

# Report on Health Care Workers

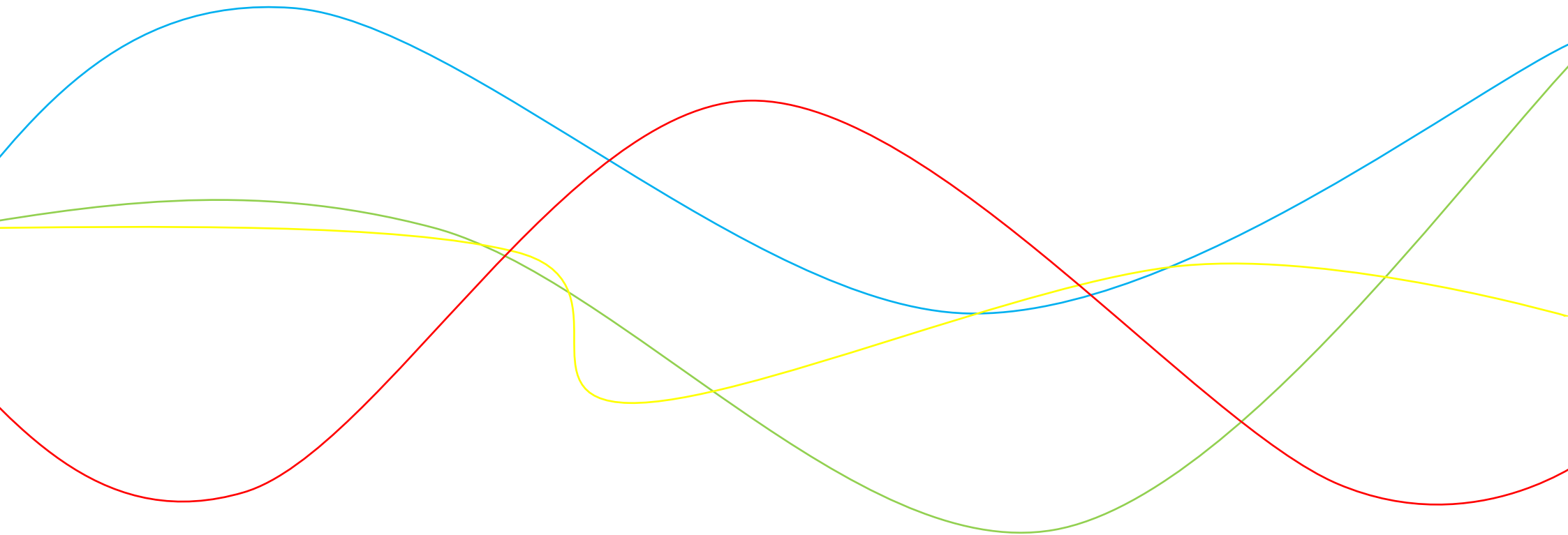
## The Positive cases– Study

20<sup>th</sup> July 2020



Department of Health & Family Welfare

Government of Kerala



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## **Report on Health Care Workers positive cases**

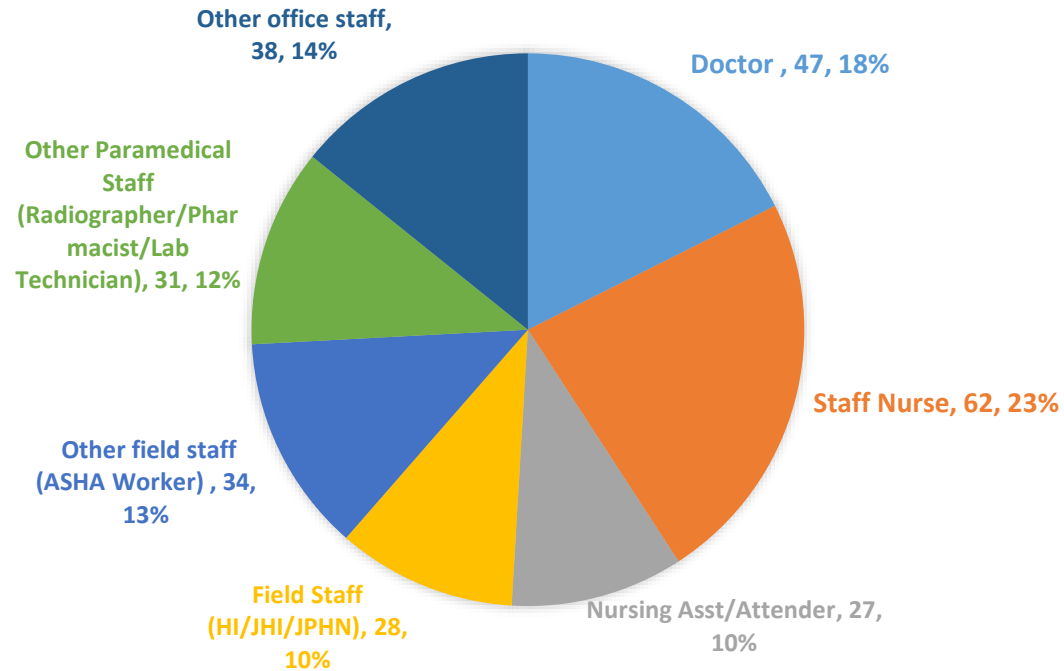
### **Executive summary**

WHO declared COVID19 virus infection threat of epidemic on 18<sup>th</sup> January 2020 . The Department of Health and Family Welfare set in motion all the actions such as developing health advisories for people, health staff and other line department staff from 19<sup>th</sup> Jan 2020 onwards. Subsequently, well planned strategy developed comprising of strong surveillance, quality quarantine, make every citizen partner in fighting COVID, testing all eligible persons, high quality care to COVID patients, proactive care of elderly and people with morbidity, focused advocacy, social mobilization and IEC campaign – Break the chain.

The epidemic is being handled with the committed service from all the health care functionaries as well as front line workers such as Police Department, LSGD and others. World over these are known as COVID warriors. Hon Chief Minister, Hon Health Minister at the outset instructed all to ensure safety and proper arrangement of quarantine and food for all these front line workers.

