

# COMPENDIUM OF GUIDELINES, INSTRUCTION AND STANDARD OPERATIVE PROCEDURES FOR COVID-19

Medical Education and Drugs Department Government of Maharashtra



# Medical Education and Drugs Department

# COMPENDIUM OF GUIDELINES, INSTRUCTION AND STANDARD OPERATIVE PROCEDURES FOR COVID-19

# THIRD EDITION VOLUME 2

Editor -in -chief Dr. Sanjay Mukherjee, IAS Secretary Medical Education and Drugs Department Government of Maharashtra

#### Co-Editors

Dr. Rakesh Waghmare, **Associate Professor** Grant Government Medical College, Grant Government Medical College, Mumbai

Dr. Mandar Sadawarte, **Assistant Professor** Mumbai

#### **FOREWORD**

As you are aware, COVID – 19 is widely spreading across the country, rising beyond 35000 positive cases in the 14<sup>th</sup> week. In order to manage and contain the spread of COVID – 19 any further, both Centre and State Government and associated departments have come out with Guidelines to be adopted across the country and in each state.

This book is a compilation of instructions issued by Ministry of Health & Family Welfare, National Centre for Disease Control & Indian Council of Medical Research of the Government of India and instructions issued by Public Health Department and Medical Education and Drugs Department of Government of Maharashtra. All the information provided in this Compendium is available in publicly available sources.

We hope that this compilation helps Practitioners, Administrators and all people involved in management of COVID-19 cases.

The compilation is updated with the relevant information issued till 3<sup>rd</sup> May, 2020. The editorial board shall be updating this on a regular basis.

We thank you all.

# **INDEX**

SR. NO.	SECTION	TITLE	PAGE
A	HOSPITALS	1. NCDC Case Information Form for 2019-nCoV Acute Respiratory	1-2
		Disease	
		2. MOHFW Advisory for Human Resource management of Covid 19	3-11
		3. MOHFW Containment Plan for Large Outbreaks of Covid 19	12-31
		4. MOHFW Guidance document on appropriate Management of	32-38
		suspected/confirmed cases of Covid cases	
		5. SOP for Investigation of Suspected Covid 19 case using Case	39-41
		Investigation form	
		6. MOHFW Model Micro plan for containing Local Transmission of	42-67
		Covid 19	
		7. MOHFW Guidelines for Quarantine facilities Covid 19	68-108
		8. MOHFW Revised Guidelines for Dialysis of Covid 19 Patients	109-116
		9. MEDD GR for Private Practitioners 01.04.2020	117-119
		10. GOI Online Training for Covid 19 on DIKSHA Platform	120-128
		11. AIIMS Guidelines for Re-Use of Personal Protective Equipment	129-134
В	TESTING	1. ICMR Govt. Laboratories 07.04.2020	135-138
		2. ICMR Private Laboratories 07.04.2020	139-141
		3. ICMR Status of New Labs considered for Initiation of Covid 19	142-143
		Testing 07.04.2020	
		4. ICMR Specimen Referral Form for Covid - 19	144-145
		5. ICMR Advisory to start rapid Antibody based blood Test for Covid	146-147
		- 19 04.04.2020	
		6. ICMR Advisory for initiation of additional COVID 19 testing	148-149
		laboratories	
		7. ICMR Guidance on expansion of testing platforms	150
		8. ICMR Advisory for sample collection sites	151
		9. ICMR Advisory for DBT CSIR DST DAE ICAR DRDO Labs	152
С	GENERAL	MOHFW Advisory for quarantine of migrant workers	153-156
	ADMINISTR	2. MEDD GR Disinfection 1 APRIL 2020	157-158
	ATION	3. MEDD Setting up Independent COVID Facility 1 April 2020	159-161
		4. GOI State Demand and Procurement 2 April 2020	162
		5. MEDD Haffkine Purchase procedure 3 April 2020	163-167
D	CITIZENS	1. MOHFW - Minding our minds during Covid - 19	168-170
		2. MOHFW Advisory & Manual on use of Homemade Protective	171-185
		Cover for Face & Mouth	
		3. MOHFW Advisory on Mental Health of Children during Covid - 19	186
		4. MOHFW Advisory on Mental Health of Elderly during Covid - 19	187

5. MOHFW Revised Psychosocial issues of migrants during Covid 19	188-189
6. NCDC Advisory for Jhugga Jhopdi clusters/slums in view of Covid	190-192
19	
7. NCDC Guidelines for elderly and high-risk groups to safeguard	193-195
from Covid 19	

# Form A NATIONAL CENTRE FOR DISEASE CONTROL

(To be filled for 2019-nCoV Acute Respiratory Disease)

Α	PATIENT INFORMATION								
	Date of reporting to health facility:	Name	of Report	ing Hea	lth Facili	ty:		Date o	of interview
	State	Local Patient ID				1			
	Name of interviewer	Address of interviewer: Contact Num			lumber c	mber of interviewer			
	Name of patient:	Age				Gende	r		
	Case Classification*: Confirmed		Sus	pect	1				
В	SOCIODEMOGRAPHC PROFILE								
_		n-India	n(name of	countr	y)				
	Postal Address	Distri			numbe		email id	t	
С	CLINICAL INFORMATION								
1	Patient clinical course								
1.1	Date of Onset of symptoms								
1.2	Date of first contact with heath facility		(nam	e of he	alth facil	ity:		,	)
1.3	Date of admission				alth facil	ity:			)
1.4	Outcome (circle): Under treatment/ Dis			Died/ C	Cured		1.50	Date of d	leath(if applicable)
1.6	Cause of death(As mentioned on death	ı certifi	cate):						
1.7	Was patient ventilated Yes/No								
2	Patient Symptoms at admission (tick a		-						
a)	Fever/chills		e throat						sea/Vomiting
p)	General weakness	•	athlessnes	SS				k) Head	
c)	Cough	h) Dia			-1	نامدندما :	-:	I) Irrita	bility/confusion
d)	Runny nose	i) Pair	i(circie)mu	scular,	cnest, at	odominal, j	oint		
e)	Any other, Specify								
3	Patient signs at admission: Details of f							-	
a)	Temperature		normal Lun		findings	(yes/no)		a(yes/no	
p)	Stridor (yes/ no)		hypnoea(y		/	/ )		ıre(yes/	· · · · · · · · · · · · · · · · · · ·
c)	Redness of eyes (yes/no)	T) Abn	ormal lung	auscui	tation(ye	es/no)	i) Any c	other(sp	есіту)
4	Underlying medical conditions (tick all	that a	oply)	1					
a)	COPD		ertension				gical or ı	neuromi	uscular disease
b)	Chronic Renal Disease	g) Ast			l) Heart				
c)	Bronchitis	h)Pres	gnancy ester)		m) lmm	unocompr	omised o	conditio	n including HIV, TB
d)	Malignancy	i) Po weeks	st-partum s)	(< 6	n) Any o	other(ment	ion)		
e)	Diabetes	j)Live	Disease		o) None	<u> </u>			
D	EXPOSURE HISTORY								
5	Occupation (circle): Student/ Business	sman/	Health car	re work	ker/Healt	th care lab	worker	r/ anima	al handler/ any other
	(specify)								
6	H/O contact with 2019-nCoV case (Circ		•						
6.1	If yes, then was it any of the following								
a)	laboratory confirmed case of 201 nCOV				der inves	tigation fo	r 2019-n	CoV whi	ile that person was ill
6.2	If yes to Q. 6, then mention contact set								
a)	While taking samples/ other investigation	ions	f) Visit to detail)	a place	e where	2019-nCo\	cases a	re treat	ed or sampled(specify
b)	Clinical care of case (among HCW)		h) Immigi	ration S	taff at P	oint of Entr	y (detail	s of plac	ce)
c)	Housekeeping (Hospital)		i) Others,	Specify	/				
d)	Caregiver of the case (specify details of case)		j) Not kno	own					
7	Is patient a member of a cluster of pa	atients	with sever	e acute	respirat	tory illness	(e.g., fe	ver and	pneumonia requiring
	hospitalization) of unknown etiology in	which	nCoV is be	ing eva	luated?	(Yes/No)			
F	TRAVEL HISTORY								

8	Have you travelled outside India in the past one month? Yes/ No. If yes then give 8.1 Date of arrival to India:							
	date of arrival and fill details from Q. 8	3.1 onw	ards else skip t	o Q.9				
8.2	Have you visited China? Yes/No If yes, then fill following columns else skip to Q. 8.3							
a)	Duration of stay:	b) Da	te of arrival in	China:	c) Dat	e of departure	e from China:	
d)	Did you visit Wuhan (yes/no)	s/no) e) Any other places visited in China (specify)						
f)	During your stay, did you visit any anii	mal mai	ket? Yes/No					
8.3	Details of visit to any other country in	past or	e month: Nam	es of the coun	tries			
a)	Duration of stay: Country name& dura	ation	Date of arrival:			Date of departure:		
b)	Duration of stay: Country name& dura	Date of arrival:			Date of departure:			
9	Have you travelled within India in the	past on	e month? Yes/	No. If no, skip	to Sect	ion F		
	If yes, details of visit to other places:	lames d	of places					
a)	Duration of stay: Place & duration		Date of arriva	al:		Date of depa	irture:	
b)	Duration of stay: Place & duration		Date of arrival:			Date of departure:		
c)	Duration of stay: Place & duration		Date of arrival:			Date of departure:		
F	LABORATORY INFORMATION (to be obtained from treating physician)							
10	Any sample collected for confirmation	of 201	9-nCoV case (y	/n)				
a)	If yes, then Type of sample collected	Date o	f collection	Sent to	Test Pe	rformed	Result	
b)	If yes, then Type of sample collected	Date o	fcollection	Sent to	Test Pe	rformed	Result	
c)	If yes, then Type of sample collected	Date o	f collection	Sent to	Test Pe	rformed	Result	

#### Suspect case

A. Patients with acute respiratory illness (fever, cough, breathing difficulty), <u>AND</u> with no other etiology that fully explains the clinical presentation <u>AND</u> at least one of the following:

- a history of travel to or residence in China in the 14 days prior to symptom onset, or
- patient is a health care worker who has been working in an environment where severe acute respiratory infections of unknown etiology are being cared for.
- worked or attended a health care facility where a confirmed case of 2019-nCoV is admitted in the last 14 days
- close contact with a confirmed case of 2019-nCoV in the 14 days prior to illness onset, or
- **B.** A suspect case for whom testing for 2019-nCoV is inconclusive

#### **Confirmed case**

A person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms.

G	ENLIST THE CONTACTS** IN THE FOLLOWING FORMAT				
S.	Name	Age	Gender	Type of contact(Family (f),	Contact details
No.				community(c), health care facility(h))	(Phone Number)

#### Contact\*\*

- Health care associated exposure, including providing direct care for 2019-nCoV patients, working with health care workers infected with 2019-nCoV, visiting patients or staying in the same close environment of a 2019-nCoV patient. Clinicians should also be alert to the possibility of atypical presentations in patients who are immunocompromised;
- Working together in close proximity or sharing the same classroom environment with a with 2019nCoV patient
- Traveling together with 2019-nCoV patient in any kind of conveyance
- Living in the same household as a 2019-nCoV patient

# Ministry of Health & Family Welfare Directorate General of Health Services (EMR Division)

### **Advisory for Human Resource Management of COVID-19**

India reported its 1<sup>st</sup> case of COVID-19 on 30<sup>th</sup> January, 2020. It was a travel related case from Wuhan, China. Since then (as on 29<sup>th</sup> March, 2020), 979 confirmed cases and 25 deaths have been reported from 27 States/UTs. Although there is no evidence to widespread community transmission, 20 existing and 22 potential hotspots have been identified. The containment measures to break the cycle of transmission and clinical management of those affected would require large human resource (HR).

#### **Scope of Document**

This document provides guidance to the state on the human resource that can be mobilized for COVID-19 management along with possible role assignments and their training requirements.

#### A. Human Resource

- 1. The major areas where enhanced deployment of HR is required:
  - i. Surveillance
    - a. Surveillance activities at grass root level.
    - b. Supervisory management of containment operations at grass root level.
    - c. Laboratory testing
    - d. Collection, collation and dissemination of data.
    - e. Risk Communication
  - ii. Clinical management
    - a. Clinical management of Suspect/confirmed cases in isolation wards.
    - b. Critical care management SARI cases in ICUs.
    - c. Patient transportation and referral
    - d. Cleaning, disinfection and waste management.
- iii. Management of quarantine, isolation facilities, logistics and supply chain management
- iv. Pyscho Social Care:
- 2. The HR pooled from various sources will be assigned roles to perform in the above mentioned areas.

# B. Capacity building

- i. Such identified HR needs to be trained online using online training programs developed by Ministry of Health and Family Welfare (MoHFW).
- ii. These trainings will be designed to suit requirement of each and every section of healthcare worker involved in the containment operations.

- iii. These trainings for different target groups shall cover:
  - a. Field surveillance, contact tracing, data management and reporting
  - b. Sampling, packaging and shipment of specimen
  - c. Hospital infection prevention and control including use of appropriate PPEs and biomedical waste management
  - d. Clinical case management including ventilator management, critical care management
  - e. Training of managers on managing quarantine and isolation facilities
  - f. Community based training in Pyscho –social care.
- iv. Each State will identify and designate a Nodal officer for Training who will coordinate all training activities in the State.
- v. MoHFW will conduct trainings of Master trainers of organizations from where field staff is being deployed. Responsibility of further dissemination will be that of concerned institution.
- vi. The concerned organization will create a database of trained person who will disseminate and convey the information to all the districts through MoHFW.
- vii. For COVID-19 management, the district administration will pool-in the requisite human resources.
- viii. Such pooled human resources would stay in the containment zone till the containment operations are over
- ix. Isolation areas: in addition to training all hospital staff, dentists and AYUSH practitioners available should also be trained.
- x. Retired doctors and other healthcare professionals should be identified to work in non-covid areas in hospitals in case of emergencies

#### C. Suggested numbers of HR

- i. For surveillance activities: Covid Warriors @ 1 per 250 population may be identified and trained.
- ii. Quarantine facilities: these are meant to house asymptomatic cases. The number identified and trained should be equal to the number of Covid Warriors.
- iii. Ventilator use: at least two times the number of ICU beds earmarked for covid-19 patients should be imparted one day training.

### **Annexure: Training Resources**

# TRAINING RESOURCES FOR COVID 19 MANAGEMENT

S.No	Role	Category of Health-	Resource Material for Capacity Building
		care Professional	
1	Field	ANM, ASHA, AWW	1. FACILITATOR GUIDE for Training of ANM,
	Surveillance	AYUSH Students	ASHA, AWW
	(Young	NCC Cadets	https://www.mohfw.gov.in/pdf/FacilitatorGuide
	Personnel	NSS Volunteers	COVID19_27%20March.pdf
	preferred)	NYKS Volunteers	
		IRCS Volunteers	
		CPSE Workers	O OLIDEO C. T CANDA AGUA ANGU
		Ambulance Drivers	2. SLIDES for Training of ANM, ASHA, AWW https://www.mohfw.gov.in/pdf/2COVID19PPT
		Gram Panchayats /	_25MarchPPTWithAnimation.pdf
		Urban Local Bodies	_25Watchi i i withAmmatton.pti
		Employees/ Rozgar	3. DIGITAL POCKET BOOK for ANM, ASHA,
		Sevaks	AWW
		RWA	https://www.mohfw.gov.in/pdf/3Pocketbookof5
		All officers generally	Covid19_27March.pdf
		deployed as micro	
		observers during	4. VIDEO TUTORIAL (Hindi) on Infection
		general elections,	Control, Personal Protection & Environement
		including teachers	Cleaning against COVID https://drive.google.com/file/d/17oCqHqPM4-
			b23YLW6tVQtUe_dRUh6VmP/view
			SESTEMAN QUESTION MILITARY
			5. STANDARD OPERATING PROCEDURE for
			Transporting a Suspect/Confirmed case of
			COVID-19
			https://www.mohfw.gov.in/pdf/StandardOperati
			<u>ngProcedureSOPfortransportingasuspectorconfi</u>
			rmedcaseofCOVID19.pdf
			6. GUIDELINES for Home Quarantine https://www.mohfw.gov.in/pdf/Guidelinesforho
			mequarantine.pdf
			<u>mequarantme.pur</u>
			7. HEALTH ADVISORY for Elderly Population
			of India during COVID19 Pandemic
			https://www.mohfw.gov.in/pdf/AdvisoryforEld
			erlyPopulation.pdf
			8. GUIDELINES for Disinfection of Public Places
			including Offices <a href="https://www.mohfw.gov.in/pdf/Guidelinesondis">https://www.mohfw.gov.in/pdf/Guidelinesondis</a>
			infectionofcommonpublicplacesincludingoffice
			s.pdf
	1	ı	<u>o.pur</u>

		<ul> <li>9. GUIDELINES for General Public for using Masks <ul> <li>https://www.mohfw.gov.in/pdf/Useofmaskbypu</li> <li>blic.pdf</li> </ul> </li> <li>10. VIDEO DEMONSTRATION (English) of Hand Washing by AIIMS <ul> <li>https://youtu.be/htl6ZUQ-b3Y</li> </ul> </li> <li>11. VIDEO DEMONSTRATION (Hindi) of Hand Washing by AIIMS <ul> <li>https://youtu.be/8Dt1BTGXn5I</li> </ul> </li> <li>12. VIDEO APPEAL (English) to Citizens by</li> </ul>
		Doctors from AIIMS <a href="https://youtu.be/yZd8bPTfYOg">https://youtu.be/yZd8bPTfYOg</a>
Field Supervision (Experienced Personnel preferred)	PHC doctors Ayush doctors Dental doctors Physiotherapists Ex- Servicemen Veterinary doctors All officers generally deployed as micro observers during general elections, including teachers	1. FACILITATOR GUIDE for Training of ANM, ASHA, AWW https://www.mohfw.gov.in/pdf/FacilitatorGuide COVID19_27%20March.pdf  2. SLIDES for Training of ANM, ASHA, AWW https://www.mohfw.gov.in/pdf/2COVID19PPT_25MarchPPTWithAnimation.pdf  3. DIGITAL POCKET BOOK for ANM, ASHA, AWW https://www.mohfw.gov.in/pdf/3Pocketbookof5_Covid19_27March.pdf  4. HOW TO USE the Training Toolkit for ANM, ASHA, AWW https://www.mohfw.gov.in/pdf/4FLWToolkitH owtousethetoolkit.pdf  5. STANDARD OPERATING PROCEDURE for Transporting a Suspect/Confirmed case of COVID-19 https://www.mohfw.gov.in/pdf/StandardOperatingProcedureSOPfortransportingasuspectorconfirmedcaseofCOVID19.pdf  6. GUIDELINES for Home Quarantine
		o. Goldelines for nome Quarantine

			https://www.mohfw.gov.in/pdf/Guidelinesforho
			mequarantine.pdf
			7. HEALTH ADVISORY for Elderly Population of India during COVID19 Pandemic <a href="https://www.mohfw.gov.in/pdf/AdvisoryforElderlyPopulation.pdf">https://www.mohfw.gov.in/pdf/AdvisoryforElderlyPopulation.pdf</a>
			8. GUIDELINES for Disinfection of Public Places including Offices <a href="https://www.mohfw.gov.in/pdf/Guidelinesondisinfectionofcommonpublicplacesincludingoffices.pdf">https://www.mohfw.gov.in/pdf/Guidelinesondisinfectionofcommonpublicplacesincludingoffices.pdf</a>
			9. GUIDELINES for General Public for using Masks <a href="https://www.mohfw.gov.in/pdf/Useofmaskbypublic.pdf">https://www.mohfw.gov.in/pdf/Useofmaskbypublic.pdf</a>
			10. GUIDELINES for COVID Waste Disposal by CPCB (revised 25th March) <a href="https://ncdc.gov.in/WriteReadData/1892s/63948">https://ncdc.gov.in/WriteReadData/1892s/63948</a> 609501585568987.pdf
	L		
3	Sample Collection, Packaging and Transportatio	Lab Technicians  B Sc/M Sc  Microbiology Students	1. GUIDELINES for Specimen Collection, Packaging and Transport for SARS-CoV-2 <a href="https://www.mohfw.gov.in/pdf/5Sample%20collection_packaging%20%202019-nCoV.pdf">https://www.mohfw.gov.in/pdf/5Sample%20collection_packaging%20%202019-nCoV.pdf</a>
	n		<ol> <li>TESTING STRATEGY for COVID-19 by Indian Council of Medical Research (revised 20 March) <a href="https://icmr.nic.in/sites/default/files/upload_documents/2020-03-20_covid19_test_v3.pdf">https://icmr.nic.in/sites/default/files/upload_documents/2020-03-20_covid19_test_v3.pdf</a></li> </ol>
			3. GUIDELINES for Rapid Antibody Kits for SARS-CoV-2 (28th March) <a href="https://icmr.nic.in/sites/default/files/upload_doc_uments/Guidance_on_RapidKits_COVID19_28">https://icmr.nic.in/sites/default/files/upload_doc_uments/Guidance_on_RapidKits_COVID19_28</a> <a btlggv3_xni?t='1771"' href="https://oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxen.com/oxe&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;4. WEBINAR 1 - Infection Control Practices for COVID-19 by AIIMS New Delhi &lt;a href=" https:="" youtu.be="">https://youtu.be/BTLGGV3_XnI?t=1771</a>

			<ol> <li>5.</li> <li>6.</li> <li>8.</li> </ol>	WEBINAR SCHEDULE for COVID management by AIIMS (Revised) https://www.mohfw.gov.in/pdf/AIIMSCOVID WebinarScheduleRevised.pdf  VIDEO DEMONSTRATION of PPE Donning & Removal by IDSP https://drive.google.com/file/d/1TdaBLvD- 73oiN6xuVwbcUgpKt6_auH_o/view?usp=shar ing  VIDEO DEMONSTRATION of PPE Donning & Removal by AIIMS https://youtu.be/mdrK_zhHD88  GUIDELINES for COVID Waste Disposal by CPCB (revised 25th March) https://ncdc.gov.in/WriteReadData/1892s/63948 609501585568987.pdf
			9.	GUIDELINES for COVID-19 Testing in Private Laboratories in India <a href="https://www.mohfw.gov.in/pdf/NotificationofI">https://www.mohfw.gov.in/pdf/NotificationofI</a> CMguidelinesforCOVID19testinginprivatelabor atoriesiIndia.pdf
4	Clinical Manag Treatment Faci	ement in COVID lities	1.	GUIDELINES for Clinical Management of COVID-19 (revised 31st March) <a href="https://www.mohfw.gov.in/pdf/RevisedNationallClinicalManagementGuidelineforCOVID1931">https://www.mohfw.gov.in/pdf/RevisedNationallClinicalManagementGuidelineforCOVID1931</a> <a href="https://www.mohfw.gov.in/pdf/RevisedNationallClinicalManagementGuidelineforCOVID1931">032020.pdf</a>
			2.	GUIDELINES on Rational Use of PPE <a href="https://www.mohfw.gov.in/pdf/Guidelinesonrat">https://www.mohfw.gov.in/pdf/Guidelinesonrat</a> <a href="ionaluseofPersonalProtectiveEquipment.pdf">ionaluseofPersonalProtectiveEquipment.pdf</a>
4.1	At isolation facility	Allopathic Doctors  Doctors drawn from Army, Paramilitary and Railways  Ayush Doctors	1.	GUIDELINES for Setting Up Isolation Facility/Ward https://ncdc.gov.in/WriteReadData/1892s/42417 646181584529159.pdf
		Medical Interns & Final yr MBBS	2.	GUIDELINES for Clinical Management of COVID-19 (revised 31st March)

		Students		https://www.mohfw.gov.in/pdf/RevisedNationa
		Nursing Students (M		IClinicalManagementGuidelineforCOVID1931
		SC/ B Sc final year)		032020.pdf
		, , , , , , , , , , , , , , , , , , , ,		<del></del>
			3.	WEBINAR SCHEDULE for Physicians
				treating COVID by AIIMS (Revised)
				https://www.mohfw.gov.in/pdf/AIIMSCOVID
				WebinarScheduleRevised.pdf
			4.	VIDEO PLAYLIST of Telemedicine Sessions
				for Physicians by AIIMS for COVID
				https://www.youtube.com/playlist?list=PLRICe
				uHqjvr6d_YG1D14NRRsD4hFl_Tzd
			_	WEDINIAD COHEDINE for Marria o Officers
			5.	WEBINAR SCHEDULE for Nursing Officers caring for COVID by AIIMS
				https://www.mohfw.gov.in/pdf/COVIDWEbina
				r.pdf
			6.	VIDEO PLAYLIST of Telemedicine Sessions
				for Nurses by AIIMS for COVID
				https://www.youtube.com/playlist?list=PLRlCe
				uHqjvr6D6gUSLeex9f5pBuf6fTSK
			7.	VIDEO DEMONSTRATION of PPE Donning
				& Removal by IDSP
				https://drive.google.com/file/d/1TdaBLvD-
				73oiN6xuVwbcUgpKt6_auH_o/view?usp=shar
				ing
			8.	VIDEO DEMONSTRATION of DDE Donning
			0.	VIDEO DEMONSTRATION of PPE Donning & Removal by AIIMS
				https://youtu.be/mdrK_zhHD88
			9.	GUIDELINES for COVID Waste Disposal by
				CPCB (revised 25th March)
				https://ncdc.gov.in/WriteReadData/1892s/63948
				<u>609501585568987.pdf</u>
1.0		A decisión	4	CHIEFT DIEG. CH. 1.12
4.2	Intensive care	Anaesthetist/	1.	GUIDELINES on Clinical Management of
		Respiratory Physician/		Severe Acute Respiratory Illness (SARI) in Suspect/Confirmed COVID cases
		Medical Specialist		https://ncdc.gov.in/WriteReadData/1892s/96997
		2/3 yr PG students		299691580715786.pdf
		(MD/		<del></del>
		DNB/Diploma)in		

above mentioned	2. VIDEO DEMONSTRATION of PPE Donning
subjects	& Removal by AIIMS
GNM Nursing	https://youtu.be/mdrK_zhHD88
Officers	
Nursing Faculty	3. GUIDELINES for COVID Waste Disposal by
Final year BSc/MS	CPCB (revised 25th March)
Nursing Students	https://ncdc.gov.in/WriteReadData/1892s/63948 609501585568987.pdf
Training statement	<u>009301383308987.pdr</u>
4.3 Infection All above listed	GUIDELINES for Infection Prevention And
prevention doctors and nurses	Control In Healthcare Facilities
and Control	https://www.mohfw.gov.in/pdf//National%20G
	uidelines%20for%20IPC%20in%20HCF%20-
	<u>%20final%281%29.pdf</u>
	2. WEBINAR 1 - Infection Control Practices for
	COVID-19 by AIIMS New Delhi
	https://youtu.be/BTLGGV3_XnI?t=1771
5 Medical care/ All doctors/ nurses	in 1. GUIDELINES for the Use of IEC posters for
nursing care service and above 6	
in non-Covid or with co-morbidit	ies Hospitals
areas.	https://www.mohfw.gov.in/pdf/Guidelinebook1 mb.pdf
All retired personne	el <u>mo.pur</u>
volunteering to wor	k 2. VIDEO DEMONSTRATION of PPE Donning
	& Removal by AIIMS
	https://youtu.be/mdrK_zhHD88
	3. GUIDELINES for COVID Waste Disposal by
	CPCB (revised 25th March)
	https://ncdc.gov.in/WriteReadData/1892s/63948
	609501585568987.pdf
6. Psycho – Psycho- Social Tea	_
Social Care of psychiatrists /	https://www.mohfw.gov.in/pdf/Mindingourmin
psychologists and	dsduringCoronaeditedat.pdf
Psycho-social work	ers  2. Practical tips to take care of your mental health
Community	during the stay
volunteers.	https://www.youtube.com/watch?v=uHB3WJsL
	J8s&feature=youtu.be
7. Management	
ICS Serving / Retired	Training module for Incident response system:
armed forces office	
armed forces office	https://nidm.gov.in/PDF/modules/irs-1.pdf

Quarantine	Serving or retired	GUIDELINES for Quarantine facilities
facility management	CPSE Officers NDMA/SDMA/ NDRF officers NGO-Consultancy Groups All officers generally deployed as micro observers during general elections, including teachers	COVID-19 <a href="https://ncdc.gov.in/WriteReadData/1892s/90542">https://ncdc.gov.in/WriteReadData/1892s/90542</a> <a href="https://ncdc.gov.in/WriteReadData/1892s/90542">https://ncdc.gov.in/WriteReadData/1892s/9054</a> <a href="https://ncdc.gov.in/WriteReadData/1892s/90542">https://ncdc.gov.in/WriteReadData/1892s/9054</a>

Note: The Training Resources in column 4 are being updated regularly as more Resources are becoming available. Also, this list is indicative and State may also use other appropriate training materials available with them.



# **Containment Plan for Large**

# **Outbreaks**

Novel Coronavirus Disease 2019 (COVID-19)

Ministry of Health and Family Welfare Government of India

# 1. INTRODUCTION

# 1.1 Background

On 31<sup>st</sup> December 2019, the World Health Organization (WHO) China Country Office was informed of cases of pneumonia of unknown etiology (unknown cause) detected in Wuhan City, Hubei Province of China. On 7<sup>th</sup> January 2020, Chinese authorities identified a new strain of Coronavirus as the causative agent for the disease. The virus has been renamed by WHO as SARS-CoV-2 and the disease caused by it as COVID-19. The disease since its first detection in China has now spread to over 200 countries/territories, with reports of local transmission happening in more than 160 of these countries/territories. As per WHO (as of 1<sup>st</sup> April, 2020), there has been a total of 823626 confirmed cases and 40598 deaths due to COVID-19 worldwide.

In India, as on 2<sup>nd</sup> April, 2020, 1965 confirmed cases (including 51 foreign nationals) and 50 deaths reported from 29 States/UTs. Large number of cases has been reported from Delhi, Karnataka, Kerala, Maharashtra, Rajasthan, Tamil Nadu, Telangana and Uttar Pradesh.

#### 1.2. Risk Assessment

COVID-19 was declared a pandemic by WHO on 11<sup>th</sup> March, 2020. While earlier the focus of spread was centered on China, it has now shifted to Europe and North America. WHO has advised countries to take a whole-of-government, whole-of-society approach, built around a comprehensive strategy to prevent infections, save lives and minimize impact.

In India also, clusters have appeared in multiple States, particularly Kerala, Maharashtra, Rajasthan, Uttar Pradesh, Delhi, Punjab, Karnataka, Telangana and UT of Ladakh. 211 districts are now reporting COVID-19 cases and the risk of further spread remains very high.

# 1.3. Epidemiology

Coronaviruses belong to a large family of viruses, some causing illness in people and others that circulate among animals, including camels, cats, bats, etc. Rarely, animal corona viruses may evolve and jump species to infect people and then spread between people as witnessed during the outbreak of Severe Acute Respiratory Syndrome (SARS, 2003) and Middle East Respiratory Syndrome (MERS, 2014). The etiologic agent responsible for current outbreak of SARS-CoV-2 is a novel coronavirus closely related to SARS-Coronavirus.

In humans, the transmission of SARS-CoV-2 can occur via respiratory secretions (directly through droplets from coughing or sneezing, or indirectly through contaminated objects or surfaces as well as close contacts). Nosocomial transmission has been described as an important driver in the epidemiology of SARS and MERS and has also been documented in COVID-19.

Current estimates of the incubation period of COVID range from 2-14 days, and these estimates will be refined as more data become available. Most common symptoms include fever, fatigue, dry cough and breathing difficulty. Upper respiratory tract symptoms

like sore throat, rhinorrhoea, and gastrointestinal symptoms like diarrhoea and nausea/vomiting are seen in about 20% of cases.

Due to paucity of scientific literature based on community based studies, the available data on host factors is skewed towards cases requiring hospitalization. As per analysis of the biggest cohort reported by Chinese CDC, about 81% of the cases are mild, 14% require hospitalization and 5% require ventilator and critical care management. The deaths reported are mainly among elderly population particularly those with co-morbidities.

At the time of writing this document, many of the crucial epidemiological information particularly source of infection, mode of transmission, period of infectivity, etc. are still under investigation.

