID-19 patient	
B. Place of Exposure:	
C. COVID-19 Patient details Patient symptomatic since (Date) Test Sample sent on (Date)	
D. Source control (Source/Patient wearing a cloth face covering or facemask)	Yes/ No
E. Approximate min. distance from the patient (in meters)	
F. Duration of contact (minutes)	
G. Aerosol-generating procedure was performed on the patient?	Performed Present/ Not Present
G2. If yes, what type of procedure	1. Intubation/2.Nebulisation 3.Airway suctioning, 4. Tracheostomy 5. Collection of sputum, 6. Bronchoscopy, 7. CPR 8. Other: ____
H. Accidental exposure to body fluids	Yes/ No
I. Did you have direct contact with the environment where the confirmed COVID-19 patient was cared for? E.g. bed, linen, medical equipment, bathroom etc.	Yes/ No/ Unknown
J. During the health care interaction with a COVID-19 patient, did you wear PPE	Yes/ No
J 2. If yes, which of the below items of Protection used: 1. Surgical triple layer mask 2. N95 mask; 3. Single use gloves 4. Disposable gown 5. Face shield or goggles/ protective glasses	 Yes/ No Yes/ No Yes/ No Yes/ No Yes/ No
K. Did you perform hand hygiene after touching the patient's surroundings (bed, door, handle etc.), regardless of whether you were wearing gloves?	Yes/ No/ NA

Annexure-2

CASE SCENARIO OF BUDDY SYSTEM IN ICUs AND ISOALTION WARDS:

Buddy system in a system when in there are at least two health workers looking after each other so that examination and procedures on infectious and critical patients can be performed without breach in PPE protocols.

Eg: A staff nurse who wants to perform suction in an intubated COVID positive patient can identify a buddy (another nurse). The buddy can assist the nurse in donning PPE. The buddy may also wear PPE and follow the staff nurse and assist in the procedure. Potential breach in PPE scenarios can be intimated to the staff nurse also. This system enables partnership and psychological support to the staff nurse and the buddy and also helps in reinforcing the infection control protocol.

SCENARIO OF INTERNAL ROTATION WITHIN THE 8 HOUR DUTY WITH 4 HRS WITH PPE AND 4 HRS WITHOUT PPE:

The eight-hour duty in COVID setting to be taken may be divided according to the example given below. This is a scenario where the doctor-1 or nurse-1 may perform the duty alternating the activities with the Doctor-2 and Nurse-2

HCW	Time	Activities
Doctor-1 or Nurse-1	1st four hrs of the duty time (with PPE)	-Patient examination -Performance of procedures -Patient Monitoring
	2nd four hrs of the duty time (without PPE)	-Maintenance of records and documentation -Bystander counselling -Discharge/transfer in procedures -Training of staff -Monitoring of routine activities in ICU

The doctor-2 or nurse-2 can reverse the roles in the specified times.