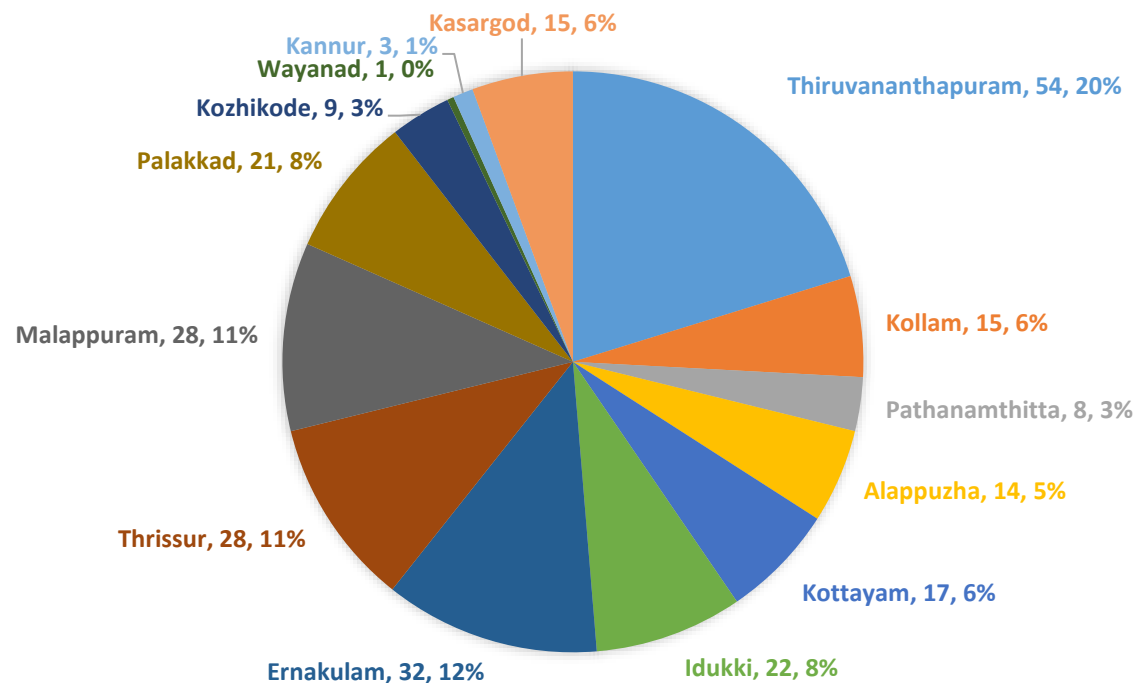
The Department of Health and Family Welfare through district surveillance unit is monitoring the positivity among health care workers not only in Government sector but also in the private sector. Based on the study the probable reasons for the breach in protection can be understood. The resource persons have been instructed to give thrust on capacity building and ensure follow up of all protective measures at individual and institutional level.

## DISTRIBUTION OF POSITIVE HEATH WORKERS ACCORDING TO DESIGNATION



- 267 health workers were contracted the disease till 20<sup>th</sup> July 2020 in the state of Kerala
- 62.55 % of the affected health workers involved in institution based patient care.
- 41% of health workers were involved in direct patient care (Doctors and nurses)
- 22% of health workers were involved in indirect patient care (Nursing assistants, attenders and paramedical staff)
- 23.2% of the affected are field workers involved in COVID control related activities contracted the disease
- Maximum positivity is shown by Nurses – 62 (23%) followed by Doctors 47 (18%).

## DISTRIBUTION OF HEALTH CARE WORKERS BASED ON DISTRICTS



- Maximum health workers were affected from Thiruvananthapuram district 54 (20%) followed by Ernakulam 32 (12%) and Malappuram and Thrissur- 28 (11%) each.
- Of the Doctors affected, maximum is from Thiruvananthapuram 13 (27.66%) followed by Ernakulam 9 (19.15%).
- Of the Nurses affected also, maximum is from Thiruvananthapuram 12 (19.35%) followed by Ernakulam, Kottayam and Alappuzha - 7 (11.3%) each.
- Maximum number of other staff contracted the disease is from Palakkad 12/38 (31.58%) followed by Thiruvananthapuram 5 (13.16%)

From the available information -

- More than 70 % of the positive health worker had an identifiable positive person as contact (a patient, colleague or relative)
- Around 14% of positive health workers were identified their disease status through sentinel surveillance
- Around 14 % of the health workers gave history of absence of adequate PPE while at work, lack of PPE and reuse of PPE also have been mentioned by few health care workers
- Having tea, lunch and snacks together in groups, without proper protection/ PPE has been noticed by around 8% of health care workers.
- Improper handling of throat swabs and fomites were identified as reason by few health care workers.

Health Care Workers turned positive for COVID-19 as on 20<sup>th</sup> July

District	Doctor	Staff Nurse	Nursing Asst/Attender	Field Staff (HI/JHI/JPHN)	Other field staff (ASHA Worker)	Other Paramedical Staff (Radiographer/Pharmacist/Lab Technician)	Other office staff	Total
Thiruvananthapuram	13	12	8	2 (JHI-1, JPHN-1)	4	10 (Rad-1, Phar-3, Housekeeping-3, Lab Technic- 2, Lab Asst-1)	5	54
Kollam		5		3 (HI-1, JPHN-2)	4	2 (Lab tech-2)	1	15
Pathanamthitta	3	3			2			8
Alappuzha	1	7	1	1 (JPHN-1)	1	1 (Lab Tech)	2	14
Kottayam	1	7	2	1 (HI-1)	2	3 (Lab tech-1, Pharmacist-2)	1	17
Idukki	5	5	2	2 (JHI-2)	3	2 (Lab Tech-1, Pharmacist-1)	3	22
Ernakulam	9	7	3	6 (JHI-3, JPHN-3)	3 (ASHA-2, ANM-1)	2 (Lab Tech-1, Radiographer-1)	2	32
Thrissur	5	4	1	6 (HI-2, JHI-1, JPHN-3)	4 (ASHA-3, Ambulance driver-1)	2 (Pharmacist-1, Physiotherapist-1)	6	28
Malappuram	5	5	3	2 (JHI-1, JPHN-1)	4 (ASHA-2, Ambulance driver- 2)	4 (EMT-2, Lab Tech-1, ECG Tech-1)	5	28
Palakkad		5	1	2 (JHI-1, JPHN-1)	1 (Ambulance driver)		12	21
Kozhikode	2	1	3	1	2 (Ambulance Driver-1, ASHA-1)			9
Wayanad	1							1
Kannur			3					3
Kasargod	2	1		2(JHI-1, JPHN-1)	4 (ASHA-3, ANM-1)	5	1	15
Total	47	62	27	28	34	31	38	267

Note: -

- Doctors in Thrissur district includes (Veterinary surgeon-2, Dental surgeon-1), Kasaragod district (Dental surgeon -1)
- Staff Nurse row includes Head Nurse, Staff Nurse, Palliative nurse and RBSK Nurse.