# 2. Strategic Approach

India would be following a scenario based approach for the following possible scenarios:

- i. Travel related case reported in India
- ii. Local transmission of COVID-19
- iii. Large outbreaks amenable to containment
- iv. Wide-spread community Transmission of COVID-19 disease
- v. India becomes endemic for COVID-19

# 2.1. Strategic Approach for Scenario: "Travel related cases reported from India"

- (i) Inter-Ministerial coordination (Group of Ministers, Committee of Secretaries) and Centre-State co-ordination been established.
- (ii) Early detection through universal screening of all International passengers at Points of Entries (PoEs).
- (iii) Surveillance and contact tracing through Integrated Disease Surveillance Programme (IDSP) for tracking travellers in the community who have travelled from affected countries.
- (iv)Early diagnosis through testing samples of suspect cases.
- (v) Buffer stock of Personal Protective Equipment (PPE) maintained.
- (vi)Risk communication for creating awareness among public to follow preventive public health measures.

#### 2. 2. Local transmission of COVID-2019 disease

Local transmission will lead to clustering of cases in time and space, epidemiologically linked to a travel related case or a positive case that has links to a travel related case. The cluster containment strategy will be:

- Extensive contact tracing and active search for cases in containment zone
- Testing all suspect cases and high risk contacts
- Isolating all suspect / confirmed cases and providing medical care.
- Quarantining contacts
- Implementing social distancing measures.
- Intensive risk communication.

# 2.3 Large outbreaks amenable to containment

The strategy will remain the same as explained in para 2.2 as above but vary in extent depending upon spread and response to be mounted to contain it. Geographic quarantine and containment strategy will include:

- Defining the area of operation
- Active surveillance for cases and contacts in the identified geographic zone.
- Expanding laboratory capacity for testing all suspect cases, high risk contacts and SARI cases.
- Operationalize surge capacities created for isolation (COVID-19 hospitals/COVID-19 dedicated blocks) to hospitalize and manage all suspect / confirmed cases.
- Implementation of social distancing measures with strict perimeter control.
- Provide chemoprophylaxis with Hydroxy-chloroquine to all asymptomatic healthcare workers and asymptomatic household contacts of laboratory confirmed cases.
- Further intensification of risk communication through audio, social and visual media.

#### 3. Scope of this Document

In alignment with strategic approach, this document provides action that needs to be taken for containing a large outbreak. The actions for mitigation phase will be dealt separately under a mitigation plan.

#### 4. Objective

The objective of this plan is to stop the chain of transmission thus reducing the morbidity and mortality due to COVID-19.

# 5. Containment for large outbreaks through geographic quarantine

# 5.1 Geographic quarantine

Geographic quarantine (cordon sanitaire) strategy calls for near absolute interruption of movement of people to and from a relatively large defined geographic area where there is single large outbreak or multiple foci of local transmission of COVID-19. In simple terms, it is a barrier erected around the focus of infection.

Geographic quarantine shall be applicable to such areas reporting large outbreak and/or multiple clusters of COVID-19 spread over multiple blocks of one or more districts that are contiguous.

### 5.2. Cluster Containment Strategy

The Cluster Containment Strategy would be to contain the disease within a defined geographic area by early detection of cases, breaking the chain of transmission and thus preventing its spread to new areas. This would include geographic quarantine, social distancing measures, enhanced active surveillance, testing all suspected cases, isolation of cases, quarantine of contacts and risk communication to create awareness among public on preventive public health measures.

#### 5.3. Evidence for implementing geographic quarantine

In 2009, during the H1N1 Influenza pandemic it was observed that well connected big cities with substantive population movement were reporting large number of cases, whereas rural areas and smaller towns with low population densities and relatively poor road/ rail/ airway connectivity were reporting only few cases.

The current geographic distribution of COVID-19 mimics the distribution of H1N1 Pandemic Influenza. This suggests that while the spread of COVID-19 in our population could be high, it's unlikely that it will be uniformly affecting all parts of the country. This calls for differential approach to different regions of the country, while mounting a strong containment effort in hot spots.

Large scale measures to contain COVID-19 over large territories have been tried in China. Mathematical modeling studies have suggested that containment might be possible especially when other public health interventions are combined with an effective social distancing strategy.

# 5.4. Factors affecting large outbreak cluster containment

A number of variables determine the success of the containment operations through geographic quarantine. These are:

- (i) Number and size of the cluster/s.
- (ii) Effectiveness of geographic quarantine.
- (iii) How efficiently the virus is transmitting in Indian population, taking into account environmental factors especially temperature and humidity.
- (iv) Public health response in terms of active case finding, testing of large number of cases, immediate isolation of suspect and confirmed cases and quarantine of contacts.
- (v) Geographical characteristics of the area (e.g. accessibility, natural boundaries)

- (vi) Population density and their movement (including migrant population).
- (vii) Ability to ensure basic infrastructure and essential services.

# **6.** Action Plan for Geographic quarantine

#### 6.1. Legal framework

The Central Government /State Government should review the existing legal instruments that provide legal support to implement the containment plan. Some of the Acts/ Rules for consideration could be (i) Disaster Management Act (2005) (ii) Epidemic Act (1897) (iii) Cr.PC and (iv) State Specific Public Health Act.

The Home Ministry has delegated the powers under DM Act, 2005 [Section 10 sub-section 2 clauses (i) and (l)] to Secretary (Health and Family Welfare) to act in such a way to contain or control the outbreak. States may invoke the provisions under DM Act,2005 or under the Epidemic Act,1897 to delegate powers to identified authority to act in such a manner to control or contain the outbreak.

Indian Penal Code under sections 270 provides power to act against those indulging in spread of disease. Section 144 of the Code of Criminal Procedure, when invoked, prohibits gathering of people.

#### 6.1. Institutional mechanisms and Inter-sectoral Co-ordination

#### At the Union Government level

- 6.1.1 The Group of Ministers (GoM) under the Chairmanship of Union Health Minister will be the apex body to take policy decisions. The GoM will have Ministers of External Affairs, Civil Aviation, Shipping, Pharmaceuticals, Home Ministry and option for co-opting any other Ministry. The Union Health Minister will have an advisory Group that will advise him on way forward. The Public Health Working Group under Secretary (H) and Joint Monitoring Group under DGHS will provide technical inputs.
- 6.1.2. At the national level, the Cabinet Secretary/ National Crisis Management Committee (NCMC) / Committee of Secretaries (CoS) will review the situation across the country and continue to direct the concerned Ministries to implement its directions . The co-ordination with health and non-health sectors will be managed by NCMC/ CoS, on issues, flagged by Ministry of Health.

The scale of arrangement within the Ministry of health will be expanded with additional areas among the core capacities assigned to various officers. If need be, there will be empowered

group taking decisions for the core areas of work (planning-co-ordination, surveillance, laboratory support, hospital preparedness, human resource, logistics and data analysis)

#### At the State level

6.1.3. The Concerned State will activate State Crisis Management Committee or the State Disaster Management Authority, as the case may be to manage the clusters of COVID-19.

#### Institutional arrangement at the operational level

6.1.4. District Collector would be the nodal person for all preparedness and response activities within his jurisdiction. District Collector will hold regular meetings with health functionaries, DDMA, Revenue, PWD, Forest, Education and Panchayati Raj/ Local Self Governance Departments where the containment plan will be finalized and operationalized. These officials will issue directions to their ground level staff in all aspects of preparedness, control and containment in accordance with the Containment Plan and Guidelines.

District Collector would need to identify key issues (logistics, legal, technical and resources) and address them for implementing containment operations. He/she will keep ready all administrative orders for social distancing, restriction of rail/road/air transport, perimeter control and continuity of essential services.

In addition, a compendium of all the administrative orders required for enforcing the non-pharmaceutical interventions would be prepared well in advance and kept ready to be executed during response phase.

#### 6.2. Trigger for Action

Epidemiological intelligence on increase in the incidence of a COVID-19 cases occurring within a defined geographic area will be trigger for action. This will be provided by IDSPs early warning and response (EWAR) system. Routine laboratory based surveillance of SARI cases is another trigger for action.

# **6.3.** Deployment of Rapid Response Teams (RRT)

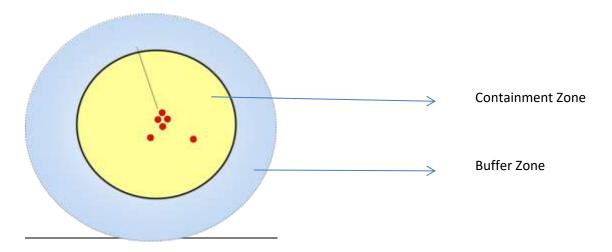
Emergency Medical Relief (EMR) division, Ministry of Health and Family Welfare will deploy the Central Rapid Response Team (RRT) to support and advice the State. The State will deploy its own State RRT and District RRT.

#### 6.4. Identify area under geographic quarantine

**6.4.1** A large outbreak is defined as localized increase in the incidence of a COVID-19 cases occurring within a defined geographic area e.g., in a village, town, or city. This could also imply progression of a small cluster, earlier noticed for which cluster management action is under implementation, into multiple clusters.

6.4.2. Defining containment and buffer zones: The area under geographic quarantine will be defined. There shall be (i) containment zone, surrounded by (ii) buffer zone.

Boundary for geographic quarantine will be defined based on : (i) geospatial distribution of each cluster contained within, (ii) largest administrative unit containing all clusters occurring within a state (with a minimum of 1 district), (iii) feasibility to implement strict interruption of movement of people, (iv) joint assessment by State and Central RRTs.



#### 6.4.3. Buffer Zone

The adjoining blocks of the affected district or rural districts of the affected city will be considered as the buffer zone.

#### 6.4.4 Perimeter

Perimeter of the geographically quarantined will be decided by the State administration based on criteria defined in Para 6.4.1. Clear entry and exit points will be established. The perimeter controls that need to be applied is in para 7.4.

#### 7. Surveillance

- 7.1. Surveillance in containment zone, including contact listing, tracking and follow up shall be carried out as detailed in Cluster Containment Plan. Contact tracing shall be as per IDSP guidelines on the same.
- 7.2 Precise mapping of the outbreak shall be carried out.
- 7.3. Passive Surveillance shall be enhanced all throughout the area under geographic quarantine and districts surrounding it for ILI and SARI cases. All hospitalized patients with Severe Acute Respiratory Illness shall also be tested for COVID-19.

#### 7.4. Perimeter Control

The perimeter control will ensure that there is no unchecked outward movement of population from the containment zone except for maintaining essential services (including medical emergencies) and government business continuity. Thermal screening, IEC shall be carried out at all entry and exit points.

All vehicular movement, movement of public transport and personnel movement will be stopped. All roads including rural roads connecting the containment zone will be guarded by Police. For personnel and vehicles requiring regular movement, a pass/ID card may be issued with details recorded and communicated.

The District administration will post signs and create awareness informing public about the perimeter control. Health workers posted at the exit point will perform screening (e.g. interview travelers, measure temperature, record the place and duration of intended visit and keep complete record of intended place of stay).

Details of all persons moving out of perimeter zone for essential/ emergency services will be recorded and they will be followed up through IDSP. Those entering such geographically quarantined areas shall be given a chemo-prophylactic dose of hydroxy-chloroquine. All vehicles moving out of the perimeter control will be decontaminated with sodium hypochlorite (1%) solution.

#### 8. Laboratory support

# 8.1 Designated laboratories

The identified VRDL network laboratories and designated private laboratories nearest to the affected area, will be further strengthened to test samples. The other available govt. laboratories and private laboratories (BSL 2 following BSL 3 precautions) shall also be engaged to collect/ test samples, after ensuring quality assurance by ICMR/VRDL network. If the number of samples exceeds its surge capacity, samples will be shipped to other nearby laboratories or to NCDC, Delhi or NIV, Pune or to other ICMR lab networks depending upon geographic proximity.

All test results should be available within 12-24 hours of sampling. ICMR along with the State Government will ensure that there are designated agencies for sample transportation to identified laboratories. The contact number of such courier agencies shall be a part of the micro-plan.

The designated laboratory will provide daily update (daily and cumulative) to District, State and Central Control Rooms on:

- i. No. of samples received
- ii. No. of samples tested
- iii. No. of samples under testing
- iv. No. of positive samples

#### 8.2 Testing criteria

Laboratory/s will undertake testing of: (i) All symptomatic individuals who have undertaken international travel in the last 14 days (ii) All symptomatic contacts of laboratory confirmed cases, (iii) All symptomatic health care workers, (iv) All hospitalized patients with SARI and (v) Asymptomatic direct and high-risk contacts of a confirmed case should be tested once between day 5 and day 14 of coming in his/her contact.

The testing will continue till 14 days from the date the last confirmed case is declared negative by laboratory test.

# 9. Hospital care

All suspect/confirmed COVID-19 cases will be hospitalized and kept in isolation in dedicated COVID-19 hospitals/hospital blocks. Persons testing positive for COVID-19 will remain hospitalized till such time as two of their samples are tested negative as per discharge policy. About 15% of the patients are likely to require hospitalization, and an additional 5 % will requires ventilator management.

A three tier arrangement for managing suspect/ confirmed cases will be implemented to decrease burden on the COVID Block/ hospital.

- (i) The mild cases will be kept in temporary makeshift hospital facilities by converting hotels/ hostel/ guest houses/ stadiums near a COVID-19 hospital. The existing quarantine facility may also be converted. This will be identified near an existing COVID hospital/ COVID block.
- (ii) Dedicated COVID-19 hospitals/dedicated blocks in large hospitals will be identified and operationalized. Moderate to severe cases, who require monitoring of their clinical status (patients with radiological evidence of pneumonia) will be admitted to COVID hospital.
- (iii) Some of the severe cases may progress respiratory failure and /or progress to multi-organ failure and hence critical care facility/ dialysis facility/ and Salvage therapy [Extra Corporeal Membrane Oxygenator (ECMO)] facility for managing the respiratory/renal complications/ multi-organ failure shall be required. If such facilities are not available in the containment zone, nearest tertiary care facility in

Government / private sector needs to be identified, that becomes a part of the micro-plan.

In every hospital fever clinics with triage, holding areas, sampling stations and individual doctor's chambers where patients with fever/cough/breathing difficulty will be attended will be established.

#### 9.1 Surge capacity

Based on the risk assessment, if the situation so warrants (if data suggests an exponential rise in the number of cases), the surge capacity of the identified hospitals will be enhanced, private hospitals will be roped in and sites identified for temporary hospitals will be operationalized.

Surge capacity will also need enhancement in terms of laboratory testing capacity as detailed in para 8.1 above.

# 9.2 Pre-hospital care (ambulance facility)

Ambulances need to be in place for transportation of suspect/confirmed cases. Such ambulances shall be manned by personnel adequately trained in Infection Prevention and Control (IPC), use of PPE and protocol that needs to be followed for disinfection of ambulances (by 1% sodium hypochlorite solution using knapsack sprayers).

For any further guidance Standard Operating Procedure (SOP) for transporting a suspect/confirmed case of COVID-19 may be referred to (Available at: https://www.mohfw.gov.in/pdf/StandardOperatingProcedureSOPfortransportingasuspectorco nfirmedcaseofCOVID19.pdf)

#### 9.3 Infection Prevention Control Practices

Health care associated infections among attending healthcare personnel are well documented in the current COVID-19 outbreak. There shall be strict adherence to Infection prevention control (IPC) practices in all health facilities. IPC committees would be formed (if not already in place. The designated hospitals will ensure that all healthcare staff is trained in washing of hands, respiratory etiquettes, donning/doffing & proper disposal of PPEs and biomedical waste management.

At all times doctors, nurses and para-medics working in the clinical areas will wear three layered surgical mask and gloves. The medical personnel working in isolation and critical

care facilities where aerozolisation is anticipated, will wear full complement of PPE (including N95 masks).

The support staff engaged in cleaning and disinfection will also wear full complement of PPE. Environmental cleaning should be done twice daily and consist of damp dusting and floor mopping with Lysol or other phenolic disinfectants and cleaning of commonly touched surfaces with sodium hypochlorite solution.

Detailed guidelines available MoHFW's website on (i) Infection prevention and control in healthcare facilities, (ii) Rational use of Personal Protective Equipment, may be referred to.

All healthcare workers must be advised to self-monitor their health and report any breach in IPC practices or occurrence of any illness.

# 10. Clinical management

# 10.1. Clinical Management

The hospitalized cases may require symptomatic treatment for fever. Paracetamol is the drug of choice. Suspect cases with co-morbid conditions, if any, will require appropriate management of co-morbid conditions.

For patients with Severe Acute Respiratory Illness (SARI), having respiratory distress may require, pulse oxymetry, oxygen therapy, non-invasive and invasive ventilator therapy. Detailed guidelines available on MoHFW's website and updated from time to time, may be followed.

Doctors managing severe COVID cases may contact AIIMS, Delhi (helpline - 9971876591) or through tele-medicine network to seek guidance for management of severe cases.

#### 10.2. Discharge Policy

Discharge policy for suspected cases of COVID-19 tested negative will be based on the clinical assessment of the treating physician. For those tested positive for COVID-19, their discharge from hospital will be based on consecutive two samples tested negative and the patient is free from symptoms.

# 11. Psychosocial support

Quarantine, isolation and being affected by a new disease, all can be very stressful for those involved and for their family members. Social distancing measures that force one to stay at home and resulting social isolation can be frustrating. This apart, the healthcare workers

working under the fear of an unknown disease, under stressful and demanding situations, impact their mental well-being. A guidance note on dealing with various mental issues is available at:

https://www.mohfw.gov.in/pdf/MindingourmindsduringCoronaeditedat.pdf.

The National Institute of Mental Health and Neuro Sciences (NIMHANS) will be the nodal agency to plan and execute psycho-social support. NIHMANS will prepare a Psycho-Social Support plan and implement the same in the COVID affected areas.

#### 12. Pharmaceutical interventions

As of now there is no approved specific drug or vaccine for cure or prevention of COVID-19.

However Hydroxychloroquine has been recommended as chemoprophylaxis drug for use by asymptomatic healthcare workers managing COVID-19 cases and asymptomatic contacts of confirmed COVID-19 cases (advisory issued by ICMR in this regard is available at: https://www.mohfw.gov.in/pdf/AdvisoryontheuseofHydroxychloroquinasprophylaxisforSAR SCoV2infection.pdf).

In addition a combination of Hydroxychloroquine and Azithromycin has been advocated for use in severe cases of COVID-19 under medical supervision. (Guideline on clinical management protocol of COVID-19 is available at: https://www.mohfw.gov.in/pdf/RevisedNationalClinicalManagementGuidelineforCOVID193 1032020.pdf)

Contacts and healthcare workers receiving Hydroxycholoroquine as chemoprohylaxis will be informed to report any untoward health event to nearest health facility.

#### 13. Non-Pharmaceutical interventions

In the absence of proven drug or vaccine, non-pharmaceutical interventions will be the main stay for containment of COVID-19 cluster.

#### 13.1. Preventive public health measures

There will be intensive social mobilization among the population in geographic quarantine zone for adoption of community-wide practice of frequent washing of hands and respiratory etiquettes. The community will also be encouraged to self-monitor their health and report to the ASHA/Anganwadi worker visiting home or to nearest health facility.

#### 13.2. Quarantine and isolation

Quarantine and Isolation are important mainstay of cluster containment. These measures help by breaking the chain of transmission in the community.

#### 13.2.1. Quarantine

Quarantine refers to separation of individuals who are not yet ill but have been exposed to COVID-19 and therefore have a potential to become ill. There will be home quarantine/facility quarantine of contacts of suspect/confirmed cases. The guideline on home quarantine available on the website of the Ministry provides detailed guidance on home quarantine.

The contacts advised quarantine will undergo risk profiling. Those above 60 or with comorbidities will be shifted to designated quarantine facility. This will help identify early development of symptoms among them, their testing and shifting to isolation facility under para 9.

#### 13.2.2. Isolation

Isolation refers to separation of individuals who are ill and suspected or confirmed of COVID-19. There are various modalities of isolating a patient. Ideally, patients can be isolated in individual isolation rooms or negative pressure rooms with 12 or more air-changes per hour.

In resource constrained settings, all positive COVID-19 cases can be cohorted in a ward with good ventilation. Similarly, all suspect cases should also be cohorted in a separate ward. However, under no circumstances these cases should be mixed up. The COVID hospital/COVID block in an identified hospital or the make shift temporary hospitals mentioned under para 9 will all have separate facilities to keep suspect and confirmed cases.

A minimum distance of 1 meter needs to be maintained between adjacent beds. All such patients need to wear a triple layer surgical mask at all times.

#### 13.3 Social distancing measures

For the cluster containment, social distancing measures are key interventions to rapidly curtail the community transmission of COVID-19 by limiting interaction between infected persons and susceptible hosts. The following measures would be taken:

### 13.3.1 Closure of schools, colleges and work places

Administrative orders will be issued to close schools, colleges and work places in containment and buffer zones. Intensive risk communication campaign will be followed to encourage all persons to stay indoors for an initial period of 28 days, to be extended based on the risk assessment. Based on the risk assessment and indication of successful containment operations, an approach of staggered work and market hours may be put into practice.

#### 13.3.2 Cancellation of mass gatherings

All mass gathering events and meetings in public or private places, in the containment and buffer zones shall be cancelled / banned till such time as the area is declared to be free of COVID-19 or the outbreak has increased to such scales to warrant mitigation measures instead of containment.

#### 13.3.3. Advisory to avoid public places

The public in the containment and buffer zones will be advised to avoid public places and only, if necessary, for attending to essential services. The administration will ensure supply of enough triple layer masks to the households in the containment and buffer zones to be distributed through visiting surveillance teams.

# 13.3.4. Cancellation of public transport (bus/rail)

There will be prohibition for persons entering the geographic quarantine and on persons exiting the geographic quarantine zone. To facilitate this, if there are major bus transit hubs or railway stations in the containment zone, the same would be made dysfunctional temporarily. Additionally, irrespective of the fact that there is a rail/road transit hub, the perimeter control will take care of prohibiting people exiting the containment zone including those using private vehicles and taxies.

As a significant inconvenience is caused to the public by adopting these measures in the containment zone, State government would proactively engage the community and work with them to make them understand the benefits of such measures.

# 13.3.5. Enforcement of Geographic quarantine.

The perimeter control and movement of vehicles within the containment zone will be prohibited except for those (identified through special passes) earmarked for providing essential services. Police check-posts at prominent locations will check vehicles and give necessary guidance by police. Those found defaulting of Government orders will be prosecuted.

#### 14. Material Logistics

#### 14.1. Personal Protective Equipment

The type of personal protective equipment for different categories of:

S. No.	Name of the	Category of personnel
	item	
1	PPE Kit, N 95, Mask,	• Doctors and nurses attending to patients in isolation, ICU/
		critical care facilities of hospitals in the containment zone.
	Gloves,	Para-medical staff in the back cabin of ambulance performing
	Goggles, cap	interventional lifesaving maneuvers.
	and shoe	Those working in laboratories or collecting sample
	cover)	
2	N-95 Mask	Supervisory doctors verifying a suspect case
	and gloves	Doctors/nurses attending patients in Screening fever clinics/
		respiratory clinics / primary health care facilities
3	Triple Layer	To be used by Field workers doing surveillance work
	Surgical mask	Staff providing essential services.
		Suspect cases and care giver / by stander of the suspect case
		Security staff.
		Ambulance drivers

The State Government has to ensure adequate stock of Personal Protective Equipment (PPE). The quantity required for a containment operation will depend upon the size and extent of the cluster and the time required for containing it. States will also ensure that the PPE are being used in accordance with the guidelines on rational use of PPE.

# 14.2. Transportation

A large number of vehicles will be required for mobilizing the surveillance and supervisory teams. The vehicles will be pooled from Government departments. The shortfall, if any, will be met by hiring of vehicles.

# 14.3. Stay arrangements for the field staff

The field staff brought in for the surveillance activities and that for providing perimeter control need to be accommodated within the containment zone. Facilities such as schools, community buildings, etc. will be identified for sheltering. Catering arrangement will have to be made at these locations.

#### 14.4 Bio-medical waste management

A large quantity of bio-medical waste is expected to be generated from containment zone. Arrangement would also be required for such bio-medical waste (discarded PPEs, etc.), preferably by utilizing the bio-medical waste management services at the designated hospital.

#### 15. Risk communication

#### 15.1 Risk communication material

Risk communication materials [comprising: (i) posters and pamphlets (ii) audio only material (iii) AV films (prepared by PIB/MoHFW)] will be prepared and kept ready for targeted roll out in the entire geographic quarantine zone.

#### 15.2 Communication channels

### 15.2.1 Interpersonal communication

During house to house surveillance, ASHAs/ other community health workers will interact with the community for: (i) reporting symptomatic cases (ii) contact tracing (iii) information on preventive public health measures.

#### 15.2.2 Mass communication

Awareness will be created among the community through miking, distribution of pamphlets, mass SMS and social media. Also use of radio and television (using local channels) will ensure penetration of health messages in the target community.

#### 15.2.3 Dedicated helpline

A dedicated helpline number will be provided at the Control Room (District Headquarter) and its number will be widely circulated for providing general population with information on risks of COVID-19 transmission, the preventive measures required and the need for prompt reporting to health facilities, availability of essential services and administrative orders on perimeter control.

# 15.2.4 Media Management

At the Central level, only Secretary (H) or representative nominated by her shall address the media. At the State level, only Principal Secretary (H), his/her nominee will speak to the media. At the District level DM/DC will address the media.

There will be regular press briefings/ press releases to keep media updated on the developments and avoid stigmatization of affected communities. Every effort shall be made to address and dispel any misinformation circulating in media including social media.

#### 16. Information Management

# 16.1 Control room at State & District Headquarters

A Control Room (if not already in place) shall be set up at State and District headquarters. This shall be manned by State and District Surveillance Officer (respectively) under which data managers (deployed from IDSP/ NHM) responsible for collecting, collating and analyzing data from field and health facilities. Daily situation reports will be put up.

The state will provide aggregate data on daily basis on the following (for the day and cumulative):

- i. Total number of suspect cases
- ii. Total number of confirmed cases
- iii. Total number of critical cases on ventilator
- iv. Total number of deaths
- v. Total number of contacts under surveillance

#### 16.2 Control Room in the geographic quarantine zone

A Control Room shall be set up inside the geographic quarantine zone to facilitate collection, collation and dissemination of data from various field units to District and State Control Rooms. This shall be manned by an epidemiologist under which data managers (deployed from IDSP/ NHM) will be responsible for collecting, collating and analyzing data from field and health facilities.

This Control Room will provide daily input to the District Control Room for preparation of daily situation report.

#### 16.3 Alerting the neighboring Districts/States

The Control Room at State Government Headquarters will alert all neighboring Districts. There shall be enhanced surveillance in all such Districts for detection of clustering of symptomatic illness. Awareness will be created in the community for them to report symptomatic cases/contacts.

Also suitable provisions shall be created for enhancing horizontal communication between adjacent districts, especially for contact tracing exercise and follow up of persons exiting the containment zone.

#### 17. Capacity building

It is expected that in such circumstances, large human resource requirement will be there to manage: (i) Field activities including surveillance, (ii) Clinical care at hospitals, (iii) laboratory testing and (iv) support staff to provide support services.

#### 17.1 Training content

Trainings will be designed to suit requirement of each and every section of healthcare worker involved in the containment operations. These trainings for different target groups shall cover:

- 1. Field surveillance, contact tracing, data management and reporting
- 2. Surveillance at designated exit points from the containment zone
- 3. Sampling, packaging and shipment of specimen
- 4. Hospital infection prevention and control including use of appropriate PPEs and biomedical waste management
- 5. Clinical care of suspect and confirmed cases including ventilator management, critical care management
- 6. Risk communication to general community and health service providers

# 17.2 Target trainee population

Various sections of healthcare workforce (including specialist doctors, medical officers, nurses, ANMs, Block Extension Educators, MHWs, ASHAs) and workforce from non-health sector (security personnel, Anganwadi Workers, support staff etc.). Trainings will be tailored to requirements of each of these sections.

Prepare Training plan and calendar for undertaking training of non-health workers (including trainee ANM), volunteers from Red Cross, Civil Defence, NCC, NSS, Nehru Yuvak Kendra volunteers, Panchayati Raj functionaries (rozgar sewaks) on community surveillance (self-protection, brief questionnaire interview and reporting to supervisors).

Train all available clinical resources (respiratory physicians, anaesthetists, intensivists, MBBS doctors who have handled ventilators, including DNB and MD students) on clinical and ventilatory management.

The training resources available at IGOT platform of GoI may be utilized.

The training will be conducted by the RRT a day prior to containment operations are initiated.

#### 17.3 Replication of training in other Districts

The State Govt. will ensure that unaffected Districts are also trained along the same lines so as to strengthen the core capacities of their RRTs, doctors, nurses, support staff and non-

health field formations. These trainings should be accompanied with functional training exercises like mock-drills.

# 18. Financing of containment operations

The fund requirement would be estimated taking into account the scale of operations and funds will be made available to the district collector from NHM flexi-fund. The SDRF funds can also be used as per notification issued by Ministry of Home Affairs.

# 19. Scaling down of operations

The operations will be scaled down if no secondary laboratory confirmed COVID-19 case is reported from the geographic quarantine zone for at least four weeks after the last confirmed test has been isolated and all his contacts have been followed up for 28 days. The containment operation shall be deemed to be over 28 days from the discharge of last confirmed case (following negative tests as per discharge policy) from the designated health facility i.e. when the follow up of hospital contacts will be complete.

The closing of the surveillance for the clusters could be independent of one another provided there is no geographic continuity between clusters. However the surveillance will continue for ILI/SARI.

However, if the containment plan is not able to contain the outbreak and large numbers of cases start appearing, then a decision will need to be taken by State administration to abandon the containment plan and start on mitigation activities.

### Ministry of Health & Family Welfare Directorate General of Health Services EMR Division

#### Guidance document on appropriate management of suspect/confirmed cases of COVID-19

**1. Introduction**: Since its first detection in China, Coronavirus Disease 2019 (COVID-19) has now spread to over 210 countries/territories, with reports of local transmission happening across the world. As per WHO (as of 7<sup>th</sup> April, 2020), there has been a total of 12,14,466 confirmed cases and 67,767 deaths due to COVID-19 worldwide.

In India, as on 7<sup>th</sup> April, 2020, 4421 confirmed cases and 114 deaths reported from 31States/UTs.

#### 2. Purpose of this document

A series of measures have been taken by both the Central and State Governments to break the chain of transmission. One among these is to isolate all suspect and confirmed cases of COVID-19. However, as the number of cases increases, it would be important to appropriately prepare the health systems and use the existing resources judicially. Available data in India suggests that nearly 70% of cases affected with COVID-19 either exhibit mild or very mild symptoms. Such cases may not require admission to COVID-19 blocks/ dedicated COVID-19 hospitals.

It is important to put in place mechanisms for triaging and decisions making for identification of the appropriate COVID dedicated facility for providing care to COVID-19 patients. The purpose of this document is to put in place such SOPs to ensure optimal utilization of available resources and thereby providing appropriate care to all the COVID-19 patients. This will ensure that available hospital beds capacity is used only for moderate to severe cases of COVID-19. The SOPs specified hereafter also specify the different types of facilities to be set up for various categories of Covid-19 cases.

#### **Guiding principles**

All the selected facilities must be dedicated for COVID management. Three types of COVID dedicated facilities are proposed in this document. All 3 types of COVID Dedicated facilities will have separate ear marked areas for suspect and confirmed cases. Suspect and confirmed cases should not be allowed to mix under any circumstances.

All suspect cases (irrespective of severity of their disease) will be tested for COVID-19. Further management of these cases will depend on their (i) clinical status and (ii) result of COVID-19 testing.

All three types of facilities will be linked to the Surveillance team (IDSP)

All these facilities will follow strict infection prevention and control practices

**3. Types of COVID Dedicated Facilities**: There are three types of COVID Dedicated Facilities –

#### (1) COVID Care Center (CCC):

- 1.1. The COVID Care Centers shall offer care only for cases that have been clinically assigned as mild or very mild cases or COVID suspect cases.
- 1.2. The COVID Care Centers are makeshift facilities. These may be set up in hostels, hotels, schools, stadiums, lodges etc., both public and private. If need be, existing quarantine facilities could also be converted into COVID Care Centers. Functional hospitals like CHCs, etc, which may be handling regular, non-COVID cases should be designated as COVID Care Centers as a last resort. This is important as essential non COVID Medical services like those for pregnant women, newborns etc, are to be maintained.
- 1.3. Wherever a COVID Care Center is designated for admitting both the confirmed and the suspected cases, these facilities must have separate areas for suspected and confirmed cases with preferably separate entry and exit. Suspect and confirmed cases must not be allowed to mix under any circumstances.
- 1.4. As far as possible, wherever suspect cases are admitted in the COVID Care Center, preferably individual rooms should be assigned for such cases.
- 1.5. Every Dedicated COVID Care Centre must necessarily be mapped to one or more Dedicated COVID Health Centres and at least one Dedicated COVID Hospital for referral purpose (details

- given below).
- 1.6. Every Dedicated COVID Care Centre must also have a dedicated Basic Life Support Ambulance (BLSA) equipped with sufficient oxygen support on 24x7 basis, for ensuring safe transport of a case to Dedicated higher facilities if the symptoms progress from mild to moderate or severe.
- 1.7. The human resource to man these Care Centre facilities may also be drawn from AYUSH doctors. Training protocols developed by AIIMS is uploaded on MoHFW website. Ministry of AYUSH has also carried out training sessions. The State AYUSH Secretary/ Director should be involved in this deployment. State wise details of trained AYUSH doctors has been shared with the States. Their work can be guided by an Allopathic doctor.