**Thiruvananthapuram**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/TVM/1	52	F	Nursing assistant	MCH Trivandrum	09-06-2020	Symptomatic at the time of testing, worked in COVID op counter without adequate PPE, worked in close and poorly ventilated environment. Worked continuously in COVID op for past one month
2	HCW/TVM/2	54	F	Asha worker	FHC Anchal	14-06-2020	Tested positive through sentinel surveillance close contact with a positive case during queue management. Used to supply food and refreshment to truck drivers who came from Muraly diary. No adequate PPE
3	HCW/TVM/3	55	M	Security staff		22-06-2020	Symptomatic during the time of testing, was engaged in crowd management in OP/Casualty, come in contact with a patient in a SARI ward. No Adequate PPE
4	HCW/TVM/4	29	F	Staff Nurse	Attukkal Devi Hospital	09-07-2020	Requested COVID testing, worked in fever OP for extended working hours, PPE reused after washing against protocol
5	HCW/TVM/5	22	F	Pharmacist	Attukkal Devi Hospital	09-07-2020	Symptomatic at the time of testing, exposure to a COVID patient in pharmacy
6	HCW/TVM/6	31	F	JH1	CHC Anayara	07-07-2020	Found positive through sentinel surveillance, infection from ASHA worker
7	HCW/TVM/7	27	M	Doctor	CHC Aryanad	07-07-2020	Symptomatic and was found positive through sentinel surveillance, worked long hours in casualty, no adequate PPE, may have got infection from other positive staff of same institution
8	HCW/TVM/8	54	F	ASHA	CHC Aryanad	07-07-2020	Symptomatic and was found positive through sentinel surveillance, visited houses every day, no adequate PPE, made house and hospital visits
9	HCW/TVM/9	54	F	ASHA	CHC Aryanad	07-07-2020	Found positive through sentinel surveillance visited houses every day, no adequate PPE, made house and hospital visits
10	HCW/TVM/10	38	M	House Keeping	KIMS		Symptomatic hence tested positive might have got infection from hospital triage area
11	HCW/TVM/11	49	M	Attender	AYUSH Centre Poonthura		Symptomatic hence tested positive, Poonthura area is the source of infection, Hospital is located in Poonthura area, No adequate PPE



12	HCW/TVM/12	20	F	Canteen staff	KIMS		Symptomatic hence tested positive, contact with positive case who is her brother who was attender in same hospital
13	HCW/TVM/13	31	F	Secretary	KIMS		Symptomatic hence tested positive, fomite transmission
14	HCW/TVM/14	33	F	Housekeeping	KIMS		Symptomatic hence tested positive, shared the same office space with the positive case, lack of PPE
15	HCW/TVM/15	44	M	Pharmacist	AYUSH Holostic Centre		Symptomatic hence tested positive, Poonthura area is the source of infection, Hospital is located in Poonthura area
16	HCW/TVM/16	32	F	Staff Nurse	KIMS		Symptomatic hence tested positive, came in contact with positive patient
17	HCW/TVM/17	29	M	NHM Doctor	PHC Valiyathura		Symptomatic hence tested positive, came in contact with positive case
18	HCW/TVM/18	36	M	Staff Nurse	MCH Karakkonam	13-07-2020	Secondary contact of positive case/possible contact during duty
19	HCW/TVM/19	34	F	Radiographer	TH Parassala	13-07-2020	Direct contact with positive case during duty
20	HCW/TVM/20	26	F	Staff Nurse	Kripasana Hospital	14-07-2020	Direct contact with positive case in wards/casualty
21	HCW/TVM/21	25	F	Staff Nurse	Kripasana Hospital	14-07-2020	Direct contact with positive case in wards/casualty
22	HCW/TVM/22	48	F	Doctor	Forte Hospital	14-07-2020	Primary contact of a positive case, direct contact when on duty
23	HCW/TVM/23	24	M	Attender	KIMS	14-07-2020	Direct contact with positive case when on duty
24	HCW/TVM/24	49	F	Housekeeping staff	MCH Multi speciality	15-07-2020	Primary contact with positive case, direct contact when on duty
25	HCW/TVM/25	60	F	Kudumbasree Grade 2	MCH Trivandrum	15-07-2020	Possible contact with positive case during duty
26	HCW/TVM/26	49	F	Lab Technician	Snehadeepam Hospital	15-07-2020	Possible contact with positive case during duty hours
27	HCW/TVM/27	43	F	ASHA	PHC Pozhiyoor	16-07-2020	Possible contact with positive case during field work from Pozhiyoor
28	HCW/TVM/28	26	F	Junior Resident	MCH Trivandrum	16-07-2020	Possible contact with positive case during duty
29	HCW/TVM/29	28	F	Junior Resident	MCH Trivandrum	16-07-2020	Possible contact with positive case during duty
30	HCW/TVM/30	30	F	Pharmacist	State TB Centre TVPM	16-07-2020	Possible contact with positive case during duty at TB centre

31	HCW/TVM/31	26	M	Junior Resident	MCH Trivandrum	16-07-2020	Possible contact with positive case during duty
32	HCW/TVM/32	24	F	House Surgeon	MCH Trivandrum	16-07-2020	Possible contact with positive case during duty
33	HCW/TVM/33	53	F	Nursing Asst	MCH Trivandrum	15-07-2020	Possible contact with positive case during duty
34	HCW/TVM/34	55	M	Nursing Asst	MCH Trivandrum	17-07-2020	Possible contact with positive case during duty
35	HCW/TVM/35	47	F	Head Nurse	SAT Hospital	17-07-2020	Possible contact with positive case during duty
36	HCW/TVM/36	31	F	Staff Nurse	THQH Parassala	17-07-2020	Possible contact with positive case during duty
37	HCW/TVM/37	48	M	Lab Asst	DVC Unit	18-07-2020	Details awaited
38	HCW/TVM/38	24	F	JPHN	UPHC Klipankulam	18-07-2020	Details awaited
39	HCW/TVM/39	34	F	Staff Nurse		18-07-2020	Details awaited
40	HCW/TVM/40	28	M	Casualty Medical Officer	MCH Trivandrum	18-07-2020	Details awaited
41	HCW/TVM/41	50	M	Assist Professor- Anaesthesia	MCH Trivandrum	18-07-2020	Details awaited
42	HCW/TVM/42	35	F	Sr Manager	MCH Trivandrum	18-07-2020	Details awaited
43	HCW/TVM/43	38	F	Attender	SAT Trivandrum	18-07-2020	Details awaited
44	HCW/TVM/44	44	F	Grade 2	FHC Vamanapuram	17-07-2020	Details awaited
45	HCW/TVM/45	46	F	Staff Nurse	MCH Trivandrum	19-07-2020	Possible contact with positive case during duty
46	HCW/TVM/46	24	M	Doctor	MCH Trivandrum	19-07-2020	Possible contact with positive case during duty
47	HCW/TVM/47	28	F	Staff Nurse	GH Neyyattinkara	19-07-2020	Possible contact with positive case during duty
48	HCW/TVM/48	27	F	Staff Nurse	Jubilee Memorial Hospital Palayam	19-07-2020	Details awaited
49	HCW/TVM/49	24	M	House Surgeon	MCH Trivandrum	19-07-2020	Possible contact with positive case during duty

50	HCW/TVM/50	30	M	Cleaning Staff	RCC Trivandrum	19-07-2020	Possible contact with positive case during duty
51	HCW/TVM/51	29	M	Doctor	MCH Trivandrum	20-07-2020	Asymptomatic direct contact with positive case
52	HCW/TVM/52	28	M	Doctor	MCH Trivandrum	20-07-2020	Symptomatic hence tested, possible contact with positive case
53	HCW/TVM/53	42	M	Lab Technician	TH Fort	20-07-2020	Asymptomatic direct contact with positive case
54	HCW/TVM/54	33	F	Staff Nurse	Ananthapuri Hospital	20-07-2020	Symptomatic hence tested, possible contact with positive case

**Kollam**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/KLM/1	47	F	ASHA	FHC Chathanoor	25-04-2020	Found positive through sentinel surveillance, contact with positive during field work, no adequate PPE
2	HCW/KLM/2	41	M	Grade-2	FHC Chathanoor	29-04-2020	Direct contact with positive case at PHC and tested positive.
3	HCW/KLM/3	51	F	JPHN	FHC Chathanoor	29-04-2020	Direct contact with positive case at PHC and tested positive
4	HCW/KLM/4	42	F	ASHA	PHC Paripally	17-05-2020	Found positive through sentinel surveillance, contact with positive during field work, no adequate PPE
5	HCW/KLM/5	31	M	Staff Nurse	THQH Punalur	03-06-2020	Direct contact with positive case and tested positive, At COVID centre duty history of contact with positive case, no adequate PPE,
6	HCW/KLM/6	40	F	Staff Nurse	TH Kadakkal	03-06-2020	tested positive as a part of contact tracing at TH Kadakkal, history of contact with suspected case, no adequate PPE
7	HCW/KLM/7	40	F	Lab Technician	TH Kadakkal	03-06-2020	Symptomatic hence tested positive, as a part of swab collection contact with positive cases
8	HCW/KLM/8	30	F	Staff Nurse	Moni Hospital		Tested due to direct contact with positive case, didn't use adequate PPE
9	HCW/KLM/9	45	F	Staff Nurse	Moni Hospital		Symptomatic hence tested, didn't use adequate PPE
10	HCW/KLM/10	48	M	HI	THQH Kunnankulam	14-07-2020	Worked in areas with interstate employee, event of signing register at the site using common fomites
11	HCW/KLM/11	36	F	ASHA	TH Nedungolam	14-07-2020	Contact during field work, visited all ward in the area possibly of direct contact
12	HCW/KLM/12	54	F	ASHA	CHC Ellamadu	16-07-2020	Possible contact with case when on duty at marriage sites, from a possible source working in a company, gone for NREG work, possible contact with case in PHC
13	HCW/KLM/13	35	F	Lab Technician	FHC Elambaloor	20-07-2020	Asymptomatic direct contact with positive case
14	HCW/KLM/14	30	F	Receptionist	HMC Anchal	20-07-2020	Asymptomatic direct contact with positive case
15	HCW/KLM/15	35	F	Staff Nurse	HMC Anchal	20-07-2020	Asymptomatic direct contact with positive case

**Pathanamthitta**

SI No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/PTA/1	42	F	ASHA worker	PHC Vallapally	16-06-2020	Found positive as a part of sentinel surveillance, History of cleaning COVID Care Centre 1 week before testing positive, active field work, distributing medicines to home quaratined paersons, improper usage of face masks
2	HCW/PTA/2	34	F	Staff Nurse	GH Pathanamthitta	20-06-2020	Found positive through sentinel surveillance, improper use of PPE
3	HCW/PTA/3	39	M	Medical Officer	TH Ranni		Symptomatic hence tested positive, contact with positive COVID case possibly from Casualty/Quarantined persons who came to casualty
4	HCW/PTA/4	47	F	Head Nurse	Pushpagiri MC		Symptomatic hence tested positive, her sister was working in psychiatry ward, contact with positive case in hospital
5	HCW/PTA/5	50	F	Doctor (Gync)	GH Adoor	15-07-2020	Probably got infected from symptomatic patients
6	HCW/PTA/6	30	M	Doctor (ISN)	District Ayurveda Hospital Ayroor	16-07-2020	Possible contact with positive case during duty hours
7	HCW/PTA/7	32	F	ASHA	PHC Kunnamthanam	17-07-2020	Possible contact with positive case during field work
8	HCW/PTA/8	33	F	Staff Nurse	GH Adoor	18-07-2020	Asymptomatic contact of gynaecologist who turned positive on 16-07-2020

**Alappuzha**

SI No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/ALP/1	58	M	Doctor	THQH Cherthala	11-07-2020	Visited Head nurse/Staff nurse in maternity ward, the antenatal who became COVID positive was in the same ward
2	HCW/ALP/2	42	F	Staff Nurse	THQH Cherthala	11-07-2020	Visited Head nurse/Staff nurse in maternity ward, the antenatal who became COVID positive was in the same ward
3	HCW/ALP/3	44	F	JPHN	THQH Cherthala	11-07-2020	Visited Head nurse/Staff nurse in maternity ward, the antenatal who became COVID positive was in the same ward
4	HCW/ALP/4	47	M	Nursing Asst	THQH Cherthala	11-07-2020	Possible source while engaged in duty of ambulance cleaning
5	HCW/ALP/5	45	F	ASHA	THQH Cherthala	11-07-2020	Contact with the antenatal who became COVID positive
6	HCW/ALP/6	29	F	Staff Nurse	DH Chenganoor	12-07-2020	Not from hospital. She is a native of Cherthala, attended funeral function in Cherthala and 16 of the persons who attended the funeral function who were also found worked in Chellanam harbour (fishing) was found positive.
7	HCW/ALP/7	37	F	Staff Nurse	THQH Cherthala	12-07-2020	Tested positive on sentinel surveillance, came in contact with a health care worker who was involved in taking swabs. He has taken swab of an antenatal case who became positive later
8	HCW/ALP/8	48	F	Staff Nurse	THQH Cherthala	12-07-2020	Visited Head nurse/Staff nurse in maternity ward, the antenatal who became COVID positive was in the same ward
9	HCW/ALP/9	31	F	Staff Nurse	THQH Cherthala	15-07-2020	Tested positive, had direct contact with positive case, she had no duties in casualty and in maternity ward, PPE not provided, exposed to an antenatal who is a COVID suspect.
10	HCW/ALP/10	30	F	Lab Technician	Janakiya Lab	16-07-2020	Details awaited
11	HCW/ALP/11	52	F	Head Nurse	Private Hospital Nedumangad	17-07-2020	Details awaited
12	HCW/ALP/12	30	F	Staff Nurse	Lakeshore Ernakulam	18-07-2020	Direct contact of [positive case/possibility of exposure during duty
13	HCW/ALP/13	39	F	Staff Nurse	TH Cherthala	20-07-2020	contact of positive case, also possibility of exposure during duty
14	HCW/ALP/14	45	F	ASHA	GH Alappuzha	20-07-2020	exposure with positive case during feild visits