#### (2) Dedicated COVID Health Centre (DCHC):

- 2.1. The Dedicated COVID Health Centre are hospitals that shall offer care for all cases that have been clinically assigned as moderate.
- 2.2. These should either be a full hospital or a separate block in a hospital with preferably separate entry\exit/zoning.
- 2.3. Private hospitals may also be designated as COVID Dedicated Health Centres.
- 2.4. Wherever a Dedicated COVID Health Center is designated for admitting both the confirmed and the suspect cases with moderate symptoms, these hospitals must have separate areas for suspect and confirmed cases. Suspect and confirmed cases must not be allowed to mix under any circumstances.
- 2.5. These hospitals would have beds with assured Oxygen support.
- 2.6. Every Dedicated COVID Health Centre must necessarily be mapped to one or more Dedicated COVID Hospitals.
- 2.7. Every DCHC must also have a dedicated Basic Life Support Ambulance (BLSA) equipped with sufficient oxygen support for ensuring safe transport of a case to a Dedicated COVID Hospital if the symptoms progress from moderate to severe.

#### (3) Dedicated COVID Hospital (DCH):

- 3.1. The Dedicated COVID Hospitals are hospitals that shall offer comprehensive care primarily for those who have been **clinically assigned as severe**.
- 3.2. The Dedicated COVID Hospitals should either be a full hospital or a separate block in a hospital with preferably separate entry\exit.

- 3.3. Private hospitals may also be designated as COVID Dedicated Hospitals.
- 3.4. These hospitals would have fully equipped ICUs, Ventilators and beds with assured Oxygen support.
- 3.5. These hospitals will have separate areas for suspect and confirmed cases. Suspect and confirmed cases should not be allowed to mix under any circumstances.
- 3.6. The Dedicated COVID Hospitals would also be referral centers for the Dedicated COVID Health Centers and the COVID Care Centers.

All these facilities will follow strict infection prevention and control practices.

#### 4. Management of COVID cases

#### 4.1. Assessment of patients:

In addition to patients arriving directly through helpline/ referral to above categories of COVID dedicated facilities, in field settings during containment operations, the supervisory medical officer to assess for severity of the case detected and refer to appropriate facility.

States\UTs may identify hospitals with dedicated and separate space and set up Fever Clinics in such hospitals. The Fever Clinics may also be set up in CHCs, in rural areas subject to availability of sufficient space to minimize the risk of cross infections. In urban areas, the civil\general hospitals, Urban CHCs and Municipal Hospitals may also be designated as Fever Clinics. These could be set up preferably near the main entrance for triage and referral to appropriate COVID Dedicated Facility. Wherever space allows, a temporary make shift arrangement outside the facility may be arranged for this triaging.

The medical officer at the fever clinics could identify suspect cases and refer to COVID Care Centre, Dedicated COVID Health Centre or Dedicated COVID Hospital, depending on the clinical severity.

#### 4.2 Categorization of patients

Patients may be categorized into three groups and managed in the respective COVID hospitals

- Dedicated COVID Care Centre, dedicated COVID Health Centre and dedicated COVID

#### Hospitals.

- **Group 1:** Suspect and confirmed cases clinically assigned as mild and very mild
- **Group 2:** Suspect and confirmed cases clinically assigned as moderate
- **Group 3:** Suspect and confirmed cases clinically assigned as severe

# Group 1: Suspect and confirmed cases clinically assigned as mild and very mild (COVID Care Centres)

- ➤ Clinical criteria: Cases presenting with fever and/or upper respiratory tract illness (Influenza Like Illness, ILI).
- ➤ These patients will be accommodated in COVID Care Centers.
- ➤ The patients would be tested for COVID-19 and till such time their results are available they will remain in the "suspect cases" section of the COVID Care Center preferably in an individual room.
- ➤ Those who test positive, will be moved into the "confirmed cases" section of the COVID Care Center.
- ➤ If test results are negative, patient will be given symptomatic treatment and be discharged with advice to follow prescribed medications and preventive health measures as per prescribed protocols.
- ➤ If any patient admitted to the COVID Care Center qualifies the clinical criteria for moderate or severe case, such patient will be shifted to a Dedicated COVID Health Centre or a Dedicated COVID Hospital.
- Apart from medical care the other essential services like food, sanitation, counseling etc. at the COVID Care Centers will be provided by local administration. Guidelines for quarantine facilities (available on MoHFW website) may be used for this purpose.

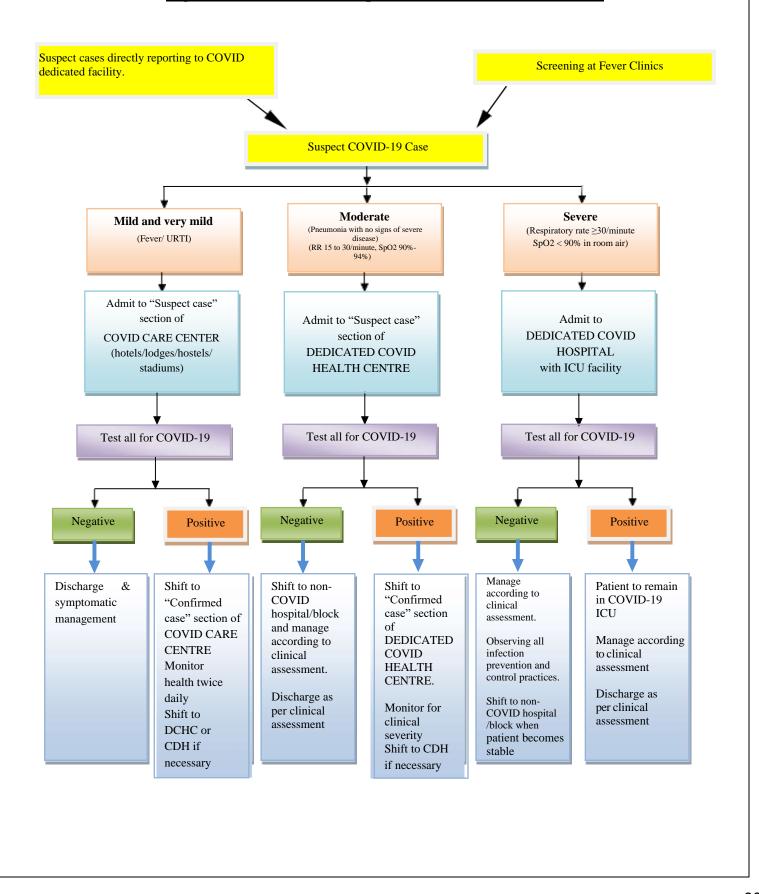
# Group 2: Suspect and confirmed cases clinically assigned as moderate (Dedicated COVID Health Centres)

- ➤ Clinical criteria: Pneumonia with no signs of severe disease (Respiratory Rate 15 to 30/minute, SpO2 90%-94%).
- ➤ Such cases will not be referred to COVID Care Centers but instead will be admitted to Dedicated COVID Health centres.
- ➤ It will be manned by allopathic doctors and cases will be monitored on above mentioned clinical parameters for assessing severity as per treatment protocol (available on MoHFW website).
- They will be kept in "suspect cases" section of Dedicated COVID Health Centres, till such time as their results are not available preferably in an individual room.
- ➤ Those testing positive shall be shifted to "confirmed cases" section of Dedicated COVID Health Centre.
- Any patient, for whom the test results are negative, will be shifted to a non-COVID hospital and will be managed according to clinical assessment. Discharge as per clinical assessment.
- ➤ If any patient admitted to the Dedicated COVID Health Center qualifies the clinical criteria for severe case, such patient will be shifted to a Dedicated COVID Hospital.

#### Group 3: Suspect and confirmed cases clinically assigned as severe (Dedicated COVID Hospital)

- ➤ Clinical criteria: Severe Pneumonia (with respiratory rate ≥30/minute and/or SpO2 < 90% in room air) or ARDS or Septic shock
- > Such cases will be directly admitted to a Dedicated COVID Hospital's ICU till such time as test results are obtained.
- ➤ If test results are positive, such patient will remain in COVID-19 ICU and receive treatment as per standard treatment protocol. Patients testing negative will be managed with adequate infection prevention and control practices.

#### Algorithm for isolation of suspect/confirmed cases of COVID-19



# SOP (Standard Operating Procedures) for investigation of a suspected COVID- 19 case using Case Investigation Form (CIF)

Case investigation is crucial for the disease confirmation and to identify the magnitude of public health response. All suspected COVID-19 cases notified as per the case definition should be investigated by a clinician/medical officer within 24 hours of case-notification using the standardized Case Investigation Form, if it comes under the following case definitions.

#### **COVID-19 Case Definitions**

#### **Suspect Case:**

A patient with acute respiratory illness (fever and at least one sign/ symptom of respiratory disease (e.g., cough, shortness of breath) AND a history of travel to or residence in a country/area or territory reporting local transmission (See NCDC website for updated list) of COVID-19 disease during the 14 days prior to symptom onset;

OR A patient / health care worker with any acute respiratory illness AND having been in contact with a confirmed COVID-19 case in the last 14 days prior to onset of symptoms;

OR A patient with severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath) AND requiring hospitalization AND with no other aetiology that fully explains the clinical presentation;

OR A case for whom testing for COVID-19 is inconclusive

**Laboratory Confirmed case**: A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

The detailed information of the suspected case along with core variables should be captured in both pages of the CIF by the investigating officer.

#### **Key components for filling up the Case Investigation Form:**

- Fill-up the "Case Investigation Form" (CIF) on both pages during examination
- Allot EPID no, a unique identifier for every suspected case that is investigated
  - Eg. COV-IND-ST-DIS-YR-Case number
  - First 3 character signifies disease, next 3 characters for country code, next 2 for state code, next 3 for district code, next 2 for year of disease onset and next 4 is the serial no. of the case in that year in the same district

Ex: First case of Patna Bihar: COV-IND-BI-PAT-20-0001

DSO should assign this EPID no for every investigated case on CIF.

COVID-19 CIF SOP Page 1 of 3

- Any error in the Epid No. may misclassify the cases
- A. Complete case identification details including name, age, sex, details of isolation facility, case classification and status
- B. Collect socio demographic details of case like father's name, address and contact details
- C. Take clinical history and examine the suspected COVID-19 case for signs and symptoms
  - **Date of onset of symptom** is the most important date which should be strictly assessed along with nature of initial symptom (for eg. bodyache/fever/cough/breathlessness/sore throat etc.)
  - Fill-up the health facility contacts after date of onset of symptom. These are the hospitals/ clinic, case has taken consultation/treatment before getting reported, which will further help to identify the need to build the capacity
  - Capture the signs, symptoms at time of admission
  - Capture the underlying medical conditions

#### D. Exposure history:

- Take significant exposure history of suspected case, to identify the person/area/country from where case picked up infection
- Explore further contact setting if there is exposure to lab confirmed COVID-19 case including exposure while taking samples, during travel/clinical care of case/living in same household/providing services to the same household
- Seek history about occurrence of cluster of patients with severe acute respiratory illness or COVID-19 at his place of residence/work/neighbourhood
- Explore exposure to mass gathering in past one month before the onset of symptom

#### E. Travel history:

- Take epidemiologically significant travel history of suspected case for travel outside and within India for past one month before the onset of symptom
- Patient travel history can be taken in chronologic order starting from one month back from onset of symptoms

#### F. Laboratory Information:

- The clinician should decide necessity for collection of clinical specimens for laboratory testing of cases only after following the case definition as given by the health authorities, Government of India.
- Appropriate clinical sample need to be collected by laboratory personnel/ health care worker trained in specimen collection by following all biosafety precautions and using personal protective equipment (PPEs)
- Clinical samples need to be sent to the designated laboratory by following standard triple packaging

COVID-19 CIF SOP Page 2 of 3

- Collect the information on the sample collected including type of sample, name of sample collection centre, date of sample collection, sample shipment to laboratory and results
- Identify and mention the reason for not collecting samples

#### G. Patients Symptoms:

Collect hospitalisation history including onset of any complications

#### H. Public Health Response:

- Identify high and low risk contacts
- High-risk contact includes:
  - Lives in the same household as the confirmed case.
  - Touched body fluids of the confirmed case (respiratory tract secretions, blood, vomit, saliva, urine, faeces)
  - Had direct physical contact with the body of the confirmed case including physical examination without PPE.
  - Touched or cleaned the linens, clothes, or dishes of the confirmed case.
  - Anyone in close proximity (within 1 m) of the confirmed case without precautions.
  - Passenger in close proximity (within 1 m) of a conveyance with a symptomatic person who later tested positive for COVID-19 for more than 6 hours.
- Low-risk contact include:
  - Shared the same space (same class for school/worked in same room/similar) and not having a high-risk exposure to confirmed case of COVID-19.
  - Travelled in same environment (bus/train/flight/any mode of transit) but not having a high-risk exposure.
- Collect the information on number of high risk contacts traced, numbers quarantined, numbers of these high-risk contacts tested and subsequently turning out positive for COVID-19
- Collect the information on low risk contacts traced and number of such contacts turning symptomatic and tested for COVID-19.

Important: Keep the CIF updated with all information including health facilities visited, laboratory results and public health response

COVID-19 CIF SOP Page 3 of 3

## **Model Micro-Plan**

## Micro Plan for Containing Local Transmission of Coronavirus Disease (COVID-19)

Epicentre	
Block,	District,
(	State

#### Micro-plan for Containing Local Outbreak of COVID-19

Geographic Location: ------ Municipality, ------ Block, ------ District, ------ State

1. Objective of the micro-plan

To contain the outbreak of COVID-19 in defined geographic area

2. Demographic details (for each district coming under containment and buffer zones separately, as defined in Section 3)

District details

District area:

**District Population:** 

No of Blocks:

No of Municipalities:

**Block Details** 

Name of Block:

Population:

Number of Villages:

#### 3. Mapping the affected area

The containment zone will be decided by the RRT based on the extent of cases/contacts listed and mapped by them. However if contact listing/ mapping is taking time (>12-24 hours), then on arbitrary basis demarcate an area of 3 Kms radius around the epicenter (the residence of the positive case). This area of 3 km radius will be the containment zone. If required, based on the mapping of contacts and cases, the containment zone will be refined.

A buffer zone of an additional 5 Kms radius (7 Kms in rural areas)/administrative boundary of including neighboring districts/per-urban zone shall also be identified, as detailed in the cluster containment plan.

3.1 Affected area (Containment Zone – As per Cluster Containment Plan)

Name of the epicentre: Municipality ward/village:

Number of affected Municipalities /villages:

Number of Villages/ Wards in Containment Zone:

Number of houses in containment zone:

Population in Containment Zone:

#### 3.2 Buffer Zone – As per Cluster Containment Plan

Number of Municipalities /villages: Number of Villages/ Wards in Buffer Zone: Number of houses in Buffer zone Population in Buffer Zone:

3.3 The containment zone will be divided into sectors with 50 houses each (30 houses in difficult areas). The sectors will facilitate all activities for containment as described in the ensuing sections/ paragraphs.

## Every confirmed case has to be considered as an epicenter and micro-plan activities will be done as described above.

Divide the area into sectors. List them with name (of village) and identified nodal officer.

#### Listing of Sectors

Sector	Name of Sector	Nodal Officer	Contact number
A			
В			
С			
D			

#### 4. Human Resource

#### 4.1. Administrative and Technical Personnel

The District Collector/District Magistrate will be Nodal person for cluster containment in their respective districts.

S. No	Name	Designation	Contact	Mobile
			Number (O)	
1		DM/District Collector		
2		ADM		
3		CDMO		
4		BDO		
5		Block MO		
6		Block AHO		
7		BEE		
8		NHM Block Manager		

#### State RRT

S. No.	Name	Designation	Contact	Mobile
			Number (O)	
1				
2				
3				

#### **District RRT**

S. No.	Name	Designation	Contact Number (O)	Mobile
1				
2				
3				

#### 4.2. Human Resource for operations / field activities

4.2.1 Responsibilities assigned to various functionaries

#### 4.2.1.1 ASHA/ ANM/ Anganwadi worker\*:

- 4.2.1.1.1. Daily house to house visit to:
- (i) Search clinically suspect cases.
- (ii) Identify contacts of confirmed and suspect cases
- (iii) Maintain line list of suspect/ confirmed cases and contacts
- (iv) Monitor contacts daily
- (v) Inform Supervisory Medical Officer about suspect cases and their contacts
- (vi) Create awareness among community about disease prevention, home quarantine, common signs and symptoms and need for reporting suspect cases by distributing fliers, pamphlets and also by inter-personal communication.
- 4.2.1.1.2. Counsel individuals to take precautions to avoid contact with those with symptoms suggestive of COVID-19.
- 4.2.1.1.3. Ensure that contacts are on home quarantine use 3 layered surgical masks at all times. Educate them on proper use and disposal of masks. The team will also educate the family members about precautions to be taken while taking care of persons under home quarantine.
- \* If there is human resource constraint to engage as many ASHA/AWW/ANMs, then Indian Red Cross society/NDRF/Civil Defence/NSS/NCC volunteers available in the district shall be engaged after proper briefing on roles and responsibilities and infection, prevention and control practices.

#### 4.2.1.2. LHV/ MPWMW

- > Supervisory duty at the village/ block covering the epicenter.
- ➤ Daily visit to allocated sectors to oversee and cross-check the activities of ASHA/Anganwadi workers/ ANM.

Report on real time basis, any person reporting of symptoms of COVID-19.

#### 4.2.1.3. Block Extension Educator and other communication staff

- ➤ Public information education and communication campaign targeting schools, colleges, work place, self-help groups, religious leaders, teachers, postman etc.
- > Arrangement of miking.

#### 4.2.1.4. Municipal/ village Panchayat staff / Civil society volunteers

- > Create awareness in the community
- Encouraging community to follow frequent hand wash, respiratory etiquettes, self-monitoring of health and reporting to the health workers about persons in their vicinity having cough, fever, breathing difficulty.

#### 4.2.1.5. Supervisory Officer

- > Supervises the field work
- > Verifies suspect case as per case definition.
- Arranging shifting of suspect case to health facility.
- > Random Check of persons under home quarantine.
- Submit daily report to control room

#### 4.2.1.6 Block NHM Manager/ any other designate of DM

- Information management with in the containment zone
- Contingency funding of the containment operations
- > Managing finances.

#### **4.2.2.** Norms for deployment of human resource:

A health care worker (ANM/ ASHA/Anganwadi Worker) will be able to visit 50 houses in a day (30 in difficult areas).

A supervisory Medical Officer shall be deployed to cover 1000 population.

#### 4.2.2 Human Resource requirement for field operations

S. No.	Designation of staff	Nature of work assigned	No. of personnel deployed for containment operation	Mobilized from within the District	Mobilized from adjoining District
1.	District Collector or his assignee	Incident Command			
2	Central/ State RRT	Planning and operations			
3	Sector Medical Officers	Supervisory			
4	LHV	Intermediate Supervisory			
5	ANM/ ASHA/ Anganwadi Worker	Field work			
6	Block Extension Educator and other communication staff	IEC			
7	Municipal/ village Panchayat staff Civil society volunteers	Community mobilization			
8	NHM -District/ Block Manager	Logistics Information Management Financial management			

#### 5. Components of Micro-plan

#### 5.1 Surveillance

#### 5.1.1. Active Surveillance

#### 5.1.1.1. Constituting Teams for Human Health Surveillance:

Each health worker would cover 50 houses in the sector assigned to them. The listing of municipality wards/ villages allocated to surveillance teams, their names, name of supervisors for each team and their contact number is at **Annexure-I** 

#### 5.1.1.2. Assigning Tasks to the Teams

The Medical Officer in-charge will assign tasks as listed in para 4.2.1 to the Supervisory Officer/ANM/ASHA/Anganwadi Worker.

During the course of their house to house visit, the ANM/ASHA/Anganwadi Worker will identify suspect case, if any, as per case definition. The name, age, sex, and the address of such persons to be recorded on proforma at **Annexure-II.** The Health worker will counsel household members to take basic precautions to avoid direct contact with a suspect case. He / she will provide a mask to the (i) suspect case (till such time he/she is examined by the supervisory officer).

The concerned ANM/ASHA/Anganwadi Worker will immediately inform his/her supervisory officer about the suspect case.

#### **5.1.1.3.** Role of Supervisory Medical Officer/ LHV

The door to door surveillance will be supervised by Medical Officers/ LHV assigned sectors within the defined surveillance zone. He/she will also collect data from the health workers under him/ her, collate and provide the cumulative data to the control room by 4.00 P.M.

He / she will visit any suspect case brought to his/ her notice by the ANM/ASHA/Anganwadi Worker during their daily house to house visit. He/ she will immediately call for the ambulance and ensure transfer of the patient to identified hospital after ensuring on the basic precautions. Details of the registration number of the ambulance, shifting time to the hospital and contact number will be kept and conveyed to the Control Room.

Name of	Age	Sex	Ambulance	Name of the	Contact	Time	of
the patient			No.	driver/	number	Shifting	
being				Paramedic			
shifted							

#### 5.1.2. Passive Surveillance

All health facilities in the containment and buffer zones will be listed. All such facilities both in Government and Private sector (including clinic) shall report clinically suspect cases of COVID-19 to the identified supervisory officer for that sector. Proforma for reporting suspect COVID-19 cases by health facilities is at **Annexure-III.** 

#### 6 Contact Tracing

The contacts of the laboratory confirmed cases/ suspect cases of COVID-19 will be line-listed. The Supervisory officer in whose jurisdiction, the laboratory confirmed case/ suspect case falls shall inform the Control Room about all the contacts and their residential addresses. The control room will in turn inform the supervisory officers of concerned sectors for surveillance of the contacts.

These contacts will be tracked by assigned ANM/ASHA/Anganwadi Worker of that sector and kept under home quarantine for 14 days. They will be monitored for clinically compatible signs and symptoms of COVID-19 for 28 days in total. If the residential address of the contact is beyond the containment zone or in adjoining district / State, the district IDSP will inform the concerned District IDSP.

Detail guidance for contact tracing, quarantine and isolation is given at **Annexure –IV**. Proforma for line listing of contacts is at **Annexure-V**.

#### 7. Laboratory Support

The microbiologist in the Central/State RRT will be responsible for managing laboratory Support. He/ She will identify nearest VRDL network laboratory for logistic support for sample collection, packaging and transportation. The doctors manning the isolation facility will be trained by the RRT and they shall be responsible for sample collection, packaging and transportation. The sample collection proforma to be attached with the samples is at **Annexure-VI**.

Name of the VRDL	Name of Nodal person	Contact number
Laboratory		

#### 8. Identified Health Facility

8.1. The Physician in the RRT will visit the nearby hospitals and identify the nearest hospital best suited for isolation and tertiary care/ medical college best suited for Ventilator management/ critical care management/ Salvage therapy (ECMO).

Name of the identified	Name and Contact	Name and	Contact details
health facility	details of MS	contact details of	of Emergency
		Nodal officer	

The details of the identified facilities will be informed to all the Supervisory Officers by the NHM District/ Block manager.

All suspect cases of COVID-19 will be admitted to the above identified health facility. The Supervisory Medical Officer, in whose Jurisdiction the case is reported,

shall ensure his/ her hospitalization. The hospital will be informed in advance about the referral case.

Reporting format for health facilities identified for isolation/critical care management of COVID-19 cases is at **Annexure III.** 

#### 8.2. Ambulance facility

There will be earmarked ambulance for the transfer of patients. The drivers will be trained in infection prevention and control practices and also in disinfection of ambulance after transporting suspect cases. Drivers of these ambulances will be provided with appropriate PPE depending on the risk assessment conducted by district/RRT epidemiologist.

Date	Shift	Name	of	the	Name	of	the	Contact	numbers
		driver			Paramedic			(Driver	and
								Paramedi	c)
	8:00 AM -								
	2:00 PM								
	2:00 PM -								
	8:00 PM								
	8:00 PM -								
	8:00 AM								

#### 8.3 Hospital infection prevention and Control

The Microbiologist in the RRT will train the health workers on infection prevention control practices prior to their field assignment. They will also train the identified field functionaries on donning and doffing of PPE. The PPEs are to worn as per the risk assessment for various categories of personnel.

S. No	Name of the item	Remarks
1	Full complement of PPE (N 95 Mask, Gloves, Goggles, coveralls, headgear, foot wear)	1
2	N-95 Mask and gloves	To be used by supervisory doctors verifying a suspect case

		Doctors/nurses attending patients in screening clinics/OPD
3	N-95 mask, gloves	Sanitary workers involved in sanitation and disinfection activities for COVID-19 cases
4	Triple Layer medical mask/ examination gloves	To be used by:  • field workers,  • suspect cases and  • care giver / by stander of the suspect case  • Ambulance drivers.  • All functionaries at the perimeter control.

#### 10. Logistics

#### 10.1. PPE

All PPE will be used rationally. RRT members will train the identified field functionaries on donning and doffing of PPE. The PPEs are to worn as per the risk assessment for various category of personnel.

The following daily log on PPE will be maintained:

S. No.	Name of the item	Opening	Nos. used	Closing	Remarks
		balance for	with in the	balance	
		the day	day		
1	PPE Kits				
2	N-95 Mask				
3	Triple Layer				
	Surgical mask				
4	Gloves				
5	Biohazard bags				

All PPEs to be disposed of in a Biohazard Bag (yellow). The outer surface will be disinfected using 1% Sodium Hypochlorite spray.

#### 11. Communication

Block Extension Educator / or any other designated communication staff will be allocated the work of public education outreach on COVID-19. Public information education and communication campaign shall target schools, colleges and work place within the

containment zone. The key messages (including that used for Inter-personal Communication) have already been conveyed to the States.

The sector wise allocation of BEE their name and contact no. will be listed. Municipal/Village Panchayat Officers will be allocated sectors with in the surveillance zone for encouraging and participating in public awareness campaigns and participation. The rostering of staff for public education outreach is at **Annexure-VIII**.

#### 12. Data Management

The Control Room will have data managers (deployed from IDSP/ NHM) responsible for collecting, collating and analyzing data from field and health facilities. They will work in 3 shifts. Data Collection tools will form **Annexure-IX** of this document. Output variables to be generated at micro level on daily basis;

No. of Suspect case of COVID-19

No. of laboratory confirmed case

No. of deaths

No. of contacts line listed:

No. of contacts tracked:

No. of contacts currently under surveillance:

No. of contacts which have exited the follow up period of 28 days:

#### 13. Control Room

The following details will be provided under this head:

Nodal Officer with contact number:

Control Room Number:

#### 14. Office orders (indicative)

Orders on notification.

Order for taking services of personnel

#### 15. Budgeting (indicative)

S.no	Item	Unit cost	Total cost	
1.	Transportation			
	No. of vehicles hired			
	POL expenditure for Office vehicles/ ambulances			
2.	Communication			
	Cost of printing posters			
	Hiring personnel for display			
	of posters			

	Cost of hiring vehicles for		
	miking		
	Advertisement cost:		
	local dailies		
	cable network		
	local TV channels		
	SMS		
3	Logistics		
	Three layered surgical mask		
	N 95 mask		
	PPE		
4	Contingency Expenditure		

### Annexures

Annexure No.	Subject
I	Containment zone: Identified Sectors for surveillance
II	Data collection tool at field level
	Data collection tool at field level (Field Level Data
	Compilation Sheet)
III	Daily Line listing of Patients detected at health facilities
IV	Recommended guidance for contact tracing, quarantine and
	isolation for Coronavirus Disease (COVID-19)
V	Line listing of Contacts
VI	Sample collection proforma to be attached with the samples
VII	Transportation arrangement for containment Operation
VIII	Identified Sectors for Public Education Outreach and rostering
	of identified communication staff
IX	Daily report of COVID-19 Outbreak

### Annexure-I

## Containment zone: Identified Sectors for surveillance

Sector	Name of	Name of ANM/	Contact	Name of	Contact
	Municipal	ASHA/Anganwadi	Number	Supervisory	Number
	ward/ village	Worker		Officer	

#### Annexure-II

## Data collection tool at field level (Line listing of suspect cases)

State & District : Sector : Village allocated: :

Name of the field worker : Phone:
Name of the Supervisor : Phone:
Name of the PHC doctor : Phone:

S.No	Name of patient	Age	Sex	Address	c/o Fever, Cough, Difficulty in breathing	Remarks

## Data collection tool at field level (Field Level Data Compilation Sheet)

S. No.	Name of village	Total population surveyed	M	F	No. of Suspect cases identified	Total number of contacts put under home quarantine	Remarks
Total							

## Annexure-III

## Daily Line listing of Patients detected at health facilities

S. No	Name	Age	Sex	Address	Symptoms or contact with COVID-19 suspect case	Sample taken (Y/N)	Remarks

Recommended guidance for contact tracing, quarantine and isolation for Coronavirus Disease (COVID-19):

#### I. Contact Tracing:

- **a.** Contact means a person:
  - Providing direct care without proper personal protective equipment (PPE) for COVID-19 patients
  - Staying in the same close environment of a COVID-19 patient (including workplace, classroom, household, gatherings).
  - Traveling together in close proximity (1 m) with a COVID-19 patient in any kind of conveyance within a 14-day period after the onset of symptoms in the case under consideration.

#### b. Each worker or person responsible for contact tracing should:

- Enlist all the contacts for tracing along with their names, address and contact details and submit to the supervisor daily
- Daily visit the contact and ask him/her if had developed any fever, cough, shortness of breath, difficulty in breathing etc.)
- Educate contacts and their family members on importance of contact tracing and home quarantine
- Distribute Triple layer surgical masks to the contact and keep sufficient stock.
- Create awareness on symptoms and provide information on self-health monitoring
- Contacts should be informed that if they develop symptoms:
  - Immediately wear a triple layer mask and avoid close contact with any other person.
  - Inform concerned health worker who will arrange for medical examination by supervisory medical officer and transportation to hospital, if required.
  - Provide details on all possible contacts since the time he/she has developed symptoms and inform health worker
- Duration of follow up of contacts would be 28 days from the time of last contact with a case

#### **II.** Active surveillance:

Active surveillance shall be done within containment zone (or 3 Km radius from the periphery of the affected area)

#### What has to be done:

- Enlist all houses (and persons)
- Daily visits to each house and enquire about any person developing any symptoms (like fever, cough, shortness of breath, difficulty in breathing etc.)
- In case of a person is detected to be developing symptoms of COVID-19, the same shall be brought to notice of supervisory medical officer
- Daily reporting: as per the format (Annexure V)

#### **III.** Home Quarantine:

- Who has to be quarantined: all households and close contacts of a confirmed and suspect cases are to be home quarantined
- **Duration of home quarantine**: Those being home quarantined need to be followed up till the time test results of suspect case (whose contacts are being home quarantined and followed up) comes negative. If the test result comes positive then all such persons become 'true' contacts and have to be home quarantined for 14 days and followed up for 28 days.