**Kottayam**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed positive	Remarks
1	HCW/KTM/1	28	F	Staff Nurse	MCH Kottayam	24-03-2020	Symptomatic hence tested positive, had to manage a un-cooperative patient and need to restrain him from not wearing mask, direct contact with positive case
2	HCW/KTM/2	32	M	Staff Nurse	GH Kottayam	21-06-2020	Symptomatic hence tested positive, handled and packed the swab samples which later turned out to be positive
3	HCW/KTM/3	40	M	HI	PHC Paramuzha	27-04-2020	Direct contact with positive case during house visit hence became positive
4	HCW/KTM/4	53	F	ASHA	GH Pala	22-06-2020	Possible contact with the positive case in the same family and hence turned positive
5	HCW/KTM/5	44	F	Staff Nurse	PHC Paramuzha	08-07-2020	Found positive through sentinel surveillance
6	HCW/KTM/6	43	F	Grade-2	CHC Vakthanam	08-07-2020	Found positive through sentinel surveillance
7	HCW/KTM/7	42	F	Staff Nurse	TH Cherthala	11-07-2020	Found positive through sentinel surveillance, contact from swab collection centre
8	HCW/KTM/8	34	F	Lab Technician	Karuna Lab (Private)	12-07-2020	Contact from a possible positive case who had visited the lab
9	HCW/KTM/9	37	M	Doctor	GH Ernakulam	14-07-2020	Direct contact at Chellanam case outbreak at Ernakulam, was on duty during the period
10	HCW/KTM/10	35	F	Staff Nurse	High Range Hospital Kanjikuzhy	15-07-2020	She is a primary contact of a positive case also possible contact during ward duty
11	HCW/KTM/11	40	M	Pharmacist	TH Vaikom	16-07-2020	Possible contact with positive case during duty hours
12	HCW/KTM/12	39	M	Staff Nurse	THQH Pambady	16-07-2020	Was on swab collection duty, possible chance of infection from contact with positive case
13	HCW/KTM/13	44	F	Staff Nurse	FHC Kuruppanthara	17-07-2020	Had taken duty at swab collection centre, hence possible chance of contact during duty
14	HCW/KTM/14	42	F	ASHA	CHC Elanadu	17-07-2020	Possible chance of contact with case during field work
15	HCW/KTM/15	40	M	Cleaning staff	CCC Manjoor Panchayat	17-07-2020	Possible chance of contact with case during COVID duty
16	HCW/KTM/16	51	F	Nursing Asst	FHC Kuruppunthara	18-07-2020	Possible contact with case during COVID duty
17	HCW/KTM/17	41	F	Pharmacist	FHC Kuruppunthara	18-07-2020	Contact of a positive case from the same institution/exposure during duty

**Idukki**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed positive	Remarks
1	HCW/IDK/1	42	F	Medical Officer	PHC Elappara	26-04-2020	Direct contact with positive case during patient care in OP setting
2	HCW/IDK/2	54	F	ASHA	PHC Elappara	26-04-2020	Direct contact with positive case during crowd management in OP setting
3	HCW/IDK/3	43	F	ASHA	TH Kattappana	21-06-2020	Symptomatic hence tested, contact during field activity or while attending a funeral
4	HCW/IDK/4	34	M	Staff Nurse	TH Kattappana	08-07-2020	Found positive through sentinel surveillance
5	HCW/IDK/5	46	F	Palliative Nurse	PHC Kanjikuzhy	09-07-2020	Found positive through sentinel surveillance
6	HCW/IDK/6	28	F	Staff Nurse	PHC Chinnakanal	11-07-2020	Found positive through sentinel surveillance, possible contact at PHC, Travel history to Ernakulam
7	HCW/IDK/7	33	M	Office Attendent	PHC Chinnakanal	15-07-2020	Possible due to direct contact with symptomatic patients
8	HCW/IDK/8	31	F	Medical Officer	PHC Chinnakanal	15-07-2020	Possible to get infected in OP due to contact with asymptomatic patients
9	HCW/IDK/9	32	F	Lab Technician	PHC Chinnakanal	15-07-2020	Possible to get infected from Lab or from direct contact with her Positive colleagues
10	HCW/IDK/10	37	M	Pharmacist	PHC Chinnakanal	15-07-2020	Possible to get infected from the positive colleagues
11	HCW/IDK/11	54	F	ASHA	CHC Rajakkad	15-07-2020	Direct contact with positive case during field visit
12	HCW/IDK/12	27	M	Doctor	TATA hospital Munnar	17-07-2020	Contact with positive case during duty
13	HCW/IDK/13	29	F	Staff Nurse	Rajagiri Hospital Ernakulam	17-07-2020	Primary contact of a positive case, contact during duty
14	HCW/IDK/14	51	M	Doctor	CHC Senapathy	18-07-2020	Possible contact with positive case from the case cluster reported from the area
15	HCW/IDK/15	39	F	Staff Nurse	PHC Rajakkad	18-07-2020	Possible contact with positive case from the case cluster reported from the area
16	HCW/IDK/16	40	M	PRO	PHC Rajakkad	18-07-2020	Direct contact with cases which turned positive in the same PHC
17	HCW/IDK/17	47	M	JHI	PHC Rajakkad	18-07-2020	Direct contact with cases which turned positive in the same PHC
18	HCW/IDK/18	34	M	Office attender	PHC Rajakkad	18-07-2020	Direct contact with cases which turned positive in the same PHC
19	HCW/IDK/19	51	F	Nursing Asst	DH Idukki	18-07-2020	COVID Care Hospital, hence possible with positive case during duty
20	HCW/IDK/20	24	F	JHI	TH Adimaly	19-07-2020	Was on duty in CC Unit possible chance of case exposure, field work is also the chance of contact



21	HCW/IDK/21	31	F	Doctor	TATA Hospital Munnar	19-07-2020	Direct contact with positive case
22	HCW/IDK/22	24	F	Nursing Asst	Lakeshore Hospital	20-07-2020	Primary Contact of positive case during duty