#### IV. Isolation:

- Suspect cases detected on active surveillance need to be in isolated in a
  room in the house temporarily till the time he/she is examined by the
  supervisory medical officer or shifted by the designated ambulance to the
  designated health facility.
- Following shifting to health facility, place of temporary isolations needs to be disinfected in accordance with prescribed SOPs by 1% sodium hypochlorite

## Line listing of Contact (Name of Patient):

S. N o.	Name	Age	Sex	Address	Date on which expose d	To be under surveill ance (till date)	Symptoma tic (Y/N). If Yes, is person isolated/re ferred	Sample taken (Y/N)	Remar ks
							-		
					-				

(Please use separate sheet for contacts of different patients)

#### **Annexure VI**

### Sample collection proforma to be attached with the samples

#### ICMR- National Institute of Virology, Pune Specimen Referral Form for 2019 Novel Coronavirus (2019-nCoV)

INSTRUCTIONS:										
<ul> <li>Inform the local /</li> </ul>										
<ul> <li>Seek guidance on</li> </ul>										
This form may be	filled in and	l shared w	rith the IL	OSP and a	so ICMR-NIV ne	odal office	er in ac	dvance.		
PERSON DETAILS										
Name of patient:					Age:Years	Mon	th G	ender: Male	Fem	ale
Address:					Data of hinth	. /	,	/ al al /		
City:								(dd/mm/	уууу)	
State:	State: Mobile/phone:									
					Email:					
EXPOSURE HISTOR	•									
Recent stay/trave				=	o 🔲 If yes, s					
History of visit to v	•			_				to:/		
Close contact with				_	IO 🔲 Close co					
Recent travel to an					IO 🔲 Travel p					
Health care worke	r working	in hospi	tal invo	lved in m	nanaging patio	ents YES	/ NO	,		
Hospitalization dat	te:/	/			Discharge da	ate:/	<i>!</i>	/		
CLINICAL SYMPTO	MS AND S	IGNS								
Date of onset of sy	mptoms: .	/	/		First sympto	m:				
Symptoms	Yes No	Sympto	ms Y	es No	Symptoms	Yes No	Svn	nptoms Ye	s N	0
Fever at evaluatio		Cough			Diarrhoea			dominal pain		Ì
History of fever		Breathle	essness	一 一	Nausea	ĦΕ		miting	F F	7
motory or rever	ШШ	Sore thi			Body-ache	$ \exists \exists $	•	emoptysis	T F	Ħ.
Chest pain		Sputum		H H	body delle	шц		isal discharge	Ħ F	╡
Sians	Yes No	Sian		Yes No	Sian			Yes No		
Wheeze		Stridor			Lower chest	t indrawi	_			
Nasal flaring	HH	Crepita		HH.	Accesary mu			Ŧ Ħ		
					Accesary mi	uscie use	<u> </u>			
UNDERLYING MED										
Condition	Yes No			Yes No	Condition			Condition	Yes	No
COPD		Bronch		□ Ⅱ	Diabetes	_ ∐ !	=	Hypertension	닏	4
Chronic renal disea		_			Heart disea		_	Asthma	Ш	
IMMUNOCOMPRO	OMISED CO	ONDITIO	<u>N</u> : YES /	NO		Othe	er:			
HOSPITALIZATION	, TREATM	ENT AND	INVEST	TIGATIO	V					
HOSPITALIZATION da		/			DIAGNOSIS:					
DIFFERENTIAL DIAGN					ETIOLOGY IDE					_
ATYPICAL PRESENTAT		NO						URSE: YES / NO		
OUTCOME: Discharge		T		Vac Na	OUTCOME da				V	NI-
Treatment	Yes No	Treatm		Yes No			No	Treatment	Yes	No
Antibiotics		Ventila		뭐 뭐	Antivirals	=		Steroids	ш	
Oxygen	$\sqcup$ $\sqcup$	CPAP			Bronchodil			Other:		
Investigation findin										
Differential Leukocy										
Basophils (%):										
Investigation detail					(findings):					
Blood culture finding	ngs (If any):			Oth	er investigatio	n details:				
SPECIMEN INFORMATION FROM REFERRING AGENCY										
Specimen type	Collection		Label		Specimen ID	Т	est n	erformed	Resu	lt
1. BAL/ETA/	Concett	dute	Lubel	FOR	Specific III	<del>-  </del>	Joe p		11000	
2.TS/NPS/NS				OFFICE						
				USE						
3. Blood in EDTA				ICMR- NIV		-				
4. Acute sera				INIV						
5 Convalescent				$\rightarrow$						
sera										
Name of Doctor:				Ho	spital Name/a	ddress: .				
Phone/mobile nun	nber:			Sig	nature and da	te:				

PLEASE REFER THE CASE DEFINITION CHECKLIST ON PAGE 2. FOR SPECIMEN COLLECTION GUIDELINES, VISIT **www.niv.co.in**For any sharing of information or for any query, contact Dr. Yogesh Gurav Scientist E (020-26006290/26006390). Page 1 of 2

## ICMR- National Institute of Virology, Pune Specimen Referral Form for 2019 Novel Coronavirus (2019-nCoV)

Name of the patien	t:	Age:yearsmonth	IS
	at the case definitio he correct response	n should be strictly followed. (Yes/No)	
	CASE	DEFINITION	
1. Severe Acute Respi	ratory Illness (SARI)	, with	
<ul> <li>history of f</li> </ul>	ever		YES / NO
<ul><li>cough</li></ul>			YES / NO
	dmission to hospital		YES / NO
WITH		B. C. L. C. C.	V50 / NO
		clinical presentation	YES / NO
•		ert to the possibility of	
AND	presentations in pa	tients who are immunocompromised);	
	he following		
A history o	f travel to Wuhan. H	lubei Province China	
	ys prior to symptom		YES / NO
	occurs in a health c		
who ha	s been working in an	environment where patients with	
	acute respiratory infe residence or history	ections are being cared for, without re y of travel	gard to YES / NO
<ul> <li>the person deterioration</li> </ul>	develops an unusua on despite appropria	al or unexpected clinical course, especi ate treatment, without regard to place even if another etiology has been ident	of
within 14 days befo • close physi	re onset of illness, h	es of any degree of severity who, and any of the following exposures: onfirmed case of nCoV infection, while	that YES / NO
<ul> <li>a healthcar been report</li> </ul>	•	y where hospital associated nCoV infe	ctions have YES / NO
nCoV is kno	own to be circulating	animal source is identified) in countries g in animal populations or where huma esult of presumed zoonotic transmission	an on*.
* To be added once/if	animal source is ide	ntified as a source of infection	YES / NO
EMAIL ID OF THE HEALTH	AUTHORITY (FOR SENDI	NG THE REPORT):	
Name of Doctor:		Hospital Name/address:	
Phone/mobile number		Signature and date:	

## Appendix-VII

## Transportation arrangement for containment Operation

Sector	Name of the	Purpose for	Vehicle	Driver	Contact
	Sector	Vehicle	Regn.	name	Number
		Deployed	number		
A		House to house surveillance			
		Supervisory Staff			
В		House to house surveillance			
		Supervisory Staff			
С		House to house surveillance			
		Supervisory Staff			

## Appendix-VIII

Identified Sectors for Public Education Outreach and rostering of identified communication staff

Sector	Name of	Name of	Contact	Name of	Contact
	Municipal ward	Municipal/	Number	Supervisory	Number
	village	Panchayat		BEE	
		staff			

A	pp	end	ix-	IX

	Cluster Cont	ainment			Appendix-1X
	Format for daily report of C	COVID-19 virus di	isease		
			Date:		
State:	District:		Block:		Epicentre:
Total No. of Village in the block:	No. of affected Municip	No. of affected Municipalty /village:			
Г.,			Populat		Population surveyed
A) A 1 Population Based Information	No. of villages/municip	ality/localities	Surveye	ed(Daily)	(Cumulative)
0-3 Km Population from Epicenter					
A-2 Morbidity data			-		
A-2 Worbidity data			Daily		Cumulative
Persons with fever / symptoms consistent (only					
new Cases) with COVID-19 virus disease	0-3 Km from Epicenter				
					_
B) Hospital based Information: Name of Hospit	al	•••••		•••••	<u> </u>
In patient			Daily		Cumulative
Suspect COVID-19 viral disease cases					
Laboratory Confirmed case of COVID-19 virus dis	sease				
No of deaths (suspected or confirmed)					
		1			
D) Contact Tracing					
Number of contacts under surveillance					
E) Laboratory Testing	Number of Sa	ımples taken	<u> </u>	Numbe	er of Samples found Positive
, <b>v</b>	Daily	Cumulat	tive	Daily	Cumulative

F) Public Education outreach	No of houses in 0-3 km	No. of houses Visited	Percentage
Villages covered by Public Education Outreach			

G) Monitoring Health Staff					
Health personnel deployed in field including medical officers, Health supervisors/health workers etc.	Health personnel deployed in field complaining of Fever/ symptoms consistent with COVID-19 virus disease				
Hospital staff including Medical Officers, Nurses, Attendants etc.	Hospital staff complaining of Fever/ symptoms consistent with COVID-19 virus disease				

#### H) Stock Position

Item	Previous days stock at District HQ	Consumed for the day	Stock at hand( s)	Stock to be requisitioned if any
PPE				
N-95 Masks				
Triple layer surgical mask				

Note: Daily report to be faxed by 11.00 a.m.

Director NCDC (Fax No: 011-23922677; 011-23921401)

Director EMR ( Fax No: 011- 23061457)

Signature DSO

(Name & Desg. Of the reporting officer) Phone No.

of DSO





# Guidelines for Quarantine facilities COVID-19

The purpose of this document is to provide interim guidance for setting up of quarantine facilities

# **Guidelines for Quarantine facilities**

Contents	
	Page No.
Introduction	3
Evaluation of Potential Sites	4
Risk assessment of the quarantine facility	5
Securing Entry and Exit points	6
Human resource Deployment, training, IEC, Clinical	7
Examination and referral	
Coordination, Recording, Monitoring and Supervision,	8
Prevention Control (IPC) measures, Catering, Laundry	
and other related activities, Biomedical waste (BMW)	
management	
Logistic management, IEC, sampling, Discharge, Terminal	10-12
Disinfection	
Daily Reporting format-Annex1	13
SOPs for medical personnel-Annex 2	14
SOPs for nursing staff-Annex 3	15
SOPs for movement of staff-Annex 4	16
SOPs for security staff-Annex 5	17
Supplies for the quarantine facility-Annex 6	18
HR for quarantine facility- Annex7	19
SoPs for screening of personnel entering quarantine facility-	20
Annex 8	
SoPs for Disinfection-Annex 9	21
Guidelines for Biomedical waste management-Annex 10	28
Guidelines for facility incharge and quarantine people at the	32
time of discharge-Annex 11	
Checklist for Establishing a Quarantine facility	35

### 1.0. Introduction

**Quarantine** is the separation and restriction of movement or activities of persons who are not ill but who are believed to have been exposed to infection, for the purpose of preventing transmission of diseases. Persons are usually quarantined in their homes, but they may also be quarantined in community-based facilities.

### Quarantine can be applied to

- An individual or to a group of persons who are exposed at a large public gathering or to persons believed exposed on a conveyance during international travel.
- A wider population- or geographic-level basis.

Examples of this application include the closing of local or community borders or erection of a barrier around a geographic area (cordon sanitaire) with strict enforcement to prohibit movement into and out of the area.

# The purpose of this document is to provide guidelines for setting up of quarantine facilities during the current COVID-19 outbreak.

The recommended duration of quarantine for Covid-19 based on available information is upto 14 days from the time of exposure.

The purpose of quarantine during the current outbreak is to reduce transmission by

- Separating contacts of COVID-19 patients from community
- Monitoring contacts for development of sign and symptoms of COVID-19, and
- Segregation of COVID-19 suspects, as early as possible from among other quarantined persons

The scope of this document is to cover the procedures required for

- Physical infrastructure/Functional Services requirement at quarantine facilities
- Procedure for medical monitoring of contacts, reporting formats
- Protocol for referrals of suspects/ Symptomatics and isolation of symptomatics if required temporarily
- Infection control practices by medical personnel, supporting staffs and catering staffs etc.

# 2.0. Evaluation of potential sites for facility-based quarantine is important for preparedness planning (Checklist at Annexure-11).

Requirements for Quarantine facility in a community-based facility is as under

### 1. Location:

- preferably placed in the outskirt of the urban/ city area (can be a hostel/unused health facilities/buildings, etc.)
- away from the people's reach, crowded and populated area
- well protected and secured (preferably by security personnel/ army)
- preferably should have better approachability to a tertiary hospital facility having critical care and isolation facility

### 2. Access considerations

- Parking space including Ambulances etc.
- Ease of access for delivery of food/medical/other supplies
- Differently-abled Friendly facilities (preferably)
- 3. **Ventilation capacity:** Well ventilated preferably natural

### 4. Basic infrastructure/functional requirements:

- Rooms/Dormitory separated from one another may be preferable with in-house capacity of 5-10 beds/room
- Each bed to be separated 1-2 meters (minimum 1 metre) apart from all sides.
- Lighting, well-ventilation, heating, electricity, ceiling fan
- Potable water to be available
- Functional telephone system for providing communications.
- Support services- fooding, snacks, recreation areas including television
- Laundry services
- Sanitation services/Cleaning and House keeping
- Properly covered bins as per BMW may be placed

### 5. Space requirements for the facility:

- Administrative offices- Main control room/clerical room
- Logistics areas/Pharmaceutical rooms

- Rest rooms- doctors/nurses/supporting staffs
- Clinical examination room/ nursing station / Sampling area
- Laundry facilities (on- or off-site)
- Mess/Meal preparation (on- or off-site)
- Holding area for contaminated waste
- Wash room/Bathroom/Toilet

### 6. Social support resources/ Recreational areas

- Television and radio / Reading materials/ indoor plays
- 7. **Monitoring the health of contacts:** During that period, contacts should be monitored at least daily for fever and respiratory symptoms.
- **2.2. Standard operating Procedures:** To ensure smooth operation in the quarantine facility, the standard Operative procedures (SOPs) needs to be framed as under
  - Daily monitoring surveillance using the daily reporting format (annex
     1)
  - Fever triage/ Isolation
  - Case and contact monitoring and response
  - Transfers of suspect/symptomatic to designated hospital (through ambulances)
  - Public information
  - Provider information (SOPs)
    - medical personnel (annex 2),
    - nursing staff (annex 3),
    - movement of health personnel and support staff (annex 4) and
    - security staff (annex 5)

Functional flow should be maintained to reduce/minimise the interactions between quarantine people and healthcare professionals/supporting staffs so that transmission of disease is prevented and controlled

### 3.0. Risk assessment of the quarantine facility

The risk level refers to how likely it is that someone in the Quarantine camp will become infected with corona virus as a result of movements and activities performed in the Quarantine camp.

Risk assessment includes identification of the biohazard risk precaution levels, along with its associated activities. The risk level refers to how

likely it is that someone in the Quarantine camp will become infected with corona virus as a result of procedures performed in the Quarantine camp. Areas were sagregated and labeled as:

- Low risk areas: Areas having less direct contact with evacuee suspects such as control room center in the quarantine center, nursing station and areas of kitchen where food is cooked.
- Moderate risk areas: Moderate risk areas are where infectious aerosols are generated from areas where the suspects were inhabiting in their bed linen, pillows and nearby clothes; low concentration of infectious particles. Contaminated surface near the quarantine zones.
- High risk areas (containment Quarantine camp): Areas where
  direct dealing with the suspects are as under
  Medical examination room, sample collection areas( high
  concentration of infectious particles while coughing, sneezing, gag
  reflex during nasopharangeal & oropharangeal sample collection).
  Toilet and bathroom areas, dining areas, areas of bio-waste
  collections, segregation and disposal.

Based on risk assessment, areas should be earmarked and infection prevention control measures to be applied as per MOHFW guidelines.

### 4.0 Securing Entry and Exit points

- In order to prevent and control infection in the facility, strategic points in the facility needs to be identified including
- The Control room where a person entering inside quarantined building to get proper awareness and training on infection control measures.
- A well informed and trained security to check (main entrance gate of the area) and a guard (24\*7) with registers for ins and outs and a designated nursing officer for checking proper PPE wear (main entrance gate in the building)
- The international biohazard warning symbol and sign to be displayed on the doors of the rooms where suspects are kept, BMW management areas, samples of higher risk groups are handled

- Only authorized & trained persons or those designated in work areas to permitted to enter the quarantine areas;
- Doors to keep closed at all times preferably under observation of a guard.
- There should be double door entry was managed with only one door to be open at a single time.
- 5.0 . Human resource Deployment: In the quarantine facility, Chief Medical officer needs to be appointed as In-charge /nodal officer for overall coordination and supervision of the quarantine center. Services of General duty medical doctors, Medicine specialists, Pediatrics, Microbiologist (for diagnostic support and IPC), Psychiatrists & Psychologists are required for routine examination and relevant clinical care of the quarantined people. Para-medics including Staff Nurse and Lab. Technician, Pharmacist need to be posted. Public health specialist are required for monitoring public health aspects of the facility while services of clinical microbiologist are required for sample collection, packaging and infection prevention & control practices. House keeping staff also need to be deployed.
- **6.0 Training** Training is the most important and critical part to ensure that all activities takes place as per established protocol and SOPs, training of health care professionals and other relevant staffs was undertaken initially. Training of medical officers on SOPs needs to be followed at Quarantine centers for daily examination, movements in the facility, infection prevention control measures and use of PPE kit etc.

Training of clinicians, laboratory technicians and medics needs to be undertaken on appropriate sample collection (nasopharyngeal and throat) and triple layer packaging with cold chain maintenance.

Paramedical staffs i.e., staff nurses; medics, pharmacist etc. needs to be trained on SOPs to be followed at Quarantine centers and use of PPE kit. Staff undertaking the work in Laundry, Mess/Canteen, security and other related staff i.e., drivers, general duty staff etc. needs to be trained on use of mask, gloves, cleaning and disinfection procedures and use of PPE kit, etc.

Refresher training or regular direction to all the above staffs needs to be provided as on need basis. During the quarantine period as and when new staff was posted, it needs to be ensured that he/she received proper training before undertaking the work. It is to emphasized that all activities / procedures must be done under strict monitoring/observations of trained specialists.

**7.0** . Daily Clinical Examination and referral - All quarantined people needs to be examined twice (morning & evening) daily clinically and those requiring

referrals for related symptoms of Corona virus (fever, cough, sore throat, breathlessness etc.) or any other reason needs to be referred to designated hospital in ambulance directly with due precautions as per referral SOP. Ambulances need to be placed in the facility in standby mode for transport including advanced lifesaving ambulance.

Daily census of the people needs to be undertaken twice a day (ex. Morning 8 am and evening 6 pm).

**8.0** Coordination— Chief medical officer needs to supervise and coordinate with various organizations working with the facility. To ensure all activities take place according to standard protocol, separate teams were constituted for various purposes- Supervisory team, admin team, logistic team, referral team, medicine / equipment team, hygiene sanitation team.

Daily review meetings needs to be conducted under chairmanship of Chief medical officer to discuss day to day affairs and sort out any issue requiring attention.

24\*7 control room needs to be established at the facility with monitor for CCTV cameras and speakers at each floor so that quarantined people can be communicated on routine basis and necessary instructions can be provided.

- **9.0** Recording and reporting mechanisms- To ensure standardized reporting, daily reporting formats of suspected cases with symptoms related to corona virus, no. of cases requiring referral, sample collection status needs to designed (as per annexure 1). It needs to be sent daily to relevant higher authorities.
- 10.0 Monitoring and Supervision Daily monitoring visit needs to be conducted inside quarantine facility and outside the facility in the surrounding campus by public health and incharge officers and gaps to be noted. Necessary corrective actions and preventive actions to be taken by the nodal officer. Visits also given by senior officers from for regular review.
- **11.0** Establishment of Infection Prevention Control (IPC) measures As per risk assessment was undertaken with respect to probability of infection from possibly infected quarantine people to health care, other staffs and surrounding areas. Special map of the facility needs to be prepared to outline the details of movement of health care and other personnel around the quarantine area and in the building. It need to be ensured that movement of health care staffs and other personnel to undertake as per the designed map to prevent and control infections.

Separate fence needs to be raised around the building to prevent entry of animals especially dogs, monkeys and even birds if possible.

Well informed and trained security personnel needs to be deployed all around the building on 24\*7 rotation basis to monitor the facility and to avoid entry of undesired persons/animals and even birds for eating any food remains/droppings inside the area.

To ensure that all health care personnel use PPE as per guidelines, they need to be properly trained and assisted during wearing of PPE. Separate areas to be earmarked for PPE Donning and Doffing. Compliance for same to be ensured by nodal officer.

Separate well informed and trained nursing officers need to be stationed at the building to regulate the movement of the staffs entering the facility. He/ She should be assigned the duty that every person entering the facility enters in the register of all the details on time of name, designation entry/exit. Nursing officer to ensure that all the persons are labeled while entering the building so that they can be identified by security staff. At the entrance, two door entries may be ensured to avoid mixing of quarantine people with health care staff.

It is to be ensured that all the quarantine facility is decontaminated daily (refer to infection prevention control guidelines) with disinfectants (freshly prepared 1% hypochlorite, detergent solution) including surface mopping of all the floor, bathrooms, toilets facility, under side of beds, other related items placed in the rooms of quarantine people .

A separate cubicle for people developing mild symptoms for temporary observation (transit room) may be considered so that it will lead to an early isolation of any symptomatic person and to prevent transmission to other cluster of groups.

**12.0** Lodging, Catering, Laundry and other related activities —Disposable and pre-packed food to be needs to be served to quarantined people. All the quarantined people to be kept on separate beds with distance of 1-2 meters with no bed facing opposite to each other. All Beds were having disposable bed sheet that should be changed on daily basis. Personal toiletries/ towel/ blanket/ pillow with covers/electric kettle, room heater and water dispenser may be provided to each person depending on availability.

A separate room needs to be assigned to perform laundry services for cleaning of all the clothes and other washing related activities. Before laundering, all the washable items needs to be placed in 1% hypochlorite up to 30 minutes and later washed in detergent solution.

**13.0 Biomedical waste (BMW) management-** To ensure that biomedical waste management in the facility takes place as per standard guidelines, separate yellow, red /black bags, foot operating dustbins needs to be kept at each floor and outside the facility. It is to strictly ensured that Doffing takes place in the designated area with all the PPE kit including mask, gloves is properly placed in yellow bags. All the health care workers collecting the possible infectious material such as food items, PPE kits from yellow bags should also wear PPE and following the IPC measures. Designated place to be earmarked outside the building for collection of yellow and black bags. It should be collected at least twice daily by biomedical waste management vehicle/any other local established practice.

Site of collection of biomedical waste should be regularly disinfected with freshly prepared 1% hypochlorite solution. All officials concerned with the administration and all other health care workers including medical, paramedical, nursing officers, other paramedical staff and waste handlers such as safaikarmacharis, attendants & Sanitation attendants needs to be well oriented to requirements of handling and management of general and biomedical waste generated at the facility. Steps in the management of biomedical waste include generation, accumulation, handling, storage, treatment, transport and disposal as mentioned in the SOP needs to be followed. Continuous training, monitoring & supervision to monitor the implementation to be done on daily basis to manage compliance related issues. All the generated waste from Quarantine facility to be treated as isolation waste and its disinfection /treatment was strictly monitored by specialists in the health authorities.

**14.0** Logistic management- All logistic to be used in quarantine facility i.e., PPE , medical equipments i.e. Thermal thermometer, Stethoscope, BP machine etc., office logistic, sample collection and packaging material, etc.to purchased in advance.

Performa needs to be prepared for daily consumption of PPE, triple layer mask, gloves, etc. and monitored by logistic team on daily basis.

**15.0** Information, Education & Communication (IEC) and Psycho-social support – As on arrival, there might be an obvious sense of psychological fear and panic among all the quarantine people and some of the involved stakeholders like health care professionals/staffs including doctors, security personnel etc.. An interpersonal communication needs to made to all of them one after another in groups by Psychiatrist team initially and later on with individual counselling sessions. Quarantine people needs to be explained on Universal infection control

measures , personal protective measures, written instructions on Do's and Don'ts in the quarantine zone to be provided to contain and avoid spread of the infection. Importance of frequent Hand washing specially after touching surfaces like door handles, stair railings, bed railings, etc. to be instructed for strict compliance. Everyday quarantine people to be counseled by clinicians regarding day to day queries. If needed, referral to be made to psychiatrist /psychologist team. If there is fear in the surrounding community it needs to be addressed.

**16.0** Sample collection and packaging – For baseline testing, Samples (Nasopharyngeal swab and throat swabs) for COVID-19 need to be collected from all quarantine people & sent with triple layer packaging maintained in cold chain (2-8°C) to designated laboratory.

Safe collection & handling of specimens in the Quarantine camp needs to be performed in identified locations as per the SOP. Specimen containers generally used are viral transport medim (VTM vials containing 3 ml medium) with falcon tubes (50 ml) as secondary layer of Triple layer packaging system. Containers needs to be correctly labeled to facilitate proper identification. Specimen request or specification forms to be placed in separate waterproof zip pouch envelopes with locking facility and pasted on the outside walls of the sample transport containers (Performa annexure). Just before the end of the 14 days quarantine period, resampling of nasopharyngeal swabs needs to be done.

- **17.0** Discharge of quarantine people from Quarantine Facility The quarantine people needs to be discharged at the end of 14 days of incubation period provided samples are negative on resampling. Instructions should be provided to self-monitor their health at their home (home quarantine) for next 14 days and immediately report to their District Surveillance officer (DSO), in case of development of symptoms suggestive of COVID-19. Written instructions were handed over to them individually. The District Surveillance Units (DSO) and State Surveillance Units (SSO) to be provided with contact details of the quarantine people to conduct active surveillance for next 14 days under intimation to the Central Surveillance Unit, IDSP (NCDC).
- **18.0** Terminal Disinfection and decontamination procedures: Quarantine facility terminal disinfection procedures to be performed as per guidelines. Cleaning/ decontamination to be performed using the proper personal protective equipment (PPE) and adopting three bucket system as prescribed in the SOP (at attached annexure).

Spraying of 1% sodium hypochlorite working solution (dilution 1:4 from an initial concentration of 4%) to be done on all the surfaces (protecting electrical points/appliances). This was followed by cleaning with a neutral detergent that is used for removing the traces formed by hypochlorite solution. While

cleaning, windows need to be opened in order to protect the health of cleaning personnel.

All frequently touched areas, such as all accessible surfaces of walls and windows, the toilet bowl and bathroom surfaces needs to be carefully cleaned. All textiles (e.g. pillow linens, curtains, etc.) should be first treated with 1% hypochlorite spray and then, packed and sent to get washed in laundry using a hot-water cycle (90°C) and adding laundry detergent. 1% hypochlorite solution should also sprayed in the PPE doffing area and discard area twice a day on daily basis. Mattresses / pillows after spraying with 1% hypochlorite should be allowed to get dry (both sides) in bright sunlight for upto 3 hrs each.

# **DAILY REPORTING FORMAT** (Daily Clinical Examination)

### COVID-19

Name	of the Centr	e:																
Addre	Address:																	
Centre	In Charge:																	
Contac	et No:																	
	Date of reporting	Censu in the Centre (8 AM)	ex	amined	Suggesti Sympton like feve cough, breathing difficulty other respirato problems	ns class	ther inical ases ad on 019- CoV	Cases referred designat hospital	ed	Cumulati cases referred t designate hospital	to ed	Cases discharge from designate hospital	ed	Cases st admitted at designat hospital	1	Censu in the Centr (8PM	e	Remarks
		M	FM	FM		F		M	FM		FM		FM		FM		F	

### Annex 2

### **Standard Operative Producers for medical personnel**

There are shift duties of the doctors may be as under

Morning: 800AM to 200 PM Afternoon: 200PM to 800 PM

Night: 800PM to 800 AM (next day)

**General instructions for medical doctors** from designated hospital (s) for performing their duty at Quarantine facility may be as under:

- a. The name of the duty officers and duty roster for to be displayed at the control room.
- b. Each team to follow the procedure mentioned below:
- c. The resident doctors on duty will report to the centre at the reporting time and mark attendance in the register.
- d. After that, they will go to clinical area to examine the quarantined people in the centre.
- e. The doctors on working duty will team up with medical officers from Quarantine facility to form a paired team (one from hospital and another from the Quarantine facility) to examine the cases.
- f. They will examine and assess the patients and report to the In-charge of the Quarantine facility.
- g. They will take care of the infection control/protective measures while examining the persons and follow guidelines placed at the door for safety/infection control measures.
- h. If any symptomatic case/ additional symptoms are observed/ reported, it should be discussed with the In-charge of the Quarantine facility for referral to the designated hospital, if required.
- They will complete examination of all patients and report before 12 noon on the same day and handover the report to the Office In-charge for onward transmission to the Ministry.
- j. They will not leave till the next relieving team arrived.
- k. They will hand over this information to the next relieving team.
- 1. They will leave the Quarantine facility with due permission of In-charge of the Quarantine facility.
- m. If any doctor has not reported due to unavoidable circumstances, present available team will inform to the concerned authority of designated hospital for substitute.
- n. In case any patient needs to be transferred due to any eventuality to the referral centre, senior most doctor will accompany the ALS Ambulance to take care of the patient till he/she reaches and handed over to the centre.
- o. The medical team may take help of psychiatric/ counsellor team if required, for psychosocial support
- p. Team to work in harmony with the Quarantine facility medical team.
- θ. The senior most doctor on duty from the designated hospital will take decision of the clinical management.

### Annex 3

# **Standard Operative Producers for Nursing Officer** (supervisor)

- Maintain log of medical professionals/staffs entering/exiting in the quarantine facility, where the quarantine people are housed.
- A designated nursing officer (infection prevention & control nurse) has to ensure that the incoming officers/ staff to the quarantine building that are wearing appropriate PPE, and they are aware of universal infection control precautions {hand washing (alcohol/ sanitizers or soap + water; mask, gloves, PPE).
- After this he/she will allow the person to enter.
- The PPE doffed off by the outgoing medical professionals needs to be disposed in the yellow bag and hand sanitization should be ensured after disposing the PPE. (PPE- donning On / doffing Off enclosed).
- Yellow bags containing the infected materials placed in the nearby gate should be disposed off daily as per the Biomedical Waste Management Rules.
- The dustbins should be covered at all times. This should be ensured by Nursing officer. If required, disinfection has to be done as advised.
- Black bags (municipal wastes) to be disposed after proper packaging daily as per the Biomedical Waste Management Rules.
- Supervise IPC in the facility in coordination with Microbiologist/Clinician

### Annex 4

### Standard Operative Producers for Movement of Health Professionals and Support Staff Inside the Quarantine facility

The movements of health professionals are to be monitored at three vital points considering the control of infection for the prevailing disease-

### **CONTROL ROOM:**

- Health professionals and support staff need to be made aware and trained in correct procedure of wearing mask and gloves.
- They need to be trained to follow the infection control measures as instructed including
  - hand washing with soap and water and sanitizing with alcohol-based sanitizers.
  - o cough etiquettes,
  - o donning and doffing of PPE etc.
  - o before entering the quarantine facility.

**Main Gate Security post:** To monitor entry of persons/visitors to the facility and ensure that the personnel should comply with instructions / including wear the mask correctly.

### Nursing Station at Quarantine building (ground floor):

- 1. Registration of name with time and purpose for entering the building
- 2. PPE should be donned here.
- 3. Nursing officer will check and ensure strict and correct wearing of PPE before entering the main quarantine area
- 4. After coming out from the main quarantine area, PPE to be doffed properly and placed in the designated bin for infective material (Yellow bag)
- 5. The hands should be sanitized before exiting the quarantine area
- 6. Mobile phones are not allowed to be used inside the building
- 7. Name of doctors to be written on the PPE with permanent marker for identification.

### Annexure-5

# Standard Operative Producers for Security Personnel at Quarantine facility

- 1. For security purpose, ensure 24 hours manning of the post of the quarantine facility.
- 2. The person manning the area must be trained and instructed to wear mask and gloves during the duty period.
- 3. Instructions for infection control measures like hand washing etc. should be properly briefed.
- 4. Doctors/Nursing staff/supporting staffs/other entering the quarantine area should wear appropriate PPE before entering the quarantine centers.
- Log of those entering/exiting the Quarantine facility should be maintained.
   Only those having specific purpose inside the Quarantine facility should be allowed to enter.
- 6. The log should be put up daily to the controlling authority.
- 7. Security guard should have a whistle to give signals to people to not come near the quarantine facility if they do not have any purpose to visit the Quarantine facility.
- 8. He should report immediately to the officer In-charge controlling the security of the quarantine facility, if anybody does not follow the instructions as directed.
- 9. The security personnel should not leave after completing his shift till his reliever reports for duty.
- 10. The officer In-charge controlling the security of the quarantine facility will supervise the duty roster and roles and responsibilities of all the personnel deployed at the quarantine area for smooth functioning.

### Annexure-6

**Requirements of Equipment for Quarantine Facility** 

Equipment	Daily Consumption for holding 300 persons
or reusable vinyl or rubber gloves for environmental cleaning     latex single-use gloves for clinical care	200
Hair covers (optional)	1500
Particulate respirators (N95, FFP2, or equivalent)	150
Medical (surgical or procedure) masks	1500
Gowns and aprons (single-use long-sleeved fluid-resistant or reusable non-fluid-resistant gowns)	150
PPE Kit	130
Alcohol-based hand rub	50
Plain soap (liquid if possible, for washing hands in clean water)	500
Clean single-use towels (e.g. paper towels)	1500
Sharps containers	5
Appropriate detergent for environmental cleaning and disinfectant for disinfection of surfaces, instruments or equipment	20 litres
Large plastic bags	200
Appropriate clinical waste bags	100
Linen bags	500
Collection container for used equipment	200

### **Human Resource requirement for Quarantine Facility**

The requisite human resources at a Quarantine Facility can be divided into two broad categories:

General Requirements of medical personnel for the facility as under

Medical personnel- (catering facility of 300 people)

- I. On- Duty Doctors in 6 hours shift of 2 doctors
- II. Nusring Staff in 6 hours shift of 4 nurses
- III. Lab. Technicians in 6 hours shift of 4 technicians
- 1. Health professionals: (Multi-disciplinary team)
  - Medical doctors (Multi-Speciality team)- General duty doctors, Specialists like Medicine, Paediatrician, Psychiatrist / Psychologist, Public Health specialist, Microbiologist etc.
  - Nursing officers
  - Pharmacists
  - Paramedics
  - Lab. Technicians (preferably)
- 2. Supporting staffs like Safai Karamchari, Housekeeping, Laundry workers, Cooks, etc.
- 3. Security staffs

### Annexure- 8

### Checklist for screening entry of persons inside the quarantine building

- Only authorised personnel should enter the quarantine facility for carrying out predetermined activity. While entering the quarantine facility, it should be ensured that personnel are wearing the requisite personal protective equipment
- A pre-identified staff should be designated to screen the personnel entering in the quarantine facility using following check-list.
- I. Is the person entering the quarantine building either doctors/nursing officers/ supporting staffs/ Govt. officials etc. posted or authorized to enter the quarantine building in the Centre?
- II. Whether the person entering the quarantine building is having duty inside the building during that time?
- III. Whether the person entering wear protective suit correctly?
- IV. Whether the person entering wear N-95 Mask correctly?
- V. Whether the person entering wear goggles correctly?
- VI. Whether the person entering wear headgear correctly?
- VII. Whether the person entering wear boots correctly?
- VIII. Whether PPE has no gaps/physical damages which can be a risk in the disease transmission?
- IX. If it is 'YES' in all Qs from 1to 9, then, the person is allowed to enter the guarantine building.
  - X. If any of the Qs is NO, then , to ask for appropriate donning of PPE initially and if not still then, to contact the concerned officer supervising the
    - nursing officers and if required, NCDC Team on duty /In-charge of the center.

### Annexure - 9

### Guidelines for Disinfection of quarantine facility (for COVID-19)

(Refer to NCDC Website for latest updates)

### **Guidelines for disinfection of guarantine facility (for COVID-19)**

**Scope**: This document aims to provide interim guidance about the environmental cleaning / decontamination in quarantine camp facilities (e.g. barracks, cubicles in rooms, offices, and toilets, etc.) where persons with potential exposure to COVID-19 have housed.

The causative agent involved in the current outbreaks of 2019-nCoV acute respiratory disease, the 2019-nCoV (genus: Betacoronavirus), belongs to the family of Coronaviridae, a large family of enveloped, positive-sense single-stranded RNA viruses. Coronaviruses are transmitted in most instances through large respiratory droplets and contact transmission, but other modes of transmission have also been proposed worldwide.

The time of survival and the conditions affecting the 2019-nCoV viability in the environment are currently unknown. According to studies assessing the environmental stability of other coronaviruses, the Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) is estimated to survive several days in the environment and the Middle East Respiratory Syndrome-related coronavirus (MERS-CoV) more than 48 hours at an average room temperature (20°C) on different surfaces [1-3].

**Environmental cleaning**: Due to the potential survival of the virus in the environment for several days, the premises and areas potentially contaminated with the 2019-nCoV should be cleaned before their re-use, using products containing antimicrobial agents known to be effective against coronaviruses. Although there is lack of specific evidence for their effectiveness against 2019-nCoV virus, cleaning with water and household detergents and use of common disinfectant products should be sufficient for general precautionary cleaning. Tests carried out using SARS-CoV showed that sodium hypochlorite is effective.

These guidelines provide guidance for environmental cleaning in quarantine facilities housing people exposed/ potential exposure toCOVID-19 and have been adapted based on the Hospital Infection Prevention and Control guidelines drafted by NCDC in collaboration with WHO and other stakeholders.

Area/Items	Item/Equipment	Process	Method/ Procedure
	Clin	ical Area	
Floors (clinical areas) – daily mopping	Dust mops Mop (No broom will be used for sweeping)  Detergent/ sanitizer-hot water, sodium hypochlorite(1%)  Three buckets (one with plain water and one with detergent solution; one bucket for sodium hypochlorite(1%)	Sweeping Cleaning Daily mopping	<ul> <li>Sweep with the dust mop or damp mop to remove surface dust. Sweep under the furniture and remove dust from corners. Gathered dust must be removed using a hearth brush and shovel.</li> <li>The sweep tool should be cleaned or replaced after use.</li> <li>Prepare cleaning solution using detergent with warm water</li> <li>Use the three-bucket technique for mopping the floor, one bucket with plain water and one with the detergentsolution.</li> <li>First mop the area with the warm water and detergent solution.</li> <li>After mopping clean the mop in plain water and squeeze it.</li> <li>Repeat this procedure for the remaining area.</li> <li>Mop area again using sodium hypochlorite 1% after drying the area.</li> <li>In between mopping if solution or water is dirty change it frequently.</li> <li>Mop the floor starting at the far corner of the room and work towards thedoor.</li> <li>Clean articles between cleaning.</li> <li>Note: Mopping should be done twice a day</li> </ul>
Ceiling and Walls	Sweeping tool Duster Bowl/ small bucket of soap solution Plain water	Damp dusting	Damp dusting with a long handledtool for the walls and ceiling done with very little moisture, just enough to collect thedust.     Damp dusting should be done in straight lines that overlap one another.     Change the mop head/cover when soiled.  Note: Should be done once a week or after examining a suspect case

	Care of mop	Hot water Detergent Sodium hypochlorite 1%	Clean with hot water and detergent solution, disinfect it with sodium hypochlorite and keep for drying upsidedown.
Doors and door knobs	Damp cloth or Sponge squeeze mop Detergent	Thorough washing	<ul> <li>The doors are to be washed with a brush, using detergent and water once a week (on one defined day); gently apply cloth to soiled area, taking care not to remove paint, then wipe with warm water to remove excess cleaningagent.</li> <li>Door knobs and other frequently touched surfaces should be cleaned daily.</li> </ul>
Isolation room	Detergent/ Sanitizer— warm water, sodium hypochlorite (1%) Three buckets (one with plain water and one with detergent solution); separate bucket for sodium hypochlorite (1%)	Terminal cleaning	Before cleaning an isolation room, liaise with infection control team for details of any special requirements. Staff will be instructed on specific cleaning procedures required with reference to Safety uniform to be worn. Chemicals or disinfectants to be used. Also, if bed screen and shower screen are to be cleaned or changed, refer cleaning in isolation rooms.
All clinical areas/ Laboratories/ Wherever spill care is required	Sodium hypochlorite (1%) Rag piece Absorbent paper Unsterile gloves Spill care kit Mop Hot water	Blood and body fluid spill care	<ul> <li>Wear non-sterile gloves.</li> <li>For large spills, cover with absorbent paper/ rag piece</li> <li>if any broken glass and sharps, using a pair of forceps and gloves, carefully retrieve. Use a large amount of folded absorbent paper to collect small glass splinters. Place the broken items into the puncture proof sharps container.</li> <li>Cover the spill with sodium hypochlorite(1%) for 10–20 minutes contact time.</li> <li>Clean up spill and discard into infectious waste bin, and mop area with soap and hot water.</li> <li>Clean the mop and mop area with 1% sodium hypochlorite.</li> <li>Wash mop with detergent and hot water and allow it to dry.</li> </ul>

Stethoscope	Alcohol-based rub/Spirit swab	Cleaning	<ul> <li>Should be cleaned with detergent and water.</li> <li>Should be wiped with alcohol based rub/spirit swab before each patient contact.</li> </ul>
BP cuffs and covers	Detergent Hot water	Washing	Cuffsshouldbewipedwithalcohol- based disinfectant and regular laundering is recommended for the cover.
Thermometer	Detergent and water Alcohol rub Individual thermometer holder	Cleaning	<ul> <li>Should be stored dry in individual holder.</li> <li>Clean with detergent and tepid water and wipe with alcohol rub in between patient use.</li> <li>Store in individual holder inverted.</li> <li>Preferably one thermometer for each patient.</li> </ul>
Injection and dressing trolley	Detergent and water  Duster Disinfectant (70% alcohol)	Cleaning	<ul> <li>To be cleaned daily with detergent and water.</li> <li>After each use should be wiped with disinfectant.</li> </ul>
Refrigerators	Detergent and water Absorbent paper or clean cloth	Cleaning (weekly)	<ul> <li>Empty the fridge and store thingsappropriately.</li> <li>Defrost, decontaminate and clean with detergent.</li> <li>Dry it properly and replace the things.</li> <li>Weekly cleaning is recommended.</li> </ul>

Area/Items	Item/Equipment	Process	Method/ procedure					
	Lodging area							
General cleaning	Detergent and warm water Mop Two buckets Clean utility gloves Handmops	Daily mopping floors Thorough washing	Scrub floors with hot water and detergent with using minimal water. (Do not pour thewater.) Clean with plainwater. Allow to dry Hypochlorite 1% mopping canbe done. Note:Recommend general cleaning procedure should be done twice a day					
Lockers, tables, cupboard, wardrobes, benches, shelves and cots	Damp duster Warm water Detergent Dry duster	Damp dusting	Damp dust with warm waterand detergent.					
Railings	Detergent/ Sanitizer–hotwater, sodium hypochlorite	Daily dusting	Damp dust with warm water and detergent followed by disinfection with hypochlorite					

	1%  Three small buckets/ or big bowls  One with plain water  One with detergent solution  One for sodium hypochlorite 1%		
Mirrors and Glass	Warm water Detergent water/ cleaning solution Damp cloth Wiper	Cleaning	Using warm water and a small quantity of detergent and using a damp cloth, wipe over the mirror and surround, then using a dry lint-free cloth, buff the mirror and glass to a clean dryfinish.
Sluice room Stainless steel/ Any other sink	Powder cleanser Detergent powder Wiper Cloth	Cleaning	<ul> <li>Sinks are to be cleaned witha powder cleanser.</li> <li>Firstwetthesink.Sprinkleonalittle powder cleanser and work around the surface with a cloth, include the plughole.</li> <li>Do not use the powder cleanseron dry sink.</li> <li>After removing spillage and any stains, flush away with running water. Wipe down the surface of the sink.</li> </ul>
Pantry furniture	Duster	Dusting	Dampdust
Telephone	Warm water detergent solution Duster	General cleaning	<ul> <li>Damp dust with warm waterand detergent.</li> <li>Payingspecialattentiontotheear and mouth piece and dry it properly.</li> </ul>
Desks	Damp cloth Furniture polish	Dusting	Wipe top sides and draw handles with a damp cloth.     Wooden desks should be cleaned with furniture polish and buffed to clear glows. Pen holder etc. to be cleaned ordusted.
Chairs (Vinyl)	Warm water and detergent	Cleaning	Wipe down with warm water and detergent. Remove any marks under arms and seat. Check fordamage to stoppers, if stopper require replacement, report to maintenance department.
Furniture and fittings	Warm water and detergent Rag piece	Dusting	Using warm water and detergent, damp dust all furniture and fittings, including chairs, stools, beds, tables, cupboards, wardrobes, lockers, trolleys, benches, shelves and storage racks, waste/ bins, fire extinguishers, oxygen cylinders, televisions window sills and dry properly.
Bed tables, bedside lockers	Warm water and detergent Wiper Duster	Cleaning	<ul> <li>Wipe down over bed table. Wipe top and underneath base and stand, using warm water and detergent. Dry oncompletion.</li> <li>Wipe down the bedside. Remove marks from fronts of draws and sides. Using warm water and detergent, wash the top to remove any sticky marks anddust.</li> </ul>
Light switches	Damp cloth (never	Cleaning	Light switches to be cleaned of dust, spots and finger

and over-bed lights	wet) Detergent Warm water		<ul> <li>marks. Clean with a damp cloth (never wet) and detergent.</li> <li>Over-bed lighting to be damp dusted. Clean with warm water and detergent.</li> </ul>
Curtains	Soft clothes Water Mild soap solution	Cleaning	Clean with water and soap for curtains
White clothes	Sodium hypochlorite 1% Tap water	Washing	Should be washed under running water and soaked in 1% sodium hypochlorite for 20minutes.  Note: PPE should be worn while washing soiled linen.
Mattress and pillow covers (cloth)	Tap water	Washing	<ul> <li>Mattress and pillows should be covered with a reusable mattress cover.</li> <li>It should be changed for each patient and when soiled sent to the laundry according to schedule.</li> </ul>
Mattress/ Pillow with rexin cover	Sodium hypochlorite 1%	Terminal  Damp dusting  and cleaning	If with rexin cover, can be cleaned with 1% sodium hypochlorite before use for next patient
Normal/ without rexin	Sunlight	Drying in sunlight	If routine mattress, dry it in bright sunlight for 1-2 days before using for next patient
Water jars	Vim powder Soap and water	Cleaning	Recommended boiled water for drinking     Water jars should be scrubbed/ cleaned with soap and water and boiled water before filling withwater.

Areas	Agents / Toilet cleaner	Procedure
	Cleaning of	of toilets
Toilet pot/ commode	Sodium hypochlorite 1%/ Soap powder / long handle angular brush	<ul> <li>Inside of toilet pot/commode:</li> <li>Scrub with the recommended agents and the long handle angular brush.</li> <li>Outside: Clean with recommended agents; use a nylon scrubber.</li> </ul>
Lid/commode	Nylon scrubber and soap powder	Wet and scrub with soap powder and the nylon scrubber inside and outside
Toilet floor	Soap powder and scrubbing brush/ nylon broom	<ul> <li>Scrub floor with soap powder and the scrubbing brush</li> <li>Wash with water</li> <li>Use sodium hypochlorite1% dilution</li> </ul>
Тар	Nylon scrubber and soap powder	Wet and scrub with soap powder and the nylon scrubber.
Outside sink	Soap powder and nylon scrubber	Scrub with the nylon scrubber.
Showers area / Taps and fittings	Warm water Detergent powder Nylon Scrubber	<ul> <li>Thoroughly scrub the floors/tiles with warm water and detergent</li> <li>Wipe over taps and fittings with a damp cloth and detergent.</li> <li>Care should be taken to clean the underside of taps and fittings.</li> </ul>

		Taps should be dried aftercleaning
Soap dispensers	Detergent and water	<ul> <li>Daily dusting</li> <li>Should be cleaned weeklywith detergent and water and dried.</li> </ul>

**Note:** Dry the floors with a separate drying mop.

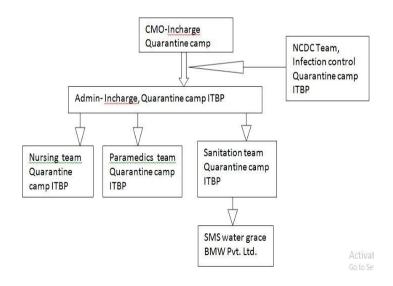
# <u>SoPs for Management of Bio-medical Waste (BMW) in the Quarantine Quarantine facility</u>

"Bio-medical waste" means any waste, which is generated during the surveillance, monitoring, diagnosis, treatment or immunization of quarantined personnel in health Quarantine facility. The Bio-medical Waste Management rules are applicable to all persons who generate, collect, receive, store, transport, treat, dispose, or handle bio medical waste in any form at the quarantine Quarantine facility.

Management of Hospital/Healthcare/Biomedical waste at the quarantine Quarantine facility is of utmost concern having global implications and immediate attention. It is documented that even the general waste generated from Quarantine Quarantine facility is a potential health hazard to the health care workers, public, flora and fauna of the area.

All officials concerned with the Quarantine facility administration and all other health care workers including medical, dental, nursing officers, other paramedical staff and waste handlers such as safai karmacharis, attendants & Sanitation attendants are well oriented to requirements of handling and management of general and biomedical waste generated at the Quarantine facility. Steps in the management of biomedical waste include generation, accumulation, handling, storage, treatment, transport and disposal.

### Organogram for Biomedical waste management( ITBP Chhawla):



Bio-medical waste has been classified in to 4 major categories to improve the segregation of waste at the source itself:

Categories	Type of Bags	Type of Waste	Treatment/Disposal
Yellow	Non chlorinated plastic, autoclavable bags	<ol> <li>Donned off PPE</li> <li>PPE with spill</li> <li>Gloves</li> <li>Shoe covers</li> <li>Head Covers</li> <li>disposable bed sheets</li> </ol>	Incineration or Plasma pyrolysis or deep burial*
Red	Non chlorinated plastic, autoclavable bags	1. Eye protection goggles 2. recyclable materials like pens 3. plastic water bottles used by quarantine people 4. Bed sheets	Autoclaving/microwaving /hydroclaving and then sent for recyling not be sent to landfill
White	Puncture, leak, tamper proof containers	1. sharp waste including metals	Auto or Dry Heat Sterilization followed by shredding or mutilation or encapsulation
Blue	Cardboard boxes with blue coloured marking	Glassware/tubelight/CFL bulbs/LED used in quarantine Quarantine facility	Disinfection or autoclaving, microwaving, hydroclaving and then sent for recycling

### **Duties of the Quarantine Quarantine facility Authorities:**

- 1. Provide training to all its health care workers and others involved in handling of bio medical waste.
- 2. To provide a safe, ventilated and secured location for storage of segregated BMW within premises of quarantine Quarantine facility.
- 3. Provide legal authorization and access to Waste collecting van/vehicle.

## Duties of the Bio-medical waste management company (SMS water grace BMW Pvt. Ltd.):

- **1.** Ensure timely collection (atleast twice daily morning & evening) of BMW from Quarantine Quarantine facility
- 2. Handing over of recyclable waste after treatment by autoclaving and incineration to authorized agencies identified by Government of India.
- 3. Assist health care facilities in training of workers.

- 4. Provide PPE kits and other safety measures to their vehicle driver, collector, helper, safai karamchari.
- 5. Issue authorized Identity card to all the persons coming to the Quarantine Quarantine facilityus.

### **Treatment and Disposal:**

- 1. Quarantine Quarantine facility does not have an onsite setup for BMW treatment facilities there it should be taken to their designated BMW facility and treatment/disposal must be done as per BMW regulations approved in their contract.
- 2. No untreated bio-medical waste shall be kept stored beyond a period of 48 hours.
- 3. All the waste (even the general waste) generated from the quarantine Quarantine facility must be treated as Biomedical waste.

### **Maintenance of Records:**

1. Records in relation to generation, collection, reception, storage, transportation, treatment and disposal shall be maintained as per rules For 5 years.

**Accident Reporting:** In case of major accident-intimate immediately and submit a report within 24 hours to the Quarantine facility incharge (CMO-Incharge ITBP Quarantine facility).

### **Implementation:**

Efficient implementation of the bio-medical waste management pivots on orientation, training and

involvement of all the staff in the Quarantine facility. Ensuring proper disposal and segregation at source is the most important step as this is the limiting factor for most health care settings. Continuous training, monitoring & supervision to monitor the implementation must be done on daily basis.

### **Generation to Disposal process:**

- 1. BMW is collected from various sites in the quarantine facility.
- 2. All Collected Bags are loaded on to special Bio Medical Waste Trucks/Van and are transported to BMW management facility for treatment and disposal thereafter.

### Procedure/ Flowchart for Treatment of Biomedical Waste:

е



Guidelines for Quarantine facility Incharge, Health professionals, Quarantine people and their family members to guide them with respect to the discharge from Quarantine facility and follow up action in the community.

# A. For the Quarantine facility Incharge & Health Professionals at the Quarantine facility:

- The final sample collection for all the travellers shall be taken up on the 13<sup>th</sup> and 14<sup>th</sup> day while being in the facility.
- The samples shall be collected and sent to the designated laboratories.
- The reports for the same shall be received latest by  $16^{th}/17^{th}$  day in the facility through ICMR.
- Based on the reports a decision can be taken to discharge the travellers.
- Discharge shall accordingly, if agreed to, will be done on the 18<sup>th</sup> day from the Quarantine facility. Quarantine facility Incharge shall accordingly intimate the travellers in advance for them to make arrangement for their onward journey.
- A detailed enumeration of the proposed place of stay by the travllers during the next 14 days will be obtained including contact numbers by the Quarantine facility Incharge.
- The Quarantine facility Incharges will plan dropping the travellers in either of the locations i.e. ISBT, Railway Station or Airport as per the preference of the travellers.

### **B.** For the Travellers in the Quarantine facility:

### 1. While travelling back home:

- Provide details of your stay for next 14 days including the contact numbers.
- Obtain list of District and State Surveillance Officers for follow up and reporting in case of any issue.
- Use triple layer surgical mask (follow correct use and disposal of mask as briefed during the stay in quarantine centre)
- Follow frequent hand-wash with soap and water or use alcohol based hand sanitizer.
- Use respiratory etiquettes (use tissue paper/ hand-kerchief to cover your nose and mouth, turn head away from the person facing of you, while coughing/ sneezing).
- Monitor your temperature twice daily.

• Retain the aircraft boarding pass/ rail ticket/ details of Journey by taxi (including contact number of drivers etc)

### 2. After reaching home

- Avoid crowded places.
- Monitor your health for a period of next 14 days (after leaving the quarantine centre).
- Monitor body temperature twice daily.
- At all times:
  - Maintain personal hygiene
  - Wash hands with soap and water frequently or use alcohol based hand sanitizer.
  - Use respiratory etiquettes (use tissue paper/ hand-kerchief to cover your nose and mouth, turn head away from the person facing of you, while coughing/ sneezing).
- Report to nearest health facility if you develop fever, cough or difficulty in breathing besides reporting it to the State and District Surveillance Officer.
- Allow attendance by health workers / respond to call received from Health functionaries. Keep their contact numbers handy.
- Inform about your health at the end of 14 days period to the Healthcare worker and State and District Surveillance Officer.

# 3. In case you develop <u>fever</u>, <u>cough or difficulty in breathing</u> any time after leaving the quarantine Centre (within next 14 days):

- Call the nearest health facility or health worker visiting you/ talking to you besides informing the State and District Surveillance Officer.
- An identified care giver (among family members) will only attend to you. He / she will wear mask and wash hands, every time he/ she comes in contact with you.
- Use surgical triple layer mask immediately on realization of symptoms.
- Get admitted to the identified health facility as advised.
- The vehicle/ ambulance which was used for transportation also needs to be disinfected. (Contact the health facility for the disinfection procedure).
- Follow infection prevention and control practices at all times and places.
- If further assistance is required, call Ministry of Health, Government of India's Control Room no. +91-11-23978046.

### C. Advice to other family members at home:

- Wash your hands with soap and water frequently.
- If the person (discharged from the quarantine centre) develops symptoms inform the health worker and also the State and District Surveillance Officer.
- In case advised to shift the patient to a health facility:
  - Share list of all contacts till date with the treating doctor/ health care worker and the State and District Surveillance
  - Family members to be in home quarantine till either medical examination rules out novel coronavirus infection or the result of sample is negative.
  - o Proper disinfection of bedding/ clothing/ room/ all personal belongings should be followed with 1% Sodium hypochlorite solution.

### **CHECKLIST FOR ESTABLISHING A QUARANTINE CENTER**

### I. Basic Information:

1)	Name of the Quarantine Centre_
----	--------------------------------

2)	Address: _
1	

- 3) Officer In charge:\_
- 4) Email address:
- 5) Phone Number:
- 6) GPS Coordinates:\_

### II. Location of quarantine centre

7)	Locate	d away fron	n the residential ar	ea?	□No	_
8)			residential area?		Tananlaa atadii	una a Chaumah a a
9)	Away 1	rom an area	where gathering of	expected (Eg:	rempies, stadit	ims, Churches
	etc):					
	Yes	Гио				

### III. Accessibility to the quarantine centre:

- 10) How far is it from the nearby airport?
- 11) How far is from the nearest railway station?
- 12) How far is the nearest bus station?
- 13) Is the road to quarantine centre is free from heavy traffic?
- 14) Is the road to quarantine centre is wide enough to have two vehicles at a time?

- 15) How far is the nearest tertiary care centre?
- 16) How far is the nearest District Hospital?

### IV. Facilities & basic amenities at quarantine facility:

- 17) How many floors are there in the quarantine building?
- 18) How many rooms available at the quarantine facility?
- 19) How many numbers of beds in each room at quarantine facility?

20)	What is the distance between beds in the quarantine room?						
21)	Is there is 24*7 supply of electricity at the facility?						
22)	Is there 24*7 supply of water at the facility?						
23)	Is there air conditioning available?						
-	If yes, it is by centralised AC or individual air conditioning in each room?						
	i. If individual AC ? a: Split b: Window						
25)	Does window space covers at least 10% of total area?						
•	How many windows in each room?						
·	T Ves T No						
27)	Is there exhaust fans in each room?						
	<ul> <li>i. If Yes, how much air exchange rate expressed in cubic feet per minute (CFM)?</li> </ul>						
20)	Technique designed facility and labels in each floor 2.2. Tyes No						
	Is there drainage facility available in each floor? ?  Is there any separate sewage line from Quarantine areas?						
23)	Yes No						
•	Are there separate exit & entry points?						
•	Is there availability of 24*7 security services at the quarantine area?						
32)	Is there any separate door for entry of non-health professionals for						
	housekeeping, catering?						
33)	☐ Yes ☐ No						
34)	Is there any separate washroom facility for each room at the facility?						
3-1)	No						
25)							
35)	If not, how many wash rooms per person/area?						
36)	Are the floors washable & easily dried?						
	Yes □ No						
•	Is the floor mappable?  Is there any in-house mess facility available at quarantine area?						
•	Is there any separate room/ resting facility for?						
33,	i. Doctors						
	ii. Nurses						
	iii. Paramedics						
	iv. Cleaning staffs						
v. Linen management							
	What is the Frequency of changing linen in Quarantine rooms?						
40)							
41)	Whether disposable of Linen used? Yes No						
	i. If No then, How they are disinfecting & cleaning linen?						
	ii. How frequently linens changed?						

42)	Is there any curtains available in the quarantine rooms/wards?
,	□No
	<ul><li>i. If yes frequency of changing them?</li><li>ii. frequency of disinfecting &amp; cleaning?</li></ul>
43)	Is there any policy for disinfecting mattress at quarantine facility?    No
44)	Is there any written policy for disinfecting beds at quarantine centres?
,	□ Yes □ No
45)	If yes, please verify policy and elaborate /
vi. Infecti	on control practices
46)	Is adequate PPE supply available at the quarantine facility?
	□ No
47)	Is there adequate supply of disinfectants at the centre?
	□ No
48)	Are the staffs in the facility trained in wearing PPE?  No
49)	Is there a separate area for donning & doffing PPE?  No
50)	Is there hand washing facility with soap with dispenser / hand sanitizer available at donning & doffing areas?
	☐ Yes ☐ No
51)	If yes, what type of hand rub dispensers are available? (select all applicable answers)  i. Pocket bottle  ii. Bottle affixed to trolley/tray
	<ul><li>iii. Bottle affixed to bed</li><li>iv. Wall dispenser</li><li>v. Dispenser located on bedside table/trolley</li></ul>
	□ Yes
52)	Whether all staff has access to hand rub dispensers??
53)	Are hand rub dispensers replaced when empty?  i. Always  ii. Intermittently

	iii. Rareliiv. Neve	r	.blo								
54)		pplica rs illus		hand	dwash tech	niaue	displave	d besi	de each	n sink?	
,	☐ Yes					4	, .				
55)				leacl	hing solution	nn of di	fferent	streng	th avai	lahle?	
	f hypochlo		litey of 5	icaci		]	inci cire .	oti eli 6	cii avai	idbic.	
	tion		YES		NO						
1%											
5%	,										
10%	)										
56)	Is there ar	ny pol	icy for r	oder	nt & pest co	ontrol r	manager	ment?	□ Ye	es	
57)	If yes, is it	being	g implen	nent	ed & follov	ved?	Yes		No		
	Are the staffs trained in infection control practices?  Yes  No  Yes  No  Yes  No										
60)	Practices??  D) What is the Frequency of cleaning of  i. floors of quarantine rooms/wards  ii. Bathrooms  iii. Ambulatory areas  iv. Resting rooms  v. What is the Frequency of cleaning high touch surfaces like door knobs bed rails etc?										
-	Yes No  Is there any separate sample collection area?  Yes No  Is there is separate thermometer & BP apparatus available at the quarantine centre?										
	☐ Yes		No								
63)	Are there	colou	r coded	bags	s available	for BM	W mana	ageme	_		
64)	Is the was	te bei	ng segr	egate	ed and disp	osed a	s per pr	otocol	? □ Ye	es	
,		•	·	•	ed as per p g disposed		I? □ Ye	es .	□ No		

#### vII. Recreational facilities

	Yes
67)	Is there provision for mobile phone or internet at the facility?
68)	Are the mobiles phone disinfected?  i. If Yes how  ii. How frequently
•	Is there any recreational room / area available?  Is there any provision for Television or Radio at the quarantine facility?  Yes No
71)	Is there a provision of printed reading materials at the facility?    No
	i. If Yes how the materials are disposed off?
vIII. Hum	an resources & logistics
72)	Is there a dedicated Infection nurse for the quarantine facility to monitor IPC activities?
73)	Is there is rotational shift for doctors/nurses/paramedics?  i. If Yes, how many shifts?  ii. Doctors in each shift  iii. Nurses in each shift  iv. Cleaning staffs in each shift
74)	Is there any pulmonologists/physician available when it is needed? Yes
75)	Is there a phlebotomist/ lab technician available when it is needed? Yes  No
76)	Is there any availability of clinical psychologist in quarantine facility?
IX. SOP &	policies
77)	Is there any guidelines/ inhouse SOP for infection control practices?    No

78)	Is there any protocol for limiting the visitors to quarantine area?
	□No
	Is there any written policy for the recreational area? ?
80)	Biomedical waste management guidelines 2016 & amendments 2019 available?
	☐ Yes ☐ No
81)	Does the quarantine health facility in charge aware of National IPC guidelines for
0-,	Γ Vos. Γ No.
	healthcare facilities 2020?
82)	Is there any linen policy available?
•	Is there any SOP for working of doctors, nurses & paramedics at quarantine
	facility?
84)	Is there any protocol for disinfecting ambulance after transporting patient to isolation centre?
85)	Is there any policy for monitoring health of staffs at quarantine area?
86)	Is there enough IEC displayed at the quarantine centre?
x. Transp	orting Patients to Isolation centre
87)	Is there any protocol for transfer of patients to tertiary care/transfer of
	symptomatic cases to isolation centre?
88)	Is there separate ambulance available for transporting patients to isolation
	centre? Yes No
•	Are the ambulance staff trained in wearing PPE & infection control practices?
90	) How far is the Isolation facility from the guarantine centre



#### National Centre for Disease Control

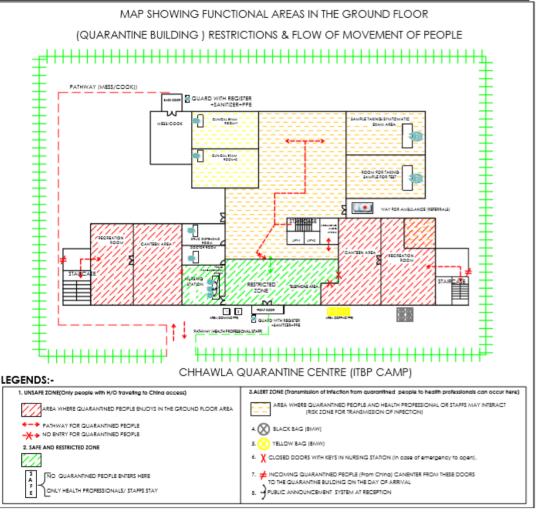




## National Centre for Disease Control (formerly National Institute of Communicable Diseases)



Directorate General of Health Services, Ministry of Health & Family Welfare





## Government of India Ministry of Health & Family Welfare

## Revised Guidelines for Dialysis of COVID – 19 patients

## Guidelines for Dialysis with reference to COVID-19 Infection

COVID-19, a disease caused by a novel corona virus (SARS CoV-2), is currently a pandemic, which produces high morbidity in the elderly and in patients with associated comorbidities. Chronic kidney disease stage-5 (CKD-5) patients on dialysis [maintenance hemodialysis (MHD)or continuous ambulatory peritoneal dialysis (CAPD)] are also vulnerable group because of their existing comorbidities, repeated unavoidable exposure to hospital environment and immunosuppressed state due to CKD-5. These patients are therefore not only more prone to acquire infection but also develop severe diseases as compared to general population.