**Ernakulam**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed positive	Remarks
1	HCW/EKM/1	39	M	JHI	CHC Kalady	31-03-2020	Found positive through COVID testing done on request, he was on screening duty at Kochi International airport, direct contact during the time of screening of passengers
2	HCW/EKM/2	41	M	JHI	CHC Chowara	28-03-2020	Found positive through COVID testing done on request, he was on screening duty at Kochi International airport, direct contact during the time of screening of passengers
3	HCW/EKM/3	50	F	JPHN	CHC Chowara	23-06-2020	Found positive through sentinel surveillance probably from any infected person during the time of field visit/hospital staff
4	HCW/EKM/4	45	F	JPHN	CHC Kalady	23-06-2020	Symptomatic hence tested positive, probably from any infected person during the time of field visit/hospital staff
5	HCW/EKM/5	40	F	ASHA	PHC Chellana	12-07-2020	Found positive through sentinel surveillance, she has visited high risk places including Chellanam harbour and case reported areas, symptomatic persons also had visited the harbour
6	HCW/EKM/6	36	F	Staff Nurse	GH Ernakulam	12-07-2020	Symptomatic and tested positive through sentinel surveillance, direct contact with cases from OP or injection room
7	HCW/EKM/7	48	M	JHI	CHC Keezhamad	13-07-2020	Probably from an infected person during the time of field visit/CHC Duty
8	HCW/EKM/8	62	M	Doctor	THQH Trippuniithura	15-07-2020	Probably from infected person during the time of Hospital duty
9	HCW/EKM/9	26	M	Doctor	Rajagiri hospital	16-07-2020	Probably from COVID case admitted here on 10-07-2020
10	HCW/EKM/10	57	F	Doctor	DISHA	16-07-2020	From close contact with her husband who is also a doctor
11	HCW/EKM/11	33	M	Doctor	Lakeshore Hospital	17-07-2020	Probably from infected patient during the hospital duty
12	HCW/EKM/12	41	F	Doctor	AYUSH	17-07-2020	Probably from infected patient during the hospital duty
13	HCW/EKM/13	52	M	Attender	Karothukuzhy Hospital	17-07-2020	Probably from infected patient during the hospital duty
14	HCW/EKM/14	23	F	Physician Assistant	Lakeshore Hospital	17-07-2020	Probably from infected patient during the hospital duty
15	HCW/EKM/15	24	F	Staff Nurse	Rajagiri Hospital	18-07-2020	Probably from infected person during the time of hospital duty
16	HCW/EKM/16	32	F	Staff Nurse	Rajagiri Hospital	18-07-2020	Probably from infected person during the time of hospital duty
17	HCW/EKM/17	33	F	Staff Nurse	Rajagiri Hospital	18-07-2020	Probably from infected person during the time of hospital duty
18	HCW/EKM/18	25	M	Councilor	Rajagiri Hospital	18-07-2020	Probably from infected person during the time of hospital duty
19	HCW/EKM/19	30	F	Staff Nurse	Carmel Hospital	18-07-2020	Probably from infected person during the time of hospital duty
20	HCW/EKM/20	51	F	JPHN	RVPD	18-07-2020	Probably from infected person during the time of hospital duty
21	HCW/EKM/21	24	F	Staff Nurse	Lakeshore Hospital	18-07-2020	Probably from infected person during the time of hospital duty
22	HCW/EKM/22	30	M	Receptionist	Lakeshore Hospital	18-07-2020	Probably from infected person during the time of hospital duty

23	HCW/EKM/23	41	F	ASHA	Chellanam	18-07-2020	Probably from infected person during the time of hospital duty
24	HCW/EKM/24	51	F	ANM	Lakeshore Hospital	18-07-2020	Probably from infected person during the time of hospital duty
25	HCW/EKM/25	40	M	Medical Officer	CHC Keezhumadu	19-07-2020	Probably from infected person during the time of hospital duty
26	HCW/EKM/26	53	F	Doctor	Lakeshore Hospital	19-07-2020	Probably from infected person during the time of hospital duty
27	HCW/EKM/27	32	F	Nursing Asst	Rajagiri Hospital	19-07-2020	Details awaited
28	HCW/EKM/28	31	F	Staff Nurse	Kinder Hospital	19-07-2020	Details awaited
29	HCW/EKM/29	25	M	Radiology Staff	Rajagiri Hospital	20-07-2020	Probably from infected person during the time of hospital duty
30	HCW/EKM/30	36	F	Doctor	MCH Ernakulam	20-07-2020	Probably from infected person during the time of hospital duty
31	HCW/EKM/31	24	F	Doctor	PHC Keezhumadu	20-07-2020	Probably from infected person during the time of hospital duty
32	HCW/EKM/32	50	M	Lab Ass	GH Ernakulam	20-07-2020	Probably from infected person during the time of hospital duty

Thrissur

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed positive	Remarks
1	HCW/TSR/1	51	F	JPHN	FWC Madayikkonam	05-06-2020	Symptomatic hence tested positive , sharing common space during lunch, tea etc
2	HCW/TSR/2	28	M	Dental Surgeon	D-Care Dental Clinic	09-06-2020	Symptomatic hence tested
3	HCW/TSR/3	38	M	NHM Pro	CHC Vadakekkad	08-06-2020	Exposure during thermal scanning of interstate driver
4	HCW/TSR/4	48	F	ASHA	THQH Chavakkad	11-06-2020	Direct contact with positive case, hence tested and found positive
5	HCW/TSR/5	36	F	Palliative Nurse	CHC Vadakekkad	11-06-2020	Direct contact with positive case, hence tested and found positive
6	HCW/TSR/6	53	F	Pharmacist	PHC Porathussery	12-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
7	HCW/TSR/7	58	F	Veterinary Doctor	Cherppu Veterinary Hospital	10-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
8	HCW/TSR/8	59	F	Livestock Inspector	Cherppu Veterinary Hospital	10-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
9	HCW/TSR/9	31	F	Staff Nurse	THQH Chavakkad	11-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
10	HCW/TSR/10	35	F	Doctor	CHC Vadakekkad	11-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
11	HCW/TSR/11	30	M	Physiotherapist	CHC Vellanikara	11-06-2020	Close contact with positive case who is also a health care worker
12	HCW/TSR/12	51	F	ASHA	THQH Chavakkad	11-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
13	HCW/TSR/13	51	M	OP Counter Staff	THQH Chavakkad	11-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
14	HCW/TSR/14	66	F	Cook	THQH Chavakkad	11-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
15	HCW/TSR/15	37	M	Ambulance driver	TH Irinjalakuda	11-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
16	HCW/TSR/16	48	M	JHI	PHC Porathussery	12-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
17	HCW/TSR/17	47	F	ASHA		12-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process

18	HCW/TSR/18	38	F	JPHN	THQH Chavakkad	14-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
19	HCW/TSR/19	42	F	JPHN	THQH Chavakkad	14-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
20	HCW/TSR/20	53	F	Lay secretary	THQH Chavakkad	14-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
21	HCW/TSR/21	31	F	PRO	THQH Chavakkad	14-06-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
22	HCW/TSR/22	59	F	Nursing Asst	Rohini Hospital	09-07-2020	Direct contact with positive case, absence of PPE during lunch and tea hours, absence of regular, periodic daily sanitation process
23	HCW/TSR/23	34	F	RBSK Nurse	CHC Puthenchera	09-07-2020	Found positive through sentinel surveillance, possible contact from office where everybody comes for signing attendance
24	HCW/TSR/24	28	F	RBSK Nurse	CHC Puthenchera	09-07-2020	Found positive through sentinel surveillance, possible contact from office where everybody comes for signing attendance
25	HCW/TSR/25	39	M	HI	Kunnamkulam Municipality	14-07-2020	Possible direct contact with positive case during field visit
26	HCW/TSR/26	48	M	HI	Kunnamkulam Municipality	14-07-2020	Possible direct contact with positive case during field visit
27	HCW/TSR/27	64	M	Veterinary Doctor	KSE Company Irinjalakuda	17-07-2020	Possible contact with a positive case at work place/travel
28	HCW/TSR/28	68	M	Doctor	ENT Hospital Irinjalakuda	20-07-2020	Testing was done on request and possible contact with positive case during duty hours