## Patients on regular dialysis should adhere to prescribed schedule and not miss their dialysis sessions to avoid any emergency dialysis.

There will be three situations of patients who require dialysis; patients already on maintenance dialysis, patients requiring dialysis due to acute kidney injury (AKI) and patients critically ill requiring continuous renal replacement therapy (CRRT).

#### **General Guidelines for Administration**

- 1. State/UT should identify and earmark at-least one hemodialysis facility with adequate number of dialysis machines, trained staff, reverse osmosis (RO) water system and other support equipment as preparatory fixed-point dialysis unit in case of rise of Covid-19 epidemic.
- 2. Health departments may issue directives to the district administrations allowing easy movements of these patients (with one attendant) to dialysis facility. Patients who do not have private vehicles, government run transport system should be organized for facilitating transport of these patients. Patients should use their hospital papers as passto commute to the dialysis unit.
- 3. District administration should ensure that service providers for the dialysis consumables, both for MHD and CAPD should be allowed to deliver the material to the hospital or home as the case may be.

#### **General Guidance for Dialysis Unit**

- 1. Adequate medical supplies such as dialysate, dialyzers and tubing, catheters, fistula needles, disinfectant and medicines etc. must be ensured in adequate quantity
- 2. A sign board should be posted prominently in the local understandable language as well as Hindi and English asking patients to report any fever, coughing or breathing problem in dialysis unit and waiting area. The information including images for education can be obtained on the International Society of Nephrology website <a href="https://www.theisn.org/covid-19">https://www.theisn.org/covid-19</a>

- 3. All hemodialysis units should educate their personnel in hemodialysis units; including nephrologists, nurses, technicians, other staff and all patients undergoing MHD along with their care givers about COVID 19
- 4. All universal precautions must be strictly followed.
- 5. All staff should strictly follow hand hygiene (seven steps) with soap and water for 20 second before handling any patient and in between two patients. If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. If hands are visibly soiled or dirty, they should be first washed with soap and water and then an alcoholic hand rub used. Avoid touchingyour eyes, nose, and mouth with unwashed hands.
- 6. Medical and support staff treating infected patients should be monitored for COVID infection at the dialysis facility and should take necessary action if found infected.
- 7. Dialysis units should organize healthcare workers shift duties in a way that work of dialysis unit is not affected.
- 8. All hemodialysis units should be aware of the testing, triage and notification policy recommended by the Union Ministry of health and Family welfare and those by State/ UT Health Departments as well as District health authorities.
- 9. The dialysis unit staff should be trained for donning and doffing of Personal Protective Equipment (PPE) to be used for dialysis of COVID-19 positive patients.
- 10. All staff should be trained for cough etiquette, hand hygiene and proper use and disposal of mask, gown and eye glassesand the need to protect themselves.
- 11. All patients on dialysis, suspected of COVID 19 should be tested with RT PCR test as per Government of India protocol.
- 12. Patients with suspected or positive COVID-19 should be referred to COVID-19 care team as per local guidelines.

#### **GUIDELINES FOR HEMODIALYSIS**

#### I. For Patients

#### a. Before Arrival to Dialysis Unit

- 1. All units should instruct their patients to recognize early symptoms of COVID-19 (recent onset fever, Sore throat, Cough, recent Shortness of breath/dyspnea, without major inter-dialytic weight gain, rhinorrhea, myalgia/bodyache, fatigue and Diarrhea)and contact dialysis staff before coming to dialysis center. The unit needs to make necessary arrangement for their arrival in the screening area.
- 2. Patients, who are stable on MHD may be encouraged to come to the unit alone without any attendant

#### b. Screening Area

1. We recommend that dialysis unit should have a designated screening area, where patients can be screened for COVID-19 before allowing them to enter inside dialysis area. Where this is not possible, patients may wait away from the dialysis unit until they receive specific instructions from the unit staff.

- 2. The screening area should have adequate space to implement social distancing between patients and accompanying persons while waiting for dialysis staff. In screening area, every patient should be asked about:
  - Symptoms suspected of COVID-19 as above.
  - History of contact with a diagnosed case of COVID 19
  - History of contact with person who has had recent travel to foreign country or from high COVID-19 prevalence area within our country as notified by the Central and State/ UT governments respectively.
- 3. Patients with symptoms of a respiratory infection should put on a facemask before entering screening area and keep it on until they leave the dialysis unit. Dialysis unit staff should make sure an adequate stock of masks is available in screening area to provide to the patients and accompanying person if necessary.
- 4. There should be display of adequate IEC material (posters etc.) about COVID 19 in the screening area.

#### c. Inside Dialysis Unit

- 1. Suspected or positive COVID-19 patients should properly wear disposable three-layer surgical mask throughout dialysis duration.
- 2. Patients should wash hands with soap and water for at least 20 seconds, using proper method of hand washing. If soap and water are not readily available, a hand sanitizer containing at least 60% alcohol can be used.
- 3. Patients should follow cough etiquettes, like coughing or sneezing using the inside of the elbow or using tissue paper.
- 4. Patients should throw used tissues in the trash. The unit should ensure the availability of plastic lined trash cans appropriately labeled for disposing of used tissues. The trash cans should be foot operated ideally to prevent hand contact with infective material.
- 5. There should be display of adequate IEC material (posters etc.) about COVID 19 in the dialysis area.

#### II. For Dialysis Staff

#### a. Screening Area

1. The unit staff should make sure an adequate stock of masks and sanitizers are available in screening area to provide to the patients and accompanying person if necessary.

#### **b.** During Dialysis

- 1. It should be ensured that a patient or staff in a unit does not become the source of an outbreak.
- 2. Each dialysis chair/bed should have disposable tissues and waste disposal bins to ensure adherence to hand and respiratory hygiene, and cough etiquette and appropriate alcohol-based hand sanitizer within reach of patients and staff.
- 3. Dialysis personnel, attendants and caregivers should also wear a three-layer surgical facemask while they are inside dialysis unit.
- 4. Ideally all patients with suspected or positive COVID-19 be dialyzed in isolation. The isolation ideally be in a separate room with a closed door, but may not be possible in all units. The next most suitable option is the use of a separate shift, preferably the last of the day for dialyzing all such patients. This offers the advantage of avoiding long waiting periods or the need for extensive additional disinfection in between shifts. The next suitable option is to physically separate areas for proven positive and suspected cases. Where this is also not possible, we suggest that the positive or suspected patient may be dialyzed at a row end within the unit ensuring a separation from all other patients by at least 2 meters.
- 5. Staff caring for suspected or proved cases should not look after other patients during the same shift.
- 6. Dialysis staff should use of all personal protective equipment (PPE) for proven or strongly suspected patients of COVID-19. Isolation gowns should be worn over or instead of the cover gown (i.e., laboratory coat, gown, or apron with incorporate sleeves) that is normally worn by hemodialysis personnel. If there are shortages of gowns, they should be prioritized for initiating and terminating dialysis treatment, manipulating access needles or catheters, helping the patient into and out of the station, and cleaning and disinfection of patient care equipment and the dialysis station. Sleeved plastic aprons may be used in addition to and not in place of the PPE recommended above.
- 7. Separating equipments like stethoscopes, thermometers, Oxygen saturation probes and blood pressure cuffs between patients with appropriate cleaning and disinfection should be done in between shifts.
- 8. Stethoscope diaphragms and tubing should be cleaned with an alcohol-based disinfectant including hand rubs in between patients. As most NIBP sphygmomanometer cuffs are now made of rexine they should also be cleaned by alcohol or preferably hypochlorite-based (1% Sodium Hypochlorite) solutions however the individual manufacturer's manuals should be referred to.
- 9. Staff using PPE should be careful of the following issues:

- While using PPE, they will not be able to use wash room so prepare accordingly
- After wearing eye shield, moisture appears after some time and visibility may become an issue. Therefore, machine preparation can be done in non-infected area before shifting to near the patient
- If dialysis is to be done bed-side in the hospital, portable RO should be properly disinfected with hypochlorite (1% Sodium Hypochlorite) solution between use of two patients

#### DISINFECTION AND DISPOSAL PRACTICES IN DIALYSIS UNIT

- Bed linen should be changed between shifts and used linen and gowns be placed in a dedicated container for waste or linen before leaving the dialysis station. Disposable gowns should be discarded after use. Cloth gowns should be soaked in a 1% hypochlorite solution for 20 minutes before sluicing and then be transported for laundering after each use.
- Inside dialysis unit, clean and disinfect frequently touched surfaces at least thrice daily and after every shift. This includes bedside tables and lockers, dialysis machines, door knobs, light switches, counter tops, handles, desks, phones, keyboards, toilets, faucets, and sinks etc.
- It is recommended that solutions for disinfection be composed either of hypochlorite, alcohol, formaldehyde or glutaraldehyde for disinfection of surfaces in accordance with the manufacturer's instructions. Almost all common disinfectant solutions are effective in killing the virus on surfaces, the key is effective and frequent cleaning.

#### Bleach solution

- o Mix 1 liter of Medichlor with 9 liters of water. This solution can be used for upto 24 hours after which it should be discarded and a fresh solution prepared.
- As an alternative 10 Grams of household bleaching powder can be dissolved in a liter of water and used for a period of 24 hours.

#### Alcohol based solutions

- Ensure solution has at least 60% alcohol. Appropriate commercially available solutions include Aerodosin a mixture of isopropanol, glutaraldehyde and ethanol or lysoformin a mixture of formaldehyde and glutaraldehyde can be used.
- Wear unsterile but clean disposable gloves when cleaning and disinfecting surfaces. Gloves should be discarded after each cleaning. If reusable gloves are used, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other purposes. Clean hands by above method immediately after gloves are removed.
- For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces. After cleaning, launder items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely.

- Wear disposable gloves when handling dirty laundry from an ill person and then discard after each use. Do not shake dirty laundry. This will minimize the possibility of dispersing virus through the air.
- Clean and disinfect clothes buckets or drums according to guidance above for surfaces. If possible, consider placing a bag liner that is either disposable (can be thrown away) or can be laundered.

## DIALYSIS OF COVID – 19 PATIENT WITH ACUTE KIDNEY INJURY (AKI)

A small proportion of patients (~5%) of COVID – 19 develops AKI. The disease is usually mild but a small number may require RRT (Renal Replacement Therapy). In addition, even smaller proportion of patients with secondary bacterial infection will have septic shock, drug nephrotoxicity or worsening of existing CKD severe enough to require RRT (Renal Replacement Therapy).

- It is suggested that all modalities of RRT may be used for patients with AKI depending on their clinical status.
- Patient admitted in other ward of the hospital with AKI should be preferably given bed-side dialysis rather than shifting patient in main dialysis unit.
- In such situation portable reverse osmosis water in a tank will serve the purpose for the dialysis.
- If more dialysis is expected in selected area, dialysis machine may be left in the same area for future dialysis.
- Ideally, this procedure should happen in COVID 19 dedicated hospital/ward.

#### CONTINUOUS RENAL REPLACEMENT THERAPY (CRRT)

• CRRT machines are free standing and can function anywhere in the hospital using sterile bagged replacement fluid and dialysate, but operating costs are high.

#### OTHER EXTRACORPOREAL THERAPY FOR COVID-19

- Use of cytokine removal therapies with Cytosorb, Oxiris and other similar devices is unproven and is not recommended except in the context of a clinical trial.
- Cytokine storm associated with elevated levels of IL-6, IL-18 and IFN gamma are associated with more severe disease and higher mortality. Extracorporeal therapies using high volume hemofiltration or adsorption to decrease cytokine levels may theoretically be expected to confer benefit and 1 study of HVHF at 6L/hr showed cytokine reduction and improvement in SOFA scores in septic patients.

#### PERITONEAL DIALYSIS

#### 1. Patients already on CAPD

- Patients who are already receiving peritoneal dialysis (PD) treatment have the relative advantage over patients who are receiving hospital or satellite-based haemodialysis treatment as they will not be exposed to hospital environment. This will reduce their exposure to infection. However, they should arrange their delivery of supply well in time to avoid missing dialysis exchanges.
- Used dialysis bags and tubing should be properly disposed using 1% hypochlorite solution first and disposed in a sealed bag. Used dialysis fluid should be drained in the flush.

#### 2. New patient planned for CAPD

• It will be difficult to maintain a service that can commence new patients on PD, mainly through a lack of healthcare worker to insert PD catheter and to provide the intensive training required. Therefore, initiation of new patient should be avoided, unless the resources are available and the facility is equipped.

#### 3. Acute PD

Use of acute peritoneal dialysis can be lifesaving and should be used as and when required and, in the setting, where hemodialysis facility is not available. Health care worker should use all precautions while initiating acute PD and discard used consumables properly.

#### PERSONAL PROTECTIVE EQUIPMENTS (PPE)

Personal protective equipment must be used while dialyzing COVID-19 positive patients. These include:

- Shoe covers
- Gown
- Surgical cap or hood
- Goggles or eye shields
- Mask: Ideally all masks should be N95 respirators with filters. However, as the life of such masks is approximately 6-8 hours and they can be uncomfortable over a long term and are also in short supply, they should be prioritized for aerosol generating procedures, namely intubation, open suction and bronchoscopy. Surgical triple layer masks and cloth masks can be used as alternatives for all other procedures.
- Surgical gloves.

The correct method of donning and doffing personal protective equipment's (PPE) can be viewed on YouTube at https://youtu.be/NrKo2vWJ8m8. However, it is always better to give hands on training of donning and doffing to staff who is going to handle suspected or positive patients.

करोना विषाण् आजाराच्या (कोवीड - १९) अनुषंगाने खाजगी वैद्यक व्यावसायिक व संबंधित रुग्णालयामार्फत करावयाच्या कार्यवाहीबाबत स्चना

महाराष्ट्र शासन वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग शासन निर्णय क्रमांक : वेशिवि २०२०/प्र.क्र.१०९/प्रशा -२ नवीन मंत्रालय. मुंबई ४०० ००१ दिनांक : **०१** एप्रिल. २०२०.

प्रस्तावना :-

कोवोड-१९ या साथोच्या आजाराचा होणारा संभाव्य प्रादुर्भाव रोखण्यासाठी राज्यातील खाजगी वैद्यक द्यावसायिक यांच्यावतीने चालविण्यात येत असलेल्या रुग्णालयांत उपचारार्थ वाखल होणाऱ्या रुग्णांवर उपचार करताना रंसाधारण रुग्ण व कोविड-१९ विषाणुमुळे बाधित रुग्ण यांमध्ये विलगीकरण राखणे आवश्यक आहे. बहुतांश रुग्णालयामध्ये अशाप्रकारे रुग्णांचे विलगीकरण केले जात नाही. तसेच काही रुग्णालयांनी ओपोडी सेवा स्थिगत केल्याची बाब आढळून आली आहे. त्यामुळे संबंधित रुग्णालयांनी कोणती कार्यप्रणाली राबविण्यात यांची याबाबत राज्य शासनामाफैत सूचना निर्गीमित करण्याची बाब विचाराधीन होती.

#### शासन निर्णय :-

करोना विघाण् आजाराच्या (कोवीड - १९) अनुषंगाने छाजगो वैद्यक ब्यावसायिक व संबंधित रुग्णालयामार्फत करावयाच्या कार्यवाहीबाबत पृहीलप्रमाणे सूचना देण्यात येत आहेत :-

- राज्यात कोवोड-१९ आजाराची साथ पसरलेली असून सर्व खाजगी वैद्यक व्यावसायिकांनी त्यांचे दवाखाने/ रुग्णालये नियमितपणे चालू ठेवण्यात यावीत. तथापि. सदर रुग्णालये चालू असताना कोवीड-१९ संशिपत रुग्णांचा इतर रुग्णांशो संपर्क येणार नाही. याची वक्षना घेण्यात यावी.
- २. सर्व दवाखाने/ रुग्णालये यांनी केंद्रीय आरोग्य व कुटुंब कल्याण मंत्रालय, नवी दिल्ली यांनी Infection. Prevention and Control याबाबत निर्णीमत केलेल्या मार्गदर्शक सूचनांचे काटेकोरपणे पालन करावे, सदर सूचना https:// nedc.gov.in/WriteReadData/1892s/6230162051583507894.pdf या Web Link वर उपलब्ध आहेत.
- कोणत्याही रुग्णामध्ये ताप. खोकला. श्वसनाचा त्रास ही लक्षणे आढळल्यास सदर रुग्णास रुग्णालयाच्या प्रवेशद्वारावरच वेगळे करण्यात यावे व त्याला Triple Layer Mask देण्यात येळन तद्नंतरच पृढील तपासणी करण्यात यावां. सदर रुग्णाच्या तपासणीअंती तो कोवोड-१९ आजाराचा संशीयत रुग्ण असल्यास त्या रुग्णास तातडीने जवळच्या कोवोड-१९ रुग्णालयात संदर्भीत करण्यात यावे, तसेच संबंधित रुग्णाच्या तपासणी करिता वापरण्यात आलेली सर्व उपकरणांचे (Instruments) निर्मतुकीकरण करण्यात यावे.
- ४. कोवोड-१९ संशीयत रूग्ण ओळखण्याकरिता https:// nedc.gov.in/WriteReadData/1892s/89568514191583491940.pdf या Web Link घर माहिती उपलब्ध आहे. त्याची प्रत सोबत जोडली आहे.
- ५. संशीयत रुग्णास फक्त १०८ ॲम्बुलन्स माफंतच कोवीड-१९ साठी निश्चीत केलेल्या संबंधित रुग्णालयात पाठीवण्यात यावे. अशा ॲम्बुलन्स सेवा प्रत्येक दिकाणी उपलब्ध होणेबाबत आयुक्त, राष्ट्रीय आरेग्य अभियान यांनी दक्षता घ्यावी. तसेच संशीयत रुग्णास संदर्भीत करताना शासनाने निर्गीयत केलेल्या Transportation बाबतच्या मार्गदर्शक सूचनांचे पालन करणे आवश्यक राहोल. सदर सूचना <a href="https://www.mohfw.gov.in/pdf/Standers/OperatingProcedure/SOPfortransportingasuspector confirmedcaseofCOVID19.pdf/या Web Link वर उपलब्ध आहेत.">https://www.mohfw.gov.in/pdf/Standers/OperatingProcedure/SOPfortransportingasuspector confirmedcaseofCOVID19.pdf/या Web Link वर उपलब्ध आहेत.</a>

- ६. कोवीड-१९ च्या रुग्णांवर उपचाराची सुविधा असलेल्या रुग्णालयांची आणि शासकीय वैद्यकीय महाविद्यालयांची यादी सर्व संवंधित जिल्हाधिकारी यांचेमार्फत प्रसिध्द करण्यात यावी.
- प्रस्तुत आदेश हे सार्वजनिक आरोग्य विभागाच्या सहमतीने निर्गीमत करण्यात येत आहेत.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावानं.

(डॉ.संजय मुखर्जी) सचिव महाराष्ट्र शासन

#### प्रत.

- १. मा. राज्यपाल यांचे सचिव, राज्यपाल सचिवालय, राजभवन, मलबार हिल, मुंबई ४०० ०३५.
- २. मा.मुख्यमंत्री यांचे अपर मुख्य सचिव, मंत्रालय, मुंबई ४०० ०३२,
- 🗻 ३. मा. मंत्री (वै.शि.) यांचे खाजगी सचिव, मंत्रालय, मुंबई ४०० ०३२, -
  - ४. मा. विरोधी पक्षनेता, महाराष्ट्र विधान परिपद, विधान भवन, मुंबई ४०० ०२१.
  - ५. मा. विरोधी पक्षनेता, महाराष्ट्र विधानसभा, विधान भवन, मुंबई ४०० ०२१.
- ६. मा. राज्यमंत्री (वै.शि.) यांचे खाजगी सचिव, मंत्रालय, मुंबई ४०० ०३२.
- 🥦 . मुख्य सचिव. महाराष्ट्र शासन, मंत्रालय, मुंबई ४०० ०३२.
- ८. अपर मुख्य सचिव, उद्योग ऊर्जा व कामगार विभाग, मंत्रालय, मुंबई.
- अपर मुख्य सचिव, वित्त विभाग, मंत्रालय, मुंबई.
- ्र १०. प्रधान सचिव, सार्वजनिक आरोग्य विभाग, मंत्रालय, मुंबई.
- ११. प्रधान सचिव, नगर विकास विभाग, मंत्रालय, मुंबई,
- १२. प्रधान सचिव, मंत्रालय कोरोना नियंत्रण कक्ष, मंत्रालय, मुंबई,
- १३. सर्व विभागीय आयुक्त.
- १४. आयुक्त, राष्ट्रीय आरोग्य अभियान, महाराष्ट्र राज्य, मुंबई.
- १५. सर्व जिल्हाधिकारी.
- १६. महासंचालक, माहिती व जनसंपर्क, महाराष्ट्र राज्य, मुंबई.
- 🚜७. संचालक. वैद्यकीय शिक्षण व संशोधन, महाराष्ट्र राज्य, मुंबई.
- **१८.** संचालक, आरोग्य संवा, मुंबई व पुणे.
- १९. आयुक्त, सर्व महानगरपालिका/ नगरपालिका.
- २०. सर्व मुख्य कार्यकारी अधिकारी, जिल्हा परिषद.
- २१. सर्व जिल्हा शल्य चिकित्सक.
- २२. सर्व जिल्हा आरोग्य अधिकारी, सर्व जिल्हा परिषद.
- २३. सर्व सहसचिव/ उपर्साचव/ अवर सचिव/ कक्ष अधिकारी. वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय.
- ्रश्.सर्व अधिष्ठाता, शासकीय वैद्यकीय/ दंत महाविद्यालय व रुग्णालये.
  - २५. निवडनस्ती प्रशासन -२.

#### National Centre for Disease Control Directorate General of Health Services MoHFW, GOI, New Delhi

#### The updated case definitions and contact-categorisation

It has been observed that WHO has recently updated the case definitions based on the current information available and will be revised as new information accumulates. India may also need to adapt case definitions depending on current epidemiological situation. Based on the available information on COVID-19, the following case definitions are put forth for approval:

Suspect Case:

A patient with acute respiratory illness {fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath)}. AND a history of travel to or residence in a country/area or territory reporting local transmission (See NCDC website for updated list) of COVID-19 disease during the 14 days prior to symptom onset:

OR

A patient/Health care worker with any acute respiratory illness **AND** having be in *contact* with a confirmed COVID-19 case in the last 14 days prior to onset consymptoms;

OR

A patient with severe acute respiratory infection {fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness breath)} AND requiring hospitalization AND with no other etiology that fully explains the clinical presentation;

OR

A case for whom testing for COVID-19 is inconclusive.

Laboratory Confirmed case:

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

#### Updated definition of contact:

A contact is a person that is involved in any of the following:

- Providing direct care without proper personal protective equipment (PPE) for COVID-19 patients
- Staying in the same close environment of a COVID-19 patient (including workplass classroom, household, gatherings).
- Traveling together in close proximity (1 m) with a symptomatic person who late tested positive for COVID-19.

#### High Risk Contact:

- Touched body fluids of the patient (Respiratory tract secretions, blood, vomit, saliva, urine, faeces)
- Had direct physical contact with the body of the patient including physical examination without PPE.

# No: T-16017/5/2020-iGOT Government of India Ministry of Personnel, Public Grievances & Pensions D/o Personnel & Training (Training Division)

Old JNU Campus, New Delhi Dated: 07th April, 2020

#### OFFICE MEMORANDUM

Subject: iGOT (Integrated Govt. Online Training) courses on DIKSHA platform on COVID-19 pandemic.

\*\*\*\*

The undersigned is directed to say that as all are aware, India faces a significantly higher threat from COVID-19 pandemic. It will be pertinent to take note of the fact that India's first line of workers is already engaged in COVID relief and doing commendable job. However, a larger force will be needed to replace the first line and to tackle the exponential or geometric increase in positive COVID cases in the subsequent stages of the pandemic.

- 2. Accordingly, to take care of the training needs of the frontline workers, the launch of the iGOT platform has been fast-forwarded, and using the MoHRD DIKSHA as a host, has been retro-fitted to the purpose requested by the Empowered Group of Officers led by Shri Arun Panda.
- 3. A version of iGOT fitted to these needs has been launched with the following URL link <a href="https://igot.gov.in">https://igot.gov.in</a>. The platform will provide the training modules on flexitime and on site basis so that the COVID response can be delivered at scale for the workforce needed to tackle the pandemic.
- 4. Courses on iGOT have been launched for Doctors, Nurses, Paramedics, Hygiene Workers, Technicians, Auxiliary Nursing Midwives (ANMs), State Govt. Officers, Civil Defence Officials,

....02/-

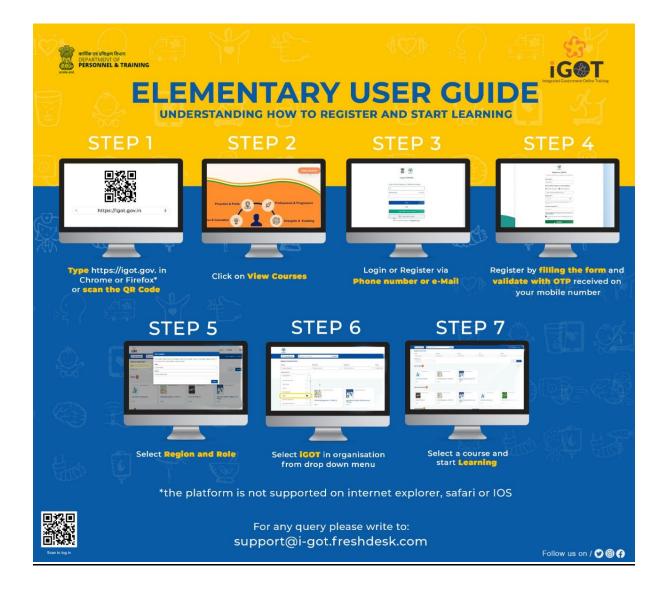
various Police Organisations, National Cadet Corps (NCC), Nehru Yuva Kendra Sangathan (NYKS), National Service Scheme (NSS), Indian Red Cross Society (IRCS), Bharat Scouts & Guides (BSG) and other volunteers at this stage. The details are as under:

- (i) The URL link is <a href="https://igot.gov.in">https://igot.gov.in</a> (QR Code is at Annexure-V).
- (ii) User Instructions Manual is at Annexure-I.
- (iii) Pamphlet of courses alongwith the Course QR Code is at Annexure-II.
- (iv) Instructions for content creation are at Annexure- III.
- (v) Launch Advertisements are at Annexure IV & V.
- 5. It is requested that wide publicity be made and more and more members of the organisations concerned be encouraged to onboard the iGOT platform and undergo online training so that the pandemic may be handled efficiently.

Under Secretary to the Govt. of India

- 1. All Ministries/Departments of the Govt. of India
- 2. Chief Secretaries of all State Govts./Union Territories
- 3. Shri Arun Panda, Secretary, MSME Chairman, Empowered Group on Augmenting Human Resources and Capacity Building.

#### Annexure - I

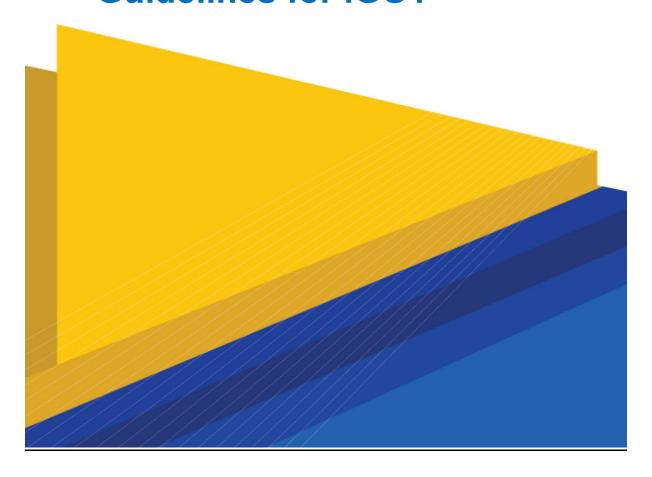








## **Content Creation Guidelines for iGOT**



#### 1. Guidelines for Content Creation on i-GOT

#### I TYPE OF ASSET

- A. Video
- B. Slide Show
- C. Animation
- D. Interactive

### II GUIDELINES: Please mark an X if the parameters will be met; NA if not applicable

Hygiene factors	Х				
Content does not have any factual errors					
Content is free from technical glitches					
Audio/Video is clear and in sync					
Content is not derogatory					
Content does not violate any IP rights or licencing agreement usage restrictions					
Technical Aspects					
Video content or animation should be between 1-7 minutes long					
Slide show should not exceed more than 15 frames/slides					
Content can easily load on a mobile phone					
Production aspects (for videos recorded on phones)					
Video should be recorded in landscape mode					
Video should be recorded using the back camera					
Subjects should not be lit from behind					
Content does not have distracting elements – like loud background music, too much animation etc.					
Usability Aspects					
Content lends itself well to dubbing or subtitling					
Appropriate instructions for content use are built into the content					

2|Page

#### **Annexure - III**

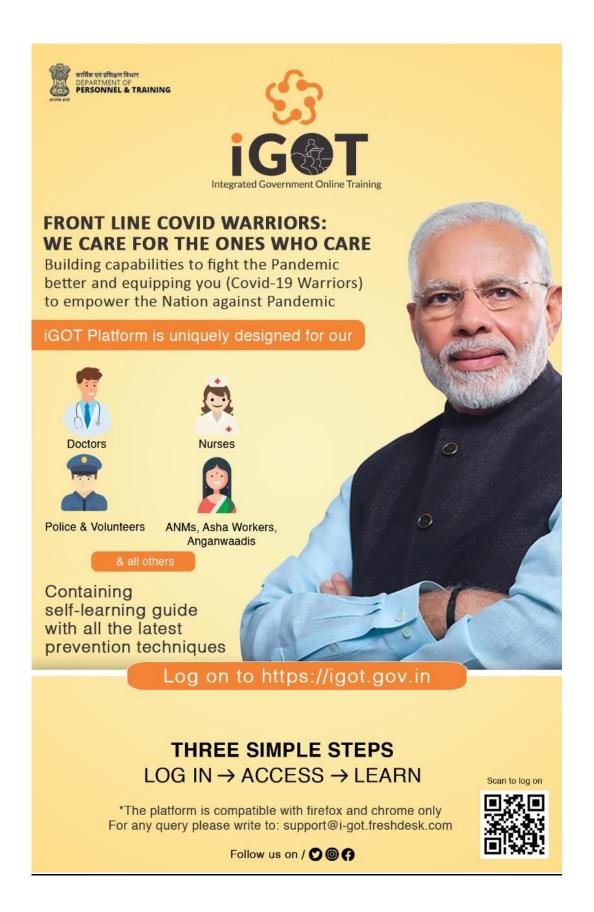
**Content Creation Guidelines for iGOT** 

#### 2. Technical Compliance for i-GOT

Format compliance					
Video (MP4/ WebM)					
Slideshow (ECML)					
Interactive (ECLM/ HTML zip/H5P)					
Document (PDF/ EPub)					
File size					
Less than 50 MB					

**3**|Page





#### All India Institute of Medical Sciences New Delhi

**Guidelines for Re-Use of Personal Protective Equipment** 

Note: This is a dynamic document and shall be modified according to latest recommendations and scientific evidence.

#### **PREAMBLE**

The COVID-19 pandemic has strained our resources tremendously in the healthcare setting. One of the most urgent issues is the fast depletion of personal protective equipment (PPE) used in the care of patients. This is a significant concern for healthcare workers' health and safety. Many countries have already exhausted or soon will exhaust their stockpile of PPE. This is despite adopting PPE sparing practices as the number of COVID-19 cases in the affected countries increases at an exponential rate and manufacturers struggle to keep up with the worldwide demand. Existing CDC guidelines recommend a combination of approaches to conserve supplies while safeguarding health care workers in such circumstances including minimizing the number of individuals who need to use respiratory protection, implementing practices allowing extended use and/or limited reuse of N95 respirators etc.

Decontamination and reuse of PPEs may provide another solution by extending existing on-hand supplies. Currently, decontamination of PPEs for purposes of reuse is not recommended, primarily because of concerns that decontamination would degrade the performance especially of the respirator. Preliminary work on the decontamination of N95 masks has been published in recent years. However, given the uncertainties on the impact of decontamination on respirator performance, these should not be worn by HCWs when performing or present for an aerosol-generating procedure.

The methods available for disinfection are only considered as extraordinary last-resort methods in the event of imminent shortages of PPE. They should only be applied after a careful evaluation of the situation and after exploring the possibility of resource-conscious, rational PPE use, for example by extending a respirator's lifespan beyond its normal limits. These guidelines have been adapted according to the local scenario and materials available.

#### Protocol For Decontamination of Coveralls and N95 Respirators<sup>6-8</sup>

**Segregation:** Used coveralls [manufactured by Dupont (Tyvek- white/ Tychem- Grey color) **OR** by Kimberly Clark (A30- white color)] and N95 respirators (all types) should be deposited into separate clearly labelled **RED** bins with **RED double bags**.

**Note**: Used coveralls should be kept in closed bins/sealed bags in separate locked room until they are collected for reprocessing and decontamination.

#### **Requirements:**

- Minimum two designated adjoining rooms (one decontamination room for actual decontamination process & one processing room with clean areas for packing and dispatching decontaminated coverall).
- Hydrogen Peroxide Vapour (HPV) generator + clothes-clips (plastic/wooden)+ clothes-lines/ curtain lines with hooks (for N95)
- 11% commercially available stabilized Hydrogen Peroxide (e.g. Baccishield or Ecoshield in hospital supply)
- Measurement cylinders
- Closed bins/large plastic bags
- Stool/chair for standing while clipping the coveralls
- Permanent markers.
- Sealing machine with plastic pack rolls.
- PPE requirement for the processing staff [gown, N95 masks, nitrile gloves, heavy duty gloves, goggles, face shield, long boots, sterilium). The staff involved in this should be on hydroxychloroquine prophylaxis.
- Logbooks

**Working solution:** Make doubling dilution of 11% Hydrogen Peroxide according to volume of the room (see table).

Choose cycle/running time depending on the volume of the room as indicated below:.

Room Volume	Hydrogen Peroxide (11%) in ml	RO water in ml	Final volume	Cycle/Running time at 32 ml /min in SATEJ PLUS machine
1000 cu ft	100 ml	100 ml	200 ml	6 min
2000 cu ft	200 ml	200 ml	400 ml	12 min
3000 cu ft	300 ml	300 ml	600 ml	19min
4000 cu ft	400 ml	400 ml	800 ml	25min
5000 cu ft	500 ml	500 ml	1000 ml	31min
6000 cu ft	600 ml	600 ml	1200 ml	37min

#### **Procedure:**

Have the clothes line placed at a height of around 7 ft. Keep a gap of 3ft between each line.

- > Seal entire room (including AC vents), except the door, using brown tape.
- ➤ Clip coveralls to clothes-lines suspended at each shoulder or hand using hangers. Ensure that the zip is open to expose the inner part. Keep a gap of at least 1 foot between each coverall.
- ➤ N95 masks can be clipped by the elastic band/ or hung on hooks on the clothes line with a gap of half foot between each mask.
- Ensure that HPV generator is plugged in and in position (45 degree angle), and there are no obstructions between HPV generator and suspended coveralls.
- Exit decontamination room and doff the gloves and gown at threshold. Discard in red bin. Perform hand hygiene.
- > Start the HPV generator cycle.
- Let the room be sealed for at least 2 hrs after the cycle finishes.
- ➤ This completes the decontamination cycle.
- ➤ Open door- you will see fog; check the machine container to confirm that the solution was used. Aerate by switching on ceiling fans for 4 hours.
- After completion of decontamination cycle, collect decontaminated PPE in a clean container. The staff should don fresh PPE again.
- The collected PPE should then be moved to the adjacent room.
- The coveralls should be folded properly and packed in plastic bags
- The N95 masks should be placed in a separate box and sealed—NEED to work this out as there are different types.

•

Note: Biological indicator containing *Geobacillus stearothermophilus* spores may be used weekly, in separate locations inside the room, for quality control purpose.

#### **Protocol for Re-use of Face shields and Goggles:**

**Segregation**: Used face shields/goggles should each be deposited into separate clearly labelled **RED** bins/bags.

**Equipment and materials required:** 0.5% sodium hypochlorite- freshly prepared (see annexure); 70% alcohol (Bacillol solution), red buckets, flat surface for drying, clean pads/wipes.

#### Procedure<sup>12</sup>:

- Immerse face shields and goggles in buckets of freshly prepared (not more than 4 hrs old) 0.5 % sodium hypochlorite solution for 10 minutes.
- Take out the face shields/goggles from the bin.
- Dry on a flat surface.
- Only after the surface is completely dry, wipe all surfaces with 70% alcohol using a clean pad/wipes.
- Face shields/goggles can be used once dry.
- Place these in a new clean container.
- **PPE for re-processing staff** (gown, N95 masks, nitrile gloves, heavy duty long gloves, goggles, face shield, long boots, alcohol based hand rub). The staff involved in this should be on hydroxychloroquine prophylaxis.
- Log book

#### **Annexure:**

#### SOP to make 0.5% hypochlorite

- I. Procedure when 10% Sod. Hypochlorite solution is in hospital supply:
  - a. One part (1) of sodium hypochlorite solution in nineteen (19) parts of water.

#### II. Procedure when 4% Sod. Hypochlorite solution is in hospital supply:

a. One part (1) of sodium hypochlorite solution in seven (7) parts of water.

Change solution after every four hours. Emptying of bin containing sodium hypochlorite to be done in the sluice room. ICNs in each area should help to standardise the protocol.

#### **References:**

- Ranney ML, Griffeth V, Jha AK. Critical Supply Shortages The Need for Ventilators and Personal Protective Equipment during the Covid-19 Pandemic. N Engl J Med. 2020 Mar 25.
- 2. NHS staff 'gagged' over coronavirus shortages. Available at <a href="https://www.theguardian.com/society/2020/mar/31/nhs-staff-gagged-over-coronavirus-protective-equipment-shortages">https://www.theguardian.com/society/2020/mar/31/nhs-staff-gagged-over-coronavirus-protective-equipment-shortages</a>
- 3. World Health Organization. <a href="https://www.who.int/news-room/detail/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide">https://www.who.int/news-room/detail/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide</a>.
- 4. Mahase E. Novel coronavirus: Australian GPs raise concerns about shortage of face masks. BMJ 2020;368:m477.
- 5. CDC, Centers for Disease Control and Prevention. Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings. Available from:
  - $\underline{https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html}$
- 6. CDC, Centers for Disease Control and Prevention. Decontamination and Reuse of Filtering Facepiece Respirators using Contingency and Crisis Capacity Strategies. Available at: <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html">https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html</a>
- 7. Schwartz A, et al. Decontamination and Reuse of N95 Respirators with Hydrogen Peroxide Vapor to Address Worldwide Personal Protective Equipment Shortages During the SARS-CoV-2 (COVID-19) Pandemic(PDF 175k) Antony Schwartz et al. Duke University, *Applied Biosafety: Journal of ABSA Internationa. (Accepted manuscript). Available at:* https://absa.org/wp-content/uploads/2020/03/ABJ-200326\_N-95\_VHP\_Decon\_Re-Use.pdf
- 8. DuPont Response to Coronavirus (COVID-19) Prevention and Control. Available at: <a href="https://www.dupont.com/news/dupont-response-novel-coronavirus-prevention-and-control.html">https://www.dupont.com/news/dupont-response-novel-coronavirus-prevention-and-control.html</a>
- 9. Fisher, E. et al. Development of a Test System to Apply Virus Containing Particles to Air Permeable Materials for the Evaluation of Decontamination Procedures for Filtering Facepiece Respirators. *Applied and Environmental Microbiology*, 75(6), 2009, 1500-1507.
- 10. Vo, E.; Rengasamy, S.; Shaffer, R. Development of a test system to evaluate procedures for decontamination of respirators containing viral droplets. *Applied and Environmental Microbiology*, 75(23), 2009, 7303-7309.
- 11. Viscusi D.J. et al. Evaluation of Five Decontamination Methods for Filtering Facepiece Respirators. *Annals of Occupational Hygiene*, 53(8), 2009, 815-827.
- $12. \ \ Prusa\ Face\ Shield\ disinfection\ .\ Available\ at:\ https://help.prusa3d.com/en/article/prusa-face-shield-disinfection\_125457/$

## INDIAN COUNCIL OF MEDICAL RESEARCH DEPARTMENT OF HEALTH RESEARCH

Date: 07/04/2020

## Total Operational Government Laboratories Supported (provided diagnostic kits or reagents) by ICMR 139 + 3 collection sites:

			+ 5 conection sites.
S. No.	Names of States		es of Medical Colleges
1.	Andhra Pradesh	1.	Sri Venkateswara Institute of Medical Sciences, Tirupati
	(6)	2.	Rangaraya Medical College, Kakinada
		3.	Sidhartha Medical College, Vijaywada
		4.	Govt. Medical College, Ananthpur
		5.	Guntur Medical College, Guntur
		6.	Rajiv Gandhi Institute of Medical Sciences, Kadapa
2.	Assam (5)	7.	Gauhati Medical College, Guwahati
		8.	Regional Medical Research Center, Dibrugarh
		9.	Jorhat Medical College, Jorhat
		10.	Silchar Medical College, Silchar
		11.	Fakkhruddin Ali Ahmed Medical College, Barpeta
3.	Bihar (4)	12.	Rajendra Memorial Research Institute of Medical
			Sciences, Patna
		13.	Indira Gandhi Institute Medical Sciences, Patna
		14.	Patna Medical College, Patna
		15.	Darbhanga Medical College, Darbhanga
4.	Chandigarh (2)	16.	Post Graduate Institute of Medical Education &
			Research, Chandigarh
		17.	Govt. Medical College, Chandigarh
5.	Chhattisgarh (2)	18.	All India Institute of Medical Sciences, Raipur
		19.	Late Baliram Kashyap M Govt. Medical College,
			Jagdalpur
6.	Delhi (7)	20.	All India Institute Medical Sciences
		21.	Lady Hardinge Medical College
		22.	National Centre for Disease Control
		23.	Ram Manohar Lohia Hospital
		24.	Institute of Liver & Biliary Sciences
		25.	Army Hospital Research & Referral
		26.	Maulana Azad Medical College
7.	Gujarat (6)	27.	BJ Medical College, Ahmedabad
		28.	MP Shah Govt Medical College, Jamnagar
		29.	Govt. Medical College, Surat
		30.	Govt. Medical College, Bhavnagar
		31.	Govt. Medical College, Vadodara
		32.	Govt. Medical College, Rajkot
8.	Goa (1)	33.	Goa Medical College, Goa
9.	Haryana (2)	34.	Pt. B.D. Sharma Post Graduate Inst. Of Med. Sciences,
			Rohtak, Haryana
		35.	BPS Govt. Medical College, Sonipat
10.	Himachal Pradesh	36.	Indira Gandhi Medical College, Shimla
	(2)	37.	Dr. Rajendra Prasad Govt. Medical College, Tanda
11.	Jammu & Kashmir	38.	Govt. Medical College, Jammu
	(4)	39.	Command Hospital (NC) Udhampur
		40.	Sher-i-Kashmir Institute of Medical Sciences, Srinagar

S. No.	Names of States	Nam	es of Medical Colleges
		41.	Govt. Medical College, Srinagar
12.	Jharkhand (2)	42.	MGM Medical College & Hospital, Jamshedpur
		43.	Rajendra Institute of Medical Sciences, Ranchi
13.	Karnataka (10)	44.	Hassan Inst. Of Med. Sciences, Hassan
		45.	Mysore Medical College & Research Institute, Mysore
		46.	Shivamogga Institute of Medical Sciences, Shivamogga
		47.	Command Hospital (Air Force), Bengaluru
		48.	Bangalore Medical College & Research Institute, Bengaluru
		49.	National Institute of Virology, Bangalore Field Unit, Bengaluru
		50.	Gulbarga Institute of Medical Sciences, Gulbarga
		51.	Vijaynagar Institute of Medical Sciences, Bellary
		52.	National Institute of Mental Health and Neuro-
			Sciences, Bangalore
		53.	Wenlock District Hospital, Mangalore
		54.	Karnataka Institute of Medical Sciences, Hubli
14.	Kerala (10)	55.	National Institute of Virology, Field Unit, Allapuzzha
	, ,	56.	Govt. Medical College, Thiruvanathapuram
		57.	Govt. Medical College, Kozhikode
		58.	Govt. Medical College, Thrissur
		59.	Rajiv Gandhi Center for Biotechnology,
			Thiruvanathapuram
		60.	Sree Chitra Tirunal Institute of Medical Sciences,
			Thiruvanathapuram
		61.	State Public Health Laboratory, Trivandrum
		62.	Inter University, Kottayam
		63.	Malabar Cancer Center, Thalassery
		64.	Central University of Kerala, Periye, Kasaragod
15.	Maharashtra (15)	65.	National Institute of Virology, Pune
		66.	Seth GS Medical College & KEM Hospital, Mumbai
		67.	Kasturba Hospital for Infectious Diseases, Mumbai
		68.	National Institute of Virology Field Unit, Mumbai
		69.	Armed Forces Medical College, Pune
		70.	BJ Medical College, Pune
		71.	Indira Gandhi Govt. Medical College, Nagpur
		72.	Grant Medical College & Sir JJ Hospital, Mumbai
		73.	Govt. Medical College, Aurangabad
		74.	V. M. Government Medical College, Solapur
		75.	Haffkine Institute, Mumbai
		76.	Shree Bhausaheb Hire Govt. Medical College, Dhule
		77.	Government Medical College, Miraj
		78.	All India Institute of Medical Sciences, Nagpur
		79.	Nagpur Veterinary College, MAFSU, Nagpur
16.	Madhya Pradesh	80.	All India Institute of Medical Sciences, Bhopal
	(6)	81.	National Institute for Research on Tribal Health,
			Jabalpur
		82.	Mahatma Gandhi Memorial Medical College, Indore
		83.	Gandhi Medical College, Bhopal

S. No.	Names of States	Nam	es of Medical Colleges
		84.	Bhopal Memorial Hospital & research Centre, Bhopal
		85.	Gajra Raja Medical College, Gwalior
17.	Manipur (2)	86.	Jawaharlal Nehru Institute of Med. Sciences, Imphal-
			East, Manipur
		87.	Regional Institute of Medical Sciences, Imphal
18.	Meghalaya (1)	88.	North Eastern Indira Gandhi Regional Institute of
			Health & Medical Sciences, Shillong, Meghalaya
19.	Mizoram (1)	89.	Zoram Medical College
20.	Odisha (3)	90.	Regional Medical Research Centre, Bhubaneshwar
		91.	All India Institute of Medical Sciences, Bhubaneshwar
		92.	SCB Medical College and Hospital, Cuttack
21.	Puducherry (1)	93.	Jawaharlal Institute of Postgraduate Medical Education
			& Research, Puducherry
22.	Punjab (2)	94.	Govt. Medical College, Amritsar
		95.	Govt. Medical College, Patiala
23.	Rajasthan (8)	96.	Sawai Man Singh Medical College, Jaipur
		97.	Dr. Sampurnan and Medical College, Jodhpur
		98.	Jhalawar Medical College, Jhalawar
		99.	RNT Medical College, Udaipur
		100.	SP Medical College, Bikaner
		101.	All India Institute of Medical Sciences, Jodhpur
		102.	JLN Medical College, Ajmer
		103.	Govt. Medical College, Kota
24.	Tamil Nadu (11)	104.	King Institute of Preventive Medicine & Research,
		405	Chennai
		105.	Madras Medical College, Chennai
		106.	Govt. Theni Medical College, Theni
		107.	Tirunelveli Medical College, Tirunelveli
		108. 109.	Govt. Medical College, Thiruvarur
		1109.	Kumar Mangalam Govt. Medical College, Salem Coimbatore Medical College, Coimbatore
		111.	Govt. Medical College, Villupuram
		112.	Madurai Medical College, Madurai
		113.	K A P Viswanatham Govt. Medical College, Trichy
		114.	Perundurai Medical College, Perundurai
25.	Telangana (5)	115.	Gandhi Medical College, Secunderabad
25.	Telangula (5)	116.	Osmania Medical College, Hyderabad
		117.	Sir Ronald Ross of Tropical & Communicable Diseases,
			Hyderabad.
		118.	Nizam's Institute of Medical Sciences, Hyderabad
		119.	Institute of Preventive Medicine, Hyderabad
26.	Tripura (1)	120.	Government Medical College, Agartala
27.	Uttar Pradesh (9)	121.	King George Medical University, Lucknow
		122.	Institute of Medical Sciences, Banaras Hindu University,
			Varanasi
		123.	Jawaharlal Nehru Medical College, Aligarh
		124.	Command Hospital, Lucknow
		125.	Lala Lajpat Rai Memorial Medical College, Meerut
		126.	Sanjay Gandhi Post Graduate Institute, Lucknow

S. No.	Names of States	Nam	es of Medical Colleges	
		127.	MLN Medical College, Allahabad	
		128.	Uttar Pradesh University of Medical Sciences (Formerly	
			Uttar Pradesh RIMS), Saifai	
		129.	MLB Medical College, Jhansi	
		130.	Regional Medical Research Centre, Gorakhpur	
28.	Uttarakhand (2)	131.	Govt. Medical College, Haldwani	
		132.	All India Institute of Medical Sciences, Rishikesh	
29.	West Bengal (5)	133.	National Institute of Cholera & Enteric Diseases, Kolkata	
		134.	Institute of Post Graduate Medical Education &	
			Research, Kolkata	
		135.	Midnapore Medical College, Midnapore	
		136.	North Bengal Medical College, Darjeeling	
		137.	School of Tropical Medicine, Kolkata	
30.	Andaman &	138.	Regional Medical Research Centre, Port Blair	
	Nicobar Islands			
	(1)			
31.	Dadra & Nagar	139.	Shri Vonoba Bhave Civil Hospital, Silvassa	
	Haveli			
	Collection sites only			
31.	Sikkim (1)	140.	Sir Thutob Namgyal Memorial (STNM), Gangtok	
32.	Ladakh (1)	141.	Sonam Norboo Memorial Hospital (SNMH), Leh	
33.	Arunachal	142.	Tomo Riba Institute of Health & Medical Sciences	
	Pradesh (1)		(TRIHMS), Naharlagun	

## INDIAN COUNCIL OF MEDICAL RESEARCH DEPARTMENT OF HEALTH RESEARCH

Date: 07/04/2020

#### **List of Private Laboratories to test COVID-19**

S. No.	Names of States	Names of Laboratory and Address
1	Delhi (8)	<ol> <li>Lal Path Labs, Block -E, Sector 18, Rohini, Delhi</li> <li>Dr Dangs Lab, C-2/1, Safadarjung Development Area, New-Delhi</li> <li>Laboratory Services, Indraprastha Apollo Hospitals, Sarita Vihar, New Delhi</li> <li>Max Lab, Max Super Spciality Hospital, Saket, New-Delhi</li> <li>Sir Ganga Ram Hospital Clinical Lab Services, Sir Ganga Ram Hospital, Delhi</li> <li>Oncquest Labs Ltd, 3-Factory Road, New-Delhi</li> <li>Prognosis Laboratories, 515-16, Sector 19, Dwarka</li> <li>City X-Ray &amp; Scan Clinic Pvt Ltd, 4B/18, Tilak Nagar, New-Delhi</li> </ol>
2.	Gujarat (4)	<ol> <li>Unipath Specialty laboratory limited, 102, Sanoma Plaza, Opposite Parimal Garden, Besides JMC House, Ellisbridge, Ahmedabad</li> <li>Supratech Micropath Laboratory &amp; Research Institute Pvt Ltd, Kedar, Ahmedabad</li> <li>SN GeneLab Pvt Ltd, President Plaza –A, Near Mahavir Hospital, Nanpura, Surat</li> <li>Pangenomics International Pvt Ltd, Ellis Bridge, Ahmedabad</li> </ol>
3.	Haryana (6)	<ol> <li>Strand Life Sciences, A-17, Sector 34, Gurugram</li> <li>SRL Limited, GP26, Sector 18, Gurugram</li> <li>Modern Diagnostic &amp; Research Centre-Lab, 363-364/4, JAwahar Nagar. Gurgaon</li> <li>Core Diagnostics Pvt Ltd, Udyog Vihar Phase-3, Gurgaon</li> <li>MolQ Laboratory, Plot 28,29; Sector 18(P), Electronic city, Udyog Vihar, Phase IV, Gurgaon</li> <li>Pathkind Diagnostics Pvt Ltd, Plot 55-56, Phase 4, Udyog Vihar, Sec 18, Gurgaon</li> </ol>
4.	Karnataka (4)	<ol> <li>Neuberg Anand Reference Laboratory, Anand Tower, #54, Bowring Hospital Road, Bengaluru</li> <li>Cancyte Technologies Pvt Ltd, Sri Shankara Research Centre, Bengaluru</li> <li>Sakra World Hospital Lab Services, Devarabeesanahalli VArthur Hobli, Bengaluru</li> <li>Central Diagnostic Lab, Vydehi Institute of Medical Sciences and Research Centre, #82, E.P.I.P. Area, Whitefield, Bengaluru</li> </ol>

	T	1. Thyrocare Technologies Limited, D37/1, TTC MIDC, Turbhe, Navi		
5.	Maharashtra (14)	Thyrocare Technologies Limited, D37/1, TTC MIDC, Turbhe, Navi Mumbai		
		Suburban Diagnostics (India) Pvt. Ltd., 306, 307/T, 3 <sup>rd</sup> Floor, Sunshine Bld., Andheri (W), Mumbai		
		. Metropolis Healthcare Ltd, Unit No. 409-416, 4 <sup>th</sup> Fl Commercial Building-1, Kohinoor Mall, Mumbai		
		Sir H.N. Reliance Foundation Hospital and Research Centre, Molecular Medicine, Reliance Life Sciences Pvt. Ltd., R-282, TTC Industrial Area, Rabale, Navi Mumbai		
		SRL Limited, Prime Square Building, Plot No 1, Gaiwadi Industrial Estate, SV Road, Goregaon, Mumbai		
		A.G. Diagnostics Pvt Ltd, Nayantara Building, Pune		
		7. Kokilaben Dhirubhai Ambani Hospital Laboratory, Four Bungalows, Mumbai		
		8. InfeXn Laboratories Private Limited, A/131, Therelek Compound, Road No 23, Wagle Industrial Estate, Thane (W)		
		9. iGenetic Diagnostics Pvt Ltd, Krislon House, Andheri East, Mumbai		
		<ol> <li>Tata Memorial Centre Diagnostic Services-Tata Memorial Hospital, Parel, Mumbai</li> </ol>		
		1. Sahyadri Speciality Labs, Plot No 54, S.No. 89-90, Lokmanya Colony, Kothrud, Pune		
		2. Dr. Jariwala Lab & Diagnostics LLP, 1 <sup>st</sup> Floor, Rasraj Heights, Rokadia Lane, Off Mandpeshwar Road, Borivli (W), Mumbai		
		13. Ruby Hall Clinic, Dept of Laboratory, Grant Medical Foundation, 40, Sassoon Road, Pune		
		14. Metropolis Healthcare Limited, Construction House, 796/189-B, Bhandarkar Institute Road, Pune		
6.	Orissa (1)	1. Dept of Lab Services, Apollo Hospitals, Bhubaneswar		
7.	Tamil Nadu (9)	<ol> <li>Dept. of Clinical Virology, CMC, Vellore</li> <li>Department of Laboratory Services, Apollo Hospitals Enterprise Ltd, Chennai</li> <li>Neuberg Ehrlich Lab Pvt Ltd, 46-48 Masilamani Road, Balaji Nagar, Chennai</li> <li>Sri Ramachandra Medical College &amp; Research Institute, Porur, Chennai</li> <li>Microbiology Lab, Veerakeralam Road, Coimbatore</li> <li>YRG CARE, Taramani, Chennai</li> </ol>		
		<ol> <li>Hitech Diagnostic Centre- A Unit of Dr. Ganesan's Hitech Diagnostic Centre PVt Ltd, Poonamallee High Road, Chennai</li> <li>MIOT Hospitals – Dept of Lab Medicine, 4/112, Mount Poonamallee Road, Manapakkam, Chennai</li> </ol>		

		9. Madras Medical Mission Clinical Lab Services, 4-A, Dr. J. Jayalalitha Nagar, Mogappair East, Chennai
8.	Telangana (10)	<ol> <li>Laboratory Services, Apollo Hospitals, 6th Floor, Health Street Building, Jubilee Hills, Hyderabad</li> <li>Vijaya Diagnostic Centre Pvt Ltd, Street No 19, Himayath Nagar, Hyderabad</li> <li>Vimta Labs Ltd, Plot No 142, Phase 2, IDA Cherlapally, Hyderabad</li> <li>Apollo Health and Lifestyle Limited, Diagnostic Labortory, Bowenpally, Secunderabad</li> <li>Dr. Remedies Labs Private Ltd, A3, Titus Plaza, Sharma Commercial Complex, Punjagutta, Hyderabad</li> <li>Pathcare Labs Pvt Ltd, Medchal, Hyderabad</li> <li>American Institute of Pathology And Lab Sciences Pvt Ltd, Citizens Hospital, Serilingampally, Hyderabad</li> <li>Medcis Pathlabs India Pvt Ltd, Plot No 16 &amp; 17, Swathi Plaza, Anand Nagar, New Bowenpally, Secunderabad</li> <li>Department of Lab Medicine, Yashoda Hospital, 9th Floor, 1-1-156 &amp; 157, Alexander Road, Secunderabad</li> <li>Biognosys Technologies (India) Pvt Ltd, #8-148/174/11, NRI Colony, Near Aleap Industrial Area, Medchal, Malkajgiri</li> </ol>
9.	U.P. (2)	RML Mehrotra Pathology Pvt Ltd, Nirala Nagar, Lucknow     Dept of Lab Medicine, Jaypee Hospital, Sector 128, Noida
10.	Uttarakhand (1)	1. Dr. Ahuja's Pathology and Imaging Centre, 7-B, Astley Hall, Dehradun
11.	West Bengal (4)	<ol> <li>Apollo Gleneagles Hospitals, 58 Canal Circular Road, Kolkata</li> <li>Tata Medical Center, Rajarhat, Kolkata</li> <li>Laboratory Services, Peerless Hospitex Hospital &amp; Research Centre, 360, Panchasayar, Kolkata</li> <li>AMRI Hospitals, Dept of Lab Medicine, JC 16-17, Sector III, Salt Lake City, Kolkata</li> </ol>
12.	Kerala (2)	DDRC SRL Diagnostics Pvt Ltd, Panampilly Nagar, Ernakulam     MIMS Lab Services, Govindapuram, Kozhikode

# INDIAN COUNCIL OF MEDICAL RESEARCH DEPARTMENT OF HEALTH RESEARCH

Status of new COVID-19 testing laboratories as per request of the State Govt.

(All laboratories are being considered for initiation of COVID-19 testing pending fulfilment of mandatory requirements)

S. No.	State	Name of the Laboratory	ratory Comments	
1.	Andhra Pradesh	No request pending	NIL	
2.	Assam	No request pending	NIL	
3.	Bihar (2)	SKMCH, Muzaffarpur	Staff undergoing training at RMRIMS, Patna on 6/04/2020. Absolutely no experience of molecular diagnosis of viruses	
		JNMC, Bhagalpur	No facilities for real time RT-PCR testing.	
4.	Chandigarh	No request pending	NIL	
5.	Chhattisgarh (1)	Pt. JNM Medical College, Raipur	Laboratory has been given training. Civil works ongoing.	
6.	Delhi (1)	Vardhman Mahavir Medical College & Safdarjung Hospital	Approved	
7.	Gujarat (2)	Sardar Patel Hospital, Ahmedabad	No Real Time PCR machine, no biosafety cabinet, no trained staff. Contacted on 07/04/2020. Not interested in testing.	
		SMVS Hospital, Gandhinagar	No Real Time PCR machine, no biosafety cabinet, no trained staff. Contacted again on 07/04/2020 (no response)	
8	Jharkhand (1)	Patliputra Medical College & Hospital, Dhanbad	Training of staff has been recommended.  Absolutely no experience of molecular diagnosis of viruses	
9.	Karnataka (1)	JN Medical College, KAHER Belagavi	Private Medical College. Needs to submit NABL accreditation for molecular diagnosis of respiratory viruses. Email has been sent	
10.	10. Maharashtra (2) Govt. Medical Colleg		No equipment or consumables available	
		Govt. Medical College, Akola	Approved	
11.	Madhya Pradesh (4)	S.S. Medical College, Rewa Bundelkhand Medical College, Sagar	Biosafety Cabinet yet to be installed. Civil works ongoing	
		RD Gardi Medical College, Ujjain	Private Medical College. Needs to submit NABL accreditation for molecular diagnosis of respiratory viruses.	
		Sri Aurobindo Institute of Medical Sciences, Indore	Private Medical College. Needs to submit NABL accreditation for molecular diagnosis of respiratory viruses.	
12.	Meghalaya (1)	Govt. Civil Hospital, Tura, Meghalaya	Full facility is not yet available. Will be again explored after few days	
13.	Odisha (1)	Ispat General Hospital, Rourkela	Staff is being sent for training at RMRC Bhubaneshwar from 8 <sup>th</sup> to 10 <sup>th</sup> April 2020	

S. No.	State	Name of the Laboratory	Comments	
14.	Punjab (1)	Guru Gobind Singh Medical University, Faridkot	Approved	
15.	Rajasthan (1)	RVRS Medical College, Bhilwara	Full set of equipments and consumables are not available.	
16.	Tamil Nadu (3)	Govt. Dharmapuri Medical College, Dharmapuri	Staff will undergo training at KIPM Chennai on 8 <sup>th</sup> and 9 <sup>th</sup> April. Approval will be given after training.	
		Kanyakumari Govt. Medical College, Nagercoil	RT-PCR & Biosafety cabinet yet to be installed.	
		Thanjavur Medical College, Thanjavur	RT-PCR & Biosafety cabinet yet to be installed.	
17.	Uttar Pradesh	SN Medical College, Agra	Approved	
	(3) Govt. Institute of Medical Sciences, Noida		Training of staff is planned at KGMU, Lucknow. Approval will be given after training.	
		GSVM Medical College, Kanpur	No real-time PCR machine	
18.	18. West Bengal (2) Murshidabad Medical College & Hospital		Biosafety Cabinet yet to be installed.	
		RG Kar Medical College & Hospital, Kolkata	Civil works ongoing	

# ICMR Specimen Referral Form for COVID-19 (SARS-CoV2)

INSTRUCTIONS:							
<ul> <li>Inform the local / district / state</li> <li>Seek guidance on requirements</li> </ul>	<ul> <li>Inform the local / district / state health authorities, especially surveillance officer for further guidance</li> <li>Seek guidance on requirements for the clinical specimen collection and transport from nodal officer</li> </ul>						
This form may be filled in and sl	hared with the IDS	SP and forwarded to a lab where testing is planned					
SECTION A – MANDATORY FIELDS (FORM WILL NOT BE ACCEPTED IN CASE OF ANY BLANK)							
*A.1 PERSON DETAILS							
*Patient Name:		*Age:YearsMonth , Gender: * Male Female Others					
*Present Patient Village or Town:		*Mobile Number:					
Fresent Fatient Village of Town.							
		*Mobile Number belongs to: Self Family Other					
*District of present residence:		*Nationality:					
*State of present residence:							
(These fields to be filled for all patients includ	ding foreigners)						
*A.2 SPECIMEN INFORMATION FROM	A REFERRING AG	GENCY					
*Specimen type BAL/ETA1	TS/NPS/NS	Blood in EDTA Acute sera Covalescent sera Other					
*Collection date							
*Label							
*Is it a repeated sample? Yes N	lo						
*Sample collection facility name:	••••••	*Collection facility pin-code					
*A.3 PATIENT CATEGORY (PLEASE SE							
		······					
		) patient					
, ,		rmed case – family member					
Cat 5b: Asymptomatic healthcare worker	in contact with co	onfirmed case without adequate protection					
Section B- OTHER FIELDS TO B	E UPDATED						
B.1 PERSON DETAILS							
Present patient address:		Pin code:					
		Date of Birth: (dd/mm/yy)					
Patient Passport No. (for Foreign national only)							
Email id:							
Patient Aadhar No. (For Indians)							
B.2 EXPOSURE HISTORY(2 WEEKS BEFORE THE ONSET OF SYMPTOMS)							
1. Did you travel to foreign country in last 14 days: Yes No							
If yes, place(s) of travel:							
2. Have you been in contact with lab co							
If yes, name of confirmed patient:							
4. Are you a health care worker working in hospital involved in managing patients: Yes No							
	-	· · · · · · · · · · · · · · · · · · ·					

B.3 CLINICAL SYMPTOMS AND SIGNS								
Date of onset of sympto	oms: / /	(dd/mm/yy)	First Sympt	om:				
Symptoms Yes S	ymptoms Yes	Symptoms Ye	s Symptoms	Yes Fron	n (dd/mm) To (dd/mm)			
<u> </u>	· ·	/omiting	7	ıation ∏if yes, ☐				
		Haemoptysis	Body ache	☐ if yes, ☐				
_	Abdominal pain	rucur uncernange			(HISTORY)			
Respiratory infection a	t sample collection: Se	evere Acute Resp	iratory Illness (SA	ARI): Yes No	ARI: Yes No			
B.4 UNDERLYING			,	<u>,                                    </u>				
-	res Condition	Yes Condit	ion Yes	Condition Yes	<u> </u>			
COPD	Bronchitis	☐ Diabet	es 🗆	Hypertension	]			
Chronic renal disease	Malignancy	H	disease	Asthma				
IMMUNOCOMPROMIS					ons:			
B.5 HOSPITALIZA Hospitalization date:								
DIFFERENTIAL DIAGNO								
ATYPICAL PRESENTAT				D COURSE: YES/NO				
OUTCOME: Discharge/				□□/□□ (dd/mm				
Phone mobile number:		Hospital N	ame/address:					
Name of Doctor:		Signature	and date: $\square\square$	/	m/yy)			
DETAILS OF HEALT	TII AIITII 6 DITY	COD CENDU	I THE DED	. D. <del>T</del> .				
DETAILS OF HEAL	IH AUTHORITY	(FOR SENDII	NG THE REPO	<u>ORI)</u>				
Name of Doctor	• • • • • • • • • • • • • • • • • • • •	Hospital Na	.me /address .		• • • • • • • • • • • • • • • • • • • •			
ENAME ID								
EMAIL ID	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			
Phone /mobile num	hor	Signati	uro and Data					
Phone /mobile number Signature and Date								
For Official Use – To be filled by COVID-19 testing lab facility								
Date of sample	Sample accepted/	Date of	Test result	Repeat Sample	Sign of Authority			
receipt(dd/mm/yy)	Rejected	testing	restresuit	required	(Lab in charge)			
					(=0.0 0.101.50)			
				1	·			

#### INDIAN COUNCIL OF MEDICAL RESEARCH

#### **DEPARTMENT OF HEALTH RESEARCH**

# Advisory to start rapid antibody based blood test for COVID-19 (4 April 2020)

Strategy for areas reporting clusters (containment zone) and in large migration gatherings/evacuees centres

Cases of Influenza Like Illness (ILI) to be monitored in health facilities. Any surge in cases to be monitored and brought to the notice of Surveillance Officer/CMO for additional investigation.