**Malappuram**

SL no.	Code	Age	M/F	Designation	Institution	Date when confirmed positive	Remarks
1	HCW/MLP/1	29	M	ECG Technician	DH Palakkad		Found positive from covid testing on request, working at DH Palakkad in positive zone area
2	HCW/MLP/2	48	F	ASHA	UPHC Mangalssery	05-06-2020	Symptomatic hence tested positive through sentinel surveillance, contact with two interstate travellers, husband working as security in relief hospital
3	HCW/MLP/3	27	M	Staff Nurse	MCH Manjeri	05-06-2020	Tested on request, history of direct contact with positive, working in positive zone area
4	HCW/MLP/4	39	F	ASHA	PHC Thenala	13-06-2020	Tested positive on sentinel surveillance, direct contact with positive case who was a colleague
5	HCW/MLP/5	44	F	JHI	PHC Thenala	13-06-2020	Tested positive on sentinel surveillance, direct contact with positive case who was a colleague
6	HCW/MLP/6	36	M	Cleaning Staff	MCH Manjeri	13-06-2020	Tested positive on sentinel surveillance, direct contact with positive case who was a colleague
7	HCW/MLP/7	43	F		THQH Chavakkad		Tested positive on sentinel surveillance, came in contact with multiple positive patients
8	HCW/MLP/8	30	M	PRO	Metro lab Manjeri		Tested positive on sentinel surveillance, reason unidentified
9	HCW/MLP/9	30	F	108 Ambulance EMT	PHC Thirurunavaya	13-06-2020	Tested positive on sentinel surveillance, contact with positive cases in the ambulance.
10	HCW/MLP/10	24	M	EMT Staff	Karuvarakund	13-06-2020	Tested positive due to direct contact. June 1 airport duty. Restroom common for all staff, where two persons tested positive
11	HCW/MLP/11	56	M	Lab Technician	Metro Lab	14-06-2020	Tested positive due to direct contact, colleague is a confirmed case contact
12	HCW/MLP/12	61	M	Physician	Sukapuram Hospital	28-06-2020	Tested positive on sentinel surveillance, reason unidentified
13	HCW/MLP/13	49	M	Paediatrician	Edapal Hospital	28-06-2020	Tested positive on sentinel surveillance, reason unidentified
14	HCW/MLP/14	32	F	Staff Nurse	Edapal Hospital	28-06-2020	Tested positive on sentinel surveillance, reason unidentified
15	HCW/MLP/15	54	F	Nursing Asst	Sukapuram Hospital	28-06-2020	Tested positive on sentinel surveillance, reason unidentified
16	HCW/MLP/16	28	F	Nursing Asst	Sukapuram Hospital	28-06-2020	Tested positive on sentinel surveillance, reason unidentified
17	HCW/MLP/17	32	F	Staff Nurse	Edapal hospital	28-06-2020	Tested positive due to direct contact, exposure from colleague
18	HCW/MLP/18	42	F	JPHN	TH Kuttipuram		Symptomatic hence tested positive, exposure from colleague
19	HCW/MLP/19	42	M	Doctor	THQH Thirurangadi	13-07-2020	Tested positive as part of routine examination due to direct contact with positive case. Case unidentified

20	HCW/MLP/20	42	F	Grade-2	THQH Ponnani	13-07-2020	Tested positive as part of routine examination due to direct contact with positive case. Case unidentified
21	HCW/MLP/21	36	M	Doctor	THQH Ponnani	16-07-2020	Possible contact with positive case during duty
22	HCW/MLP/22	34	M	Ambulance Driver	TH Kondotty	16-07-2020	Possible contact with positive case during duty
23	HCW/MLP/23	24	M	Doctor	Jubilee Mission Hospital Thrissur	17-07-2020	Possible contact with positive case during duty
24	HCW/MLP/24	60	M	Security staff	THQH Ponnani	17-07-2020	Details awaited
25	HCW/MLP/25	25	F	Staff Nurse	MCH Calicut	18-07-2020	Possible contact with positive case during duty
26	HCW/MLP/26	32	F	Staff Nurse	Koramvyala (pvt) Manjeri	19-07-2020	Unidentified
27	HCW/MLP/27	30	M	Ambulance driver	TH Kuttipuram	20-07-2020	Primary contact of a positive case. Exposure chance during duty
28	HCW/MLP/28	47	M	Clerk	TH Kuttipuram	20-07-2020	Primary contact of a positive case. Exposure chance during duty

**Palakkad**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/PKD/1	32	F	Staff Nurse	DH Palakkad	23-05-2020	Worked in isolation ward at DH Palakkad
2	HCW/PKD/2	22	F	RBSK Nurse	Valayar Check post	23-05-2020	Who was in Valayar duty and was in contact with a positive case on 17-05-2020 and with another positive case on 20-05-2020 at checkpoint
3	HCW/PKD/3	36	F	Staff Nurse	DH Palakkad	23-05-2020	Was in isolation ward at DH Palakkad
4	HCW/PKD/4	20	F	RBSK Nurse	Valayar Check Post	24-05-2020	RBSK Nurse who was in Valayar duty and had contact with a positive case while on duty
5	HCW/PKD/5	49	M	JHI	FHC Srikrishnapuram	29-05-2020	Working as JHI at FHC Krishnapuram had visited houses of three positive cases on 15 <sup>th</sup> May, 21 <sup>st</sup> May and 24 <sup>th</sup> May and another positive case on 16, 24 and 28 May .Had 90 year old father in his house who is admitted
6	HCW/PKD/6	31	M	Biomedical Engineer	KIROLSKAR	29-05-2020	Visited valayar check post and district hospital for thermal scanner installation on 20-05-2020 also had visited multiple health institution as part of his work
7	HCW/PKD/7	39	M	Ambulance Driver	DH Palakkad	29-05-2020	Working as KSAPS driver in DH Palakkad who went with his taxi to pick up 4 Chennai returnees to Malappuram on 18-05-2020
8	HCW/PKD/8	51	F	Head Nurse	DH Palakkad	01-06-2020	Worked as Head nurse in GH Palakkad and contact of a positive case and also had frequent visit and interactions with office staff on 22 and 23 May 2020 who were diagnosed as COVID positive later
9	HCW/PKD/9	50	F	Hospital Attendant	DH Palakkad	02-06-2020	Working as hospital attender and came in contact during COVID duty
10	HCW/PKD/10	46	F	Clerk	DH Palakkad	05-06-2020	Clerk at DH Palakkad who had frequent contact with other office staff and staff in isolation ward, during lunch session all staff who were found positive used to sit together. She attended the installation of Thermal scanner on 20-05-2020 at DH Palakkad and Valayar check post
11	HCW/PKD/11	35	M	Clerk	DH Palakkad	05-06-2020	DEO at DH Palakkad who had frequent contact with other office staff and staff in isolation ward, during lunch session all staff who were found positive used to sit together.
12	HCW/PKD/12	48	M	Clerk	DH Palakkad	05-06-2020	Clerk at DH Palakkad, who had frequent contact with other office staff and staff in isolation ward, during lunch session all staff who were found positive used to sit together. He attended the installation of



							Thermal scanner on 20-05-2020 at DH Palakkad and Valayar check post
13	HCW/PKD/13	41	M	Manager	KMSCL-DH Palakkad	05-06-2020	Attended the installation of thermal scanner at DH Palakkad and Valayar check post
14	HCW/PKD/14	53	M	Helper in artificial Limb centre	DH Palakkad	06-06-2020	Helper at artificial limb centre was deployed for office work at DH Palakkad for two days in a week. He had contact with other office staff and staff in isolation ward after duty
15	HCW/PKD/15	51	M	Clerk	DH Palakkad	06-06-2020	Clerk at DH Palakkad who had frequent contact with other office staff and staff in isolation ward after duty. In lunch session they used to sit together
16	HCW/PKD/16	37	M	Clerk	DH Palakkad	06-06-2020	Clerk at DH Palakkad who had frequent contact with other office staff and staff in isolation ward after duty. In lunch session they used to sit together
17	HCW/PKD/17	46	F	Clerk	DH Palakkad	06-06-2020	Clerk at DH Palakkad who had frequent contact with other office staff and staff in isolation ward after duty. In lunch session they used to sit together. She attended installation of thermal scanner in DH Palakkad and Valayar Check post
18	HCW/PKD/18	49	M	Clerk	DH Palakkad	06-06-2020	Clerk at DH Palakkad who had frequent contact with other office staff and staff in isolation ward after duty. In lunch session they used to sit together
19	HCW/PKD/19	34	F	Cleaning staff	CHC Cherpulassery	09-06-2020	HMC Cleaning staff at CHC Cherpulassery used to mingle with staff and patients on daily basis. There are a lot of quarantined people in the area/migrants visited the CHC for certificates
20	HCW/PKD/20	45	F	Senior Clerk	CHC Cherpulassery	09-06-2020	Senior clerk at CHC Cherpulassery used to mingle with staff and patients on daily basis. There are a lot of quarantined people in the area/migrants visited the CHC for certificates
21	HCW/PKD/21	53	F	JPHN	CHC Parali	26-06-2020	JPHN CHC Parali, was on swab collection duty on 15-06-2020, one positive case was detected on that day

**Kozhikode**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/KKD/1	30	F	Head Nurse	MCH Kozhikode	22-04-2020	Direct contact with positive case, hence tested and found positive, contact possibly from hospital
2	HCW/KKD/2	31	F	PG Student	MCH Kozhikode	03-06-2020	Symptomatic hence tested positive. Possibly from hospital duty/during travelling
3	HCW/KKD/3	42	F	Nursing Asst Gr ii	TH Triruangadi	13-07-2020	Came in contact with a positive case who came to casualty with a history of fracture
4	HCW/KKD/4	39	M	JHI	DH Kannur	22-05-2020	Breech in doffing procedure
5	HCW/KKD/5	48	F	Nursing Asst	GH Thalassery	23-05-2020	Breech in doffing procedure
6	HCW/KKD/6	53	F	Nursing Asst	GH Thalassery	23-05-2020	Breech in doffing procedure
7	HCW/KKD/7	24	M	Staff nurse in ambulance	108 Ambulance	13-06-2020	Person was asymptomatic and had direct contact with positive case
8	HCW/KKD/8	35	M	Doctor	Rajagiri Hospital	19-07-2020	Possible chance of infection from hospital
9	HCW/KKD/9	42	F	ASHA	PHC Perumanna	20-07-2020	Detected on sentinel surveillance

**Wayanad**

SI No.	Code	Age	M/F	Designation	Institution	Date when confirmed positive	Remarks
1	HCW/WYD/1	29	M	Doctor	PHC Bairakkuppa	12-07-2020	Institution at border area and possible direct contact with cases and also had Private practice by doctor near the border area

**Kannur**

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/KNR/1	54	F	Attender	GH Kannur	18-05-2020	Found positive from sentinel surveillance, direct contact from work place
2	HCW/KNR/2	50	F	Grade-2	DH Kannur	23-05-2020	Positive from sentinel surveillance, contact with positive case in hostel room
3	HCW/KNR/3	55	F	Nursing Assistant	GH Thalassery	23-05-2020	Found positive from sentinel surveillance, direct contact from work place

### Kasaragod

SL No.	Code	Age	M/F	Designation	Institution	Date when confirmed Positive	Remarks
1	HCW/KSD/1	32	F	Staff Nurse	GH Kasaragod	14-05-2020	Symptomatic hence tested positive, had worked in the swab collection room where a patient from Maharashtra turned positive later, was examined
2	HCW/KSD/2	28	F	Radiographer	DH Kanjanahad	14-05-2020	Symptomatic, hence tested positive, contact with positive case in CT Scan/X-ray
3	HCW/KSD/3	34	F	Dentist	GH Kasaragod	03-06-2020	Symptomatic, hence tested and found positive, possible contact with positive case in the Swab collection room
4	HCW/KSD/4	21	F	Lab Technician	Priyadarshini Lab	05-07-2020	Found positive through sentinel surveillance
5	HCW/KSD/5	26	F	Lab Technician	Priyadarshini Lab	05-07-2020	Found positive through sentinel surveillance
6	HCW/KSD/6	21	F	Lab Technician	Priyadarshini Lab	05-07-2020	Found positive through sentinel surveillance
7	HCW/KSD/7	25	F	Lab Technician	EK Nayanar Hospital	10-07-2020	Direct contact hence tested positive
8	HCW/KSD/8	54	F	Office Attendent	CHC Pallikara	12-07-2020	Direct contact hence tested positive
9	HCW/KSD/9	52	M	JHI	Nileshwar Municipality	13-07-2020	He had duty to supervise municipality institution quarantine until June 10
10	HCW/KSD/10	42	F	ASHA	CHC Cheruvattoor	15-07-2020	Possibly during the field visit
11	HCW/KSD/11	34	F	JPHN	CHC Muliya	17-07-2020	Posted for COVID duty, also attended a birthday party function which are the possible cause for the contacts
12	HCW/KSD/12	43	F	ASHA	Kumbala Panchayat	17-07-2020	Was on duty on OP Counter which is the cause of infection
13	HCW/KSD/13	45	F	ASHA	Pallikara Panchayat	19-07-2020	Possible contact with positive case during field visit
14	HCW/KSD/14	72	M	Doctor	Private Clinic Manjeshwaram	19-07-2020	Possible chance of contact during duty
15	HCW/KSD/15	49	F	ANM	Private Clinic Manjeshwaram	19-07-2020	Possible chance of contact during duty

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The Public Health division headed by Dr Meenakshy along with the State Surveillance Unit, all district Surveillance Units have done the detailed study of Health Care Workers. There are many other officers who have been working untiringly and doing data management and immediately responding to the requirements. Their unstinted support made the publishing of the report possible. We earnestly appreciate their works.

The study report will assist all the health care workers, institutions and the capacity building divisions in Government and Private Sector Hospitals so as to build strong systems.

**Dr Rajan Khobragade****Principal Secretary****Health and Family Welfare****Government of Kerala**





Department of Health & Family Welfare

Government of Kerala

Annexe II

Thiruvananthapuram

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