As a matter of abundant precautions, all symptomatic ILI persons should be advised home quarantine for 14 days.

At facility level, symptomatic ILI individuals to be tested using rapid antibody tests.

# Antibody test negative:

- If warranted, confirm by real-time RT-PCR using throat/nasal swab.
  - RT-PCR negative: Likely non-COVID-19 ILI
  - RT-PCR positive: *Confirmed COVID-19 Case* and action as per protocol to be initiated for isolation, treatment and contact tracing.

OR

- If real-time RT-PCR not done, home quarantine and repeat antibody testing after 10 days of the last rapid antibody test.
  - Antibody test negative: Likely non-COVID-19 ILI.
  - Antibody test positive: there is possibility of recent infection, quarantine for another 10 days.
- Antibody test positive: After clinical assessment, treatment in hospital or isolation as per protocol. Action as per protocol to be initiated for contact tracing.

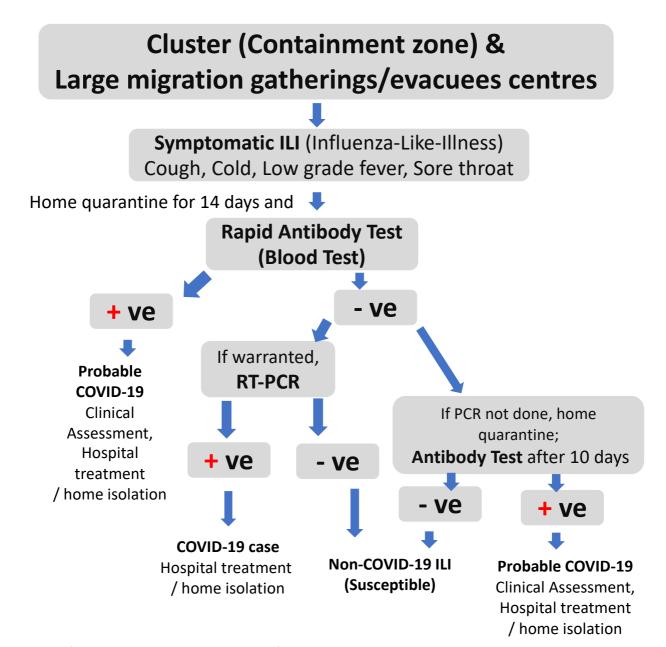
If symptoms worsen, refer to designated COVID-19 hospitals. When home quarantine is not feasible, consider facility-based quarantine.

#### **General Guidelines:**

- Healthcare workers doing the rapid antibody test to use gloves, mask, and head covers.
- Healthcare workers collecting throat/nasal swab to follow standard national infection control guidelines.
- The rapid antibody tests approved by US-FDA/CE-IVD or non-CE-IVD validated by ICMR-NIV with marketing approval by DCGI be used.
- In order to ensure that all such cases are monitored and necessary action is initiated with respect to infectious disease management, details of all test results shall be uploaded in ICMR portal.
- All such organizations are duty bound to register themselves to ICMR portal and upload the data in real-time.
- Failure to do so, they will be held liable to action under Disaster Management Act, 2005.

# STRATEGY FOR USE OF RAPID ANTIBODY BASED BLOOD TEST

(4 April, 2020)



If symptoms worsen, refer to designated COVID-19 hospitals

#### INDIAN COUNCIL OF MEDICAL RESEARCH

#### DEPARTMENT OF HEALTH RESEARCH

# Advisory for initiation of additional COVID-19 testing laboratories

Currently, the Indian Council of Medical Research (ICMR) has approved the COVID-19 testing in more than 200 laboratories across the country. Based on the new requests from several districts of India for initiation of COVID-19 testing, ICMR has formulated the following guidelines for establishment of a new testing laboratory for COVID-19 testing in any district.

# In areas with no operational COVID-19 testing facility, a new facility will be considered subject to fulfillment of the following criteria (applicable from 5<sup>th</sup> April, 2020):

- i) The number of suspected cases in that particular district should be more than 100 per day.
- ii) The nearest testing laboratory for COVID-19 is more than:
  - a. Plain areas- 250 kms (4-5 hrs @ 60 Km/hr)
  - b. Hilly areas- 150 kms (5 hrs @ 30Km/hr)
- iii) In case there are testing laboratories within the above mentioned distance, each of the existing testing laboratories should be testing at least 100 samples per day.
- iv) If the nearest testing laboratory is within the above mentioned distance, and not testing 100 samples per day, and does not agree to test the samples from the affected district, then the existing laboratory will be closed down, and permission will be given to the new laboratory.
- v) The district should have a government laboratory with the following:
  - Availability of BSL-2 level laboratory including a molecular biology setup for virological diagnosis.
  - Availability of a functioning and calibrated Biosafety cabinet type 2A/2B in the laboratory.
  - Availability of cold centrifuge/microfuge for RNA extraction
  - Availability of a functioning and calibrated real-time PCR machine.
  - Availability of staff with good understanding of laboratory biosafety and biosecurity, trained for handling respiratory samples for viral diagnosis, RNA extraction and realtime PCR.
  - Available staff with experience of work in virology and handling clinical specimens, especially respiratory samples.
  - A robust Institutional policy on biomedical waste management of human origin.
  - Well defined arrangement for segregation and discarding of biomedical waste.

(Proofs of the above mentioned requirements need to be submitted to ICMR while applying for a new testing laboratory, which will include documents and photographs of the laboratory)

vi) If the district has no government laboratory, but has a private laboratory which can apply for COVID-19 testing, the laboratory should have NABL accreditation, and the scope of accreditation must include real-time PCR for respiratory viruses.

(All the required documentations which needs to be provided by the private laboratory to ICMR is available in the official website of ICMR)

Date: 07.04.2020

# INDIAN COUNCIL OF MEDICAL RESEARCH DEPARTMENT OF HEALTH RESEARCH

# **Guidance on expansion of SARS-CoV-2 testing platforms:**

- 1. ICMR recommends the use of US-FDA approved closed real time RT PCR systems like GeneXpert and Roche COBAS-6800/8800. These systems are approved under emergency use.
- **2.** In addition, Truenat<sup>TM</sup> beta CoV test on Truelab<sup>TM</sup> workstation validated by ICMR is recommended as a screening test. All positives through this platform will need to be reconfirmed by confirmatory assays for SARS-CoV-2. All negatives may not be processed further.
- 3. Truenat beta CoV test should only be performed with all biosafety precautions in BSL-2 or BSL-3 setups at laboratories. Performing this test for SARS-CoV2 in mobile test units without proper biosafety level 2 checks is not recommended.
- **4.** This is in addition to the previously issued guidelines and subsequent addendums.

# INDIAN COUNCIL OF MEDICAL RESEARCH DEPARTMENT OF HEALTH RESAERCH

# **Advisory for sample collection sites:**

ICMR has no objection on adoption of establishing convenient sample collection sites (drive through centers for sample collection etc.) by the respective State Governments.

However, the following advice is provided by ICMR:

- The sample collection should be done using the recommended Personal Protective Equipment (PPE).
- These sites should be disinfected regularly as per recommended procedures.
- All recommended biosafety and biosecurity precautions should be implemented.
- Sample transport to the nearest COVID-19 testing laboratory should be ensured under proper cold-chain conditions and with triple layered packing.

# INDIAN COUNCIL OF MEDICAL RESEARCH DEPARTMENT OF HEALTH RESEARCH

It is hereby notified that ICMR has no objection to initiation of COVID19 testing in Government laboratories operational under the Department of Biotechnology (DBT), Department of Science & Technology (DST), Council of Scientific & Industrial Research (CSIR), Department of Atomic Energy (DAE), Indian Council of Agricultural Research (ICAR) and Defence Research and Development Organisation (DRDO).

Since these research Institutes are of eminence under other research organizations, ICMR will not conduct any site assessment nor accord approval for initiation of testing at these laboratories. Secretary to the Government of India of the concerned Departments may accord approval for initiation of testing as deemed appropriate. Responsibility of these laboratories will lie with the concerned departments and not ICMR.

<u>Caution:</u> SARS-CoV-2 is a high-risk pathogen with high transmissibility and infectivity. Sample handling at too many points and by inadequately trained staff can lead to spills and laboratory outbreaks.

ICMR hereby advises the DBT, DST, CSIR, DAE, ICAR and DRDO laboratories to ensure the following safeguards before initiation of COVID19 testing:

- Availability of BSL-2 level laboratory including a molecular biology setup for virological diagnosis.
- Availability of a functioning and calibrated Biosafety cabinet type 2A/2B in the laboratory.
- Availability of cold centrifuge/microfuge for RNA extraction
- Availability of a functioning and calibrated real-time PCR machine.
- Availability of staff with good understanding of laboratory biosafety and biosecurity, trained for handling respiratory samples for viral diagnosis, RNA extraction and realtime PCR.
- Available staff with experience of work in virology and handling clinical specimens, especially respiratory samples.
- A robust Institutional policy on biomedical waste management of human origin.
- Well defined arrangement for segregation and discarding of biomedical waste.

#### Additional advice is as follows:

- ICMR will not provide diagnostic kits / reagents to these laboratories. ICMR advisory on use of commercial kits may also be accessed at <a href="www.icmr.nic.in">www.icmr.nic.in</a>. SoPs available with ICMR will be shared on request.
- Laboratory test should be only offered when the sample is referred by the State health officials or State IDSP.
- ICMR guidelines for testing (available at <a href="www.icmr.nic.in">www.icmr.nic.in</a>) may be strictly followed. Since the guidance evolves periodically, the latest revised version should be followed.
- Testing laboratories to ensure immediate/ real-time reporting to State officials of IDSP (Integrated Disease Surveillance Program of Govt. of India) for timely initiation of contact tracing. Additionally, as mandated by PMO, a report should also be uploaded on the online portal of ICMR. Each laboratory initiating COVID-19 testing should essentially register on the ICMR portal and get a username and password. Data entry should be ensured on a daily real-time basis. Contact points for registration at ICMR are:
  - Dr. Harpreet Singh: hsingh@bmi.icmr.org.in
  - Dr. Ira Praharaj: praharaj.ira@icmr.gov.in

(Kindly note that all data has to be reported to IDSP and ICMR)

# **Advisory for quarantine of migrant workers**

### Introduction

Coronavirus disease 2019 (COVID-19) is an acute infectious respiratory disease caused by a newly discovered coronavirus (SARS-CoV-2).

Most people infected with the COVID-19 virus experience mild to moderate respiratory illness and recover without requiring special treatment, the disease presentation is more likely to be severe in older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, etc.

# Purpose of the advisory

Migrant workers from peri-urban and rural parts of the country who migrate to large cities constitute a sizable segment of urban population across the country. During outbreak of a communicable disease or social distancing measures as being undertaken for COVID-19 Pandemic, such populations tend to return back to their homes. In such a scenario, the resultant congregations of migrant workers in bus stations/State borders may make them susceptible to COVID-19 infection. Further such exposed individuals may later become infected and carry this infection to far flung rural localities. Also it would be difficult to track them and their contacts. Hence this advisory.

# **Advisory**

# 1. Advisory by Ministry of Home Affairs (MHA)

The migrant workers will remain at their regular place of work/local residence within the city. They will not be evacuated either by their employer/landlord. Action to this effect and to address other related issues will be taken by local administration as per advisories being issued by Ministry of Home Affairs.

# 2. Health actions at place of congregation of migrant workers

As some of the migrant workers have already moved in groups and either reached their destination or are on their way, the health actions would be based on the locations where the migrant workers are currently located.

- 2.1 Migrant workers who are in the cities of their local residence
- 2.2 Migrant workers who are on their way and are yet to reach their destination city/village
- 2.3 Migrant workers who have reached their destination

# 2.1 Migrant workers who are still in the cities of their local residence

Wherever a congregation of migrant workers has formed in bus stations/railway stations or any other place within the city of their local residence, the following actions would be taken:

- a) Names, local residential and permanent addresses and mobile numbers of the migrant workers shall be recorded.
- b) District health administration will depute a team which would include District Surveillance Officer/his representative and public health personnel. Thermal screening of all such persons shall be done by this team.
- c) Persons found to be suffering for fever shall be further interviewed by this team for (i) other symptoms suggestive of COVID-19, (ii) history suggestive of contact with a suspect/confirmed case of COVID-19. All such persons qualifying these criteria shall be referred to designated COVID-19 treatment hospital for isolation and testing.
- d) Those who are not exhibiting any such symptoms would undergo a risk profiling.
- e) Those who are above 60 years or have co-morbidities would be shifted to facility quarantine. Others would undergo home quarantine for 14 days.
- f) IDSP will monitor those under home/facility quarantine.

# 2.2 Migrant workers who are on their way and are yet to reach their destination city/village

## 2.2.1 Setting/establishment of quarantine center

- a) If there are no established quarantine centers in the vicinity, a quarantine center will be established that would conform to the norms as per the checklist communicated already to States.
- b) Norms for the same can be referred to at https://ncdc.gov.in/WriteReadData/1892s/90542653311584546120.pdf

#### 2.2.2 Health actions at the quarantine facility

Following action would be taken up at the quarantine facility:

- a) Names, local residential and permanent addresses and mobile numbers of the migrant workers shall be recorded.
- b) District health administration will depute a team which would include District Surveillance Officer/his representative and public health personnel. Thermal screening of all such persons shall be done by this team.
- c) Persons found to be suffering for fever shall be further interviewed by this team for (i) other symptoms suggestive of COVID-19, (ii) history suggestive of contact with a suspect/confirmed case of COVID-19. All such persons qualifying these criteria shall be referred to designated COVID-19 treatment hospital for isolation and testing.

# 2.2.2.1 Administrative actions at the quarantine facility

- a) A record of all migrant workers assigned to a particular quarantine facility shall be kept.
- b) The contact number of administrator/or any subordinate officer will be displayed for the persons being quarantined to report their grievances.

- c) Adequate manpower to attend to planning, operation, logistic and financial aspects of the quarantine center would be deployed.
- d) All basic amenities as per the checklist shall be provided at these centers (refer to 3b above).
- e) All such persons shall be encouraged to remain in contact with their family members through phone to avoid anxiety and stress. Phone charging points shall be provided at these centers in adequate numbers.
- f) Access control shall be enforced at the quarantine center.
- g) Total duration of quarantine shall be 14 days\*.

# 2.2.2.2 Technical actions at the quarantine facility

- a) All quarantined persons will undergo daily medical examination for appearance of symptoms suggestive of COVID-19.
- b) The migrant workers will be provided triple layer medical mask and sensitized on
  - (i) How to use and dispose off mask.
  - (ii) Washing hands frequently.

20\_covid19\_test\_v3.pdf)

- (iii) Following respiratory etiquettes (coughing/sneezing into tissue/handkerchief/flexed elbow).
- (iv) Maintaining at least 1 meter distance from each other.
- (v) To report on symptoms of fever/cough/breathing difficulty.
- c) Those during the course of their stay are found to be symptomatic for COVID-19 shall be referred to designated COVID-19 hospital for isolation and testing. They will be managed as per guidelines on management of COVID-19 cases (available at https://www.mohfw.gov.in/pdf/GuidelinesonClinicalManagementofCOVID1912020. pdf) and discharged per discharge policy (available as at: https://www.mohfw.gov.in/pdf/Corona%20Discharge-Policy.pdf) and brought to quarantine center.
- d) If the person tests positive, all his close contacts shall be segregated and tested as per ICMR testing guidelines.
   (Available at: https://icmr.nic.in/sites/default/files/upload\_documents/2020-03-
- e) Special care shall be taken with regards to vulnerable groups including children, pregnant women, elderlies and those with co-morbidities.
- f) In addition to medical care for COVID-19, routine healthcare needs (particularly provision for reproductive care, treatment of Non communicable diseases etc.) shall be attended to. For such purpose a medical team from the nearest hospital will visit/camp at quarantine facility.
- g) A psycho-social team would visit all such facilities to address psycho-social issues if any.
- h) An ambulance will remain stationed at the quarantine center to attend to any medical emergencies and referral of suspect patients.

- i) To create awareness among people being quarantined, IEC material will be displayed at multiple prominent locations at quarantine centers. This shall also be addressed by interpersonal communication.
- j) Clean beddings and fresh linen will be provided to the quarantined persons
- k) All frequently touched surfaces will be disinfected twice a day with 1% sodium hypochlorite solution. Floors will be mopped daily with household cleaning agent and 1% sodium hypochlorite solution. For detailed information Guidelines on disinfection of common public places are available at: https://www.mohfw.gov.in/pdf/Guidelinesondisinfectionofcommonpublicplacesinclud ingoffices.pdf
- 1) All waste shall be segregated and disposed off as per bio-medical waste management rules 2016. The agency providing bio-medical waste disposal at the nearest hospital will be tasked for waste disposal.
- m) Prior to their final discharge from the quarantine facility, a record shall be created of their names, mobile numbers, places likely to visit in next 14 days. A state wise list shall be prepared based on places they are likely to visit in next 14 days and communicated to respective State and district IDSP units for further follow up.

# 2.3 Migrant workers who have reached their destination

Migrant workers who have reached their destination will be identified by the district administration and IDSP will follow them up at their residence.

- a) District health administration will depute a team which would include District Surveillance Officer/his representative and public health personnel.
- b) Such persons shall be contacted by IDSP teams and interviewed about place of local residence
- c) Those found to be suffering for fever shall be further interviewed by this team for (i) other symptoms suggestive of COVID-19, (ii) history suggestive of contact with a suspect/confirmed case of COVID-19. All such persons qualifying these criteria shall be referred to designated COVID-19 treatment hospital for isolation and testing.
- d) Those who are not exhibiting any such symptoms would undergo a risk profiling.
- e) Those who are above 60 years or have co-morbidities would be shifted to facility quarantine. Others would undergo home quarantine for 14 days.
- f) IDSP will monitor those under home/facility quarantine.

<sup>\*</sup> In facility quarantine, quarantine period shall be extended if a positive case is detected during the 14 days of quarantine. This extension of quarantine shall be applicable for all who were in close contact with the positive case and will be effective for 14 days since last close contact with the positive case, subject to the fact that there had been no intermingling with the person tested positive and his close contacts with other quarantined population. (Otherwise the extension of quarantine period shall be applicable to all quarantined persons).

# महाराष्ट्र शासन वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, शासन निर्णय क्रमांक:- वैशिवि-२०२०/प्र.क्र.११३/प्रशा. २ नवीन मंत्रालय, मुंबई ४०० ००१ दिनांक:- ०१ एप्रिल, २०२०.

वाचा :- केंद्र शासनाच्या दि. २९ मार्च, २०२० रोजीच्या मार्गदर्शक सूचना

# प्रस्तावना :-

जागितक आरोग्य संघटनेने कोविड-१९ हा आजार पॅनडॅमिक घोषित केलेला आहे. सदर आजाराने बाधित रुग्णांच्या संख्येत दिवसेंदिवस वाढ होत आहे. कोविड-१९ आजाराचा प्रादुर्भाव रोखण्यासाठी सार्वजनिक ठिकाणी निर्जंतुकीकरण करण्याबाबत केंद्र सरकारने दिनांक २९/३/२०२० अन्वये मार्गदर्शक सूचना निर्गमित केल्या आहेत. तथापि, सदर सुचनांचे पालन स्थानिक स्तरावर होत नसल्याचे निदर्शनास येत आहे. त्यामुळे इतर हानी टाळण्यासाठी सूचना निर्गमित करण्याची बाब शासनाच्या विचाराधीन होती.

# शासन निर्णय :-

कोविड-१९ आजाराचा प्रादुर्भाव रोखण्यासाठी सार्वजनिक ठिकाणी निर्जत्कीकरण करण्याच्या अनुषंगाने पुढीलप्रमाणे सुचना देण्यात येत आहेत.

- १. कोविड-१९ आजाराचा प्रादुर्भाव रोखण्यासाठी निर्जंतुकीकरण करण्याबाबत केंद्र शासनाने वेळोवेळी दिलेल्या मार्गदर्शक सूचनांचे पालन करावे. Weblink https://www.mohfw.gov.in/pdf/Guidelinesondisinfectionofcommonpublicplacesincludingoffices.pdf
- २. सदर निर्जंतुकीकरण/फवारणी ही नगरपालिका/महानगरपालिका/स्थानिक स्वराज्यसंस्था यांच्यामार्फतच करण्यात यावी. तसेच अन्य खाजगी संस्था/व्यक्ती यांच्याकडून निर्जंतुकीकरण/फवारणी करण्यात येऊ नये.
- 3. नगरपालिका/महानगरपालिका/स्थानिक स्वराज्यसंस्था यांनी त्यांच्या हद्दीतील आढळून आलेल्या Confinement Zone मध्ये निर्जंतुकीकरण्याबाबत त्यांच्या स्तरावर उचित निर्णय घ्यावा.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने,

(डॉ.संजय मुखर्जी) सचिव, महाराष्ट्र शासन

प्रति,

- १. मा. राज्यपाल यांचे सचिव, राज्यपाल सचिवालय, राज भवन, मलबार हिल, मुंबई-४०० ०३५
- २. मा. मुख्यमंत्री यांचे अपर मुख्य सचिव, मंत्रालय, मुंबई-४०० ०३२
- ३. मा. मंत्री (वै.शि.) यांचे खाजगी सचिव, मंत्रालय, मुंबई- ४०० ०३२
- ४. मा. विरोधी पक्षनेता, महाराष्ट्र विधानपरिषद, विधान भवन, मुंबई- ४०० ०२१
- ५. मा. विरोधी पक्षनेता, महाराष्ट्र विधानसभा, विधान भवन, मुंबई- ४०० ०२१
- ६. मा. राज्यमंत्री (वै.शि.) यांचे खाजगी सचिव, मंत्रालय, मुंबई- ४०० ०३२
- ७. मुख्य सचिव, महाराष्ट्र शासन, मंत्रालय, मुंबई-४०० ०३२
- ८. अपर मुख्य सचिव, उद्योग ऊर्जा व कामगार विभाग, मंत्रालय, मुंबई

- ९. अपर मुख्य सचिव, वित्त विभाग, मंत्रालय, मुंबई
- १०. प्रधान सचिव, सार्वजनिक आरोग्य विभाग, मंत्रालय, मुंबई.
- ११. प्रधान सचिव, नगर विकास विभाग, मंत्रालय, मुंबई.
- १२. प्रधान सचिव, मंत्रालय कोरोना नियंत्रण कक्ष, मंत्रालय, मुंबई.
- १३. सचिव, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग,मंत्रालय,मुंबई.
- १४. सर्व विभागीय आयुक्त.
- १५. सर्व जिल्हाधिकारी.
- १६. महासंचालक, माहिती व जनसंपर्क, महाराष्ट्र राज्य, मुंबई
- १७. संचालक ,वैद्यकीय शिक्षण व संशोधन,मुंबई.
- १८. संचालक, आरोग्य सेवा, मुंबई व पुणे.
- १९. आयुक्त, सर्व महानगरपालिका/ नगरपालिका.
- २०. सर्व मुख्य कार्यकारी अधिकारी, जिल्हा परिषद.
- २१. सर्व जिल्हा शल्य चिकित्सक.
- २२. सर्व जिल्हा आरोग्य अधिकारी, सर्व जिल्हा परिषद.
- २३. उप सचिव/अवर सचिव/कक्ष अधिकारी (सर्व), वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मुंबई
- २४.सर्व अधिष्ठाता, शासकीय वैद्यकीय/दंत महाविद्यालय व रुग्णालये
- २५. निवडनस्ती प्रशासन-२

कोव्हीड -१९ संदर्भात शासकीय वैद्यकीय महाविद्यालयाशी संलग्नित रूग्णालये, सार्वजनिक आरोग्य विभाग व नगरविकास विभाग यांच्या अधिपत्याखालील रूग्णालये तसेच खाजगी रूग्णालयात स्वतंत्र विलगीकरण इमारत/ कक्ष निर्माण करण्याबाबत मार्गदर्शक सूचना.

# महाराष्ट्र शासन

वैद्यकिय शिक्षण व औषधी द्रव्ये विभाग शासन परिपत्रक क्रमांक: वैशिवि-२०२०/प्र.क्र.११०/२०/प्रशा-२, गोकुळदास तेजपाल रुग्णालय आवार, ९ वा मजला, लोकमान्य टिळक मार्ग, मुंबई-१,दिनांक १ एप्रिल २०२०.

# <u>परिपत्रक</u>

सार्वजनिक आरोग्य विभागाच्या दिनांक १४.३.२०२० च्या अधिसूचनेन्वये राज्यात साथरोग अधिनियम १८९७ ची अंमंलबजावणी करण्यात येत असून सदर अधिनियमाच्या खंड - २ (१) नूसार संचालक ,आरोग्य सेवा तसेच संचालक ,वैद्यकीय शिक्षण व संशोधन मुंबई यांना त्यांच्या कार्यक्षेत्रात कोव्हीड १९ वर नियंत्रण आणण्यासाठी व प्रादुर्भाव रोखण्यासाठी उपाययोजना करण्याबाबत सक्षम प्राधिकारी म्हणून घोषीत करण्यात आले आहे.

सर्वसाधारण रूग्ण व कोरोना बाधित रूग्ण यांची सरिमसळ न होता तसेच संभाव्य संसर्ग टाळण्यासाठी National Centre for Disease Control, New Delhi यांनी मार्गदर्शक सूचना प्रसारित केल्या आहेत. यामध्ये शासकीय वैद्यकीय महाविद्यालयाशी संलग्नित रूग्णालये, सार्वजिनक आरोग्य विभाग व नगरिवकास विभाग यांच्या अधिपत्याखालील रूग्णालये तसेच खाजगी रूग्णालयात स्वतंत्र विलगीकरण इमारत /कक्ष निर्माण करण्याबाबतच्या खालील मार्गदर्शक सूचनांचा समावेश आहे.

९. उपरोक्त सर्व रूग्णालयांमध्ये स्वतंत्र विलगीकरण इमारत निर्माण करणे आवश्यक आहे.
 १.१ वैद्यकीय शिक्षण व औषधी द्रव्ये विभागाच्या अधिनस्त संस्थासाठी स्वतंत्र विलगीकरण इमारतीमध्ये किमान ६० रूग्ण खाटा तर सार्वजनिक आरोग्य विभागाच्या अधिनस्त संस्था

व इतर उर्वरित संस्थामध्ये किमान ५० रूग्ण खाटा आवश्यक त्या साधन सामुग्रीसह उपलब्ध करणे अनिवार्य आहे.

- १.२ उक्त विलगीकरण इमारत दैनंदिन रूग्णसेवेला बाधा ठरणारी नसावी.
- 9.३ सदर विलगीकरण कक्षाकरिता स्वतंत्र प्रशिक्षीत मनुष्यबळ नामनिर्देशित(Ear Marked) करण्यात यावा.
- २. सदर विलगीकरण कक्षाकरिता National Centre for Disease Control ,New Delhi यांचेव्दारा तयार करण्यात आलेले COVID -9९ Outbreak, Guidelines for Setting up Isolation Facility/ Ward या मार्गदर्शक सूचनांचा व मानकांचे काटेकोरपणे पालन होणे अनिवार्य आहे.

(weblink-https://ncdc.gov.in//WriteReadData/1892s/42417646181584529159.pdf) ३.ज्या सरकारी व खाजगी रूग्णालयांना स्वतंत्र विलगीकरण कक्षाची इमारत उपलब्ध करणे शक्य नाही, अशा रूग्णालयांनी त्यांच्याकडे उपलब्ध असलेल्या सोयीसुविधांचा उपयोग करून स्वतंत्र विलगीकरण कक्ष निर्माण करणे गरजेचे आहे. सदर कक्ष /इमारत तयार करताना खालील एस.ओ.पी.चे अनुकरण करावे.

- 3.9 सदरचे विलगीकरण कक्ष निर्माण करताना उक्त रूग्णांलयांकरिता किमान दोन प्रवेश व्दार (Separate Entry and Exit) असणे आवश्यक आहे.ताप,खोकला,श्वसनाचा त्रास असणाऱ्या रूग्णाना रूग्णालयीन प्रवेशव्दारावरच वर्गीकरण करून कोव्हीड -१९ कक्षाकरिता संदर्भीत करावेत.कोव्हीड १९ संशयित रूग्ण व त्याकरिता नामनिर्देशित केलेले मनुष्यबळ, इतर रूग्ण व रूग्णालयातील इतर कर्मचारी यांचे संपर्कात येणार नाही,याची कृपया दक्षता घ्यावी.
- 3.२ विलगीकरण कक्ष निर्माण करताना त्यामध्ये उपलब्ध रूग्ण खाटांच्या तुलनेत ६० टक्के खाटा Suspected रूग्णाकरता आरक्षीत करणे आवश्यक आहे. ३० टक्के रूग्ण खाटा जे रूग्ण कोरोना बाधीत आहेत त्यांच्याकरिता आरक्षीत करणे आवश्यक आहे. तसेच किमान १० टक्के खाटा अतिदक्षता (आयसीसीयु) करिता राखीव ठेवणे अनिवार्य आहे.
- 3.3 सदर खाजगी अथवा सरकारी रूग्णालयामध्ये मध्यवर्ती वातानुकुलीत यंत्रणा (Centralized AC) कार्यान्वित असल्यास उक्त यंत्रणा कोव्हीड -१९ आजाराकरिता आरक्षीत करण्यात आलेल्या विलगीकरण कक्षामध्ये बंद ठेवणे बंधनकारक आहे.
- ३.४ सदर विलगीकरण कक्षाकरिता स्वतंत्र प्रशिक्षीत मनुष्यबळ नामनिर्देशित (Ear Marked)करण्यात यावा.

३.५ वरील स्वतंत्र विलगीकरण कक्ष निर्माण करताना केंद्र शासनाने निर्धारित केलेल्या मार्गदर्शक सूचनांचे संबंधित खाजगी व सरकारी रूग्णालयांनी त्यांचे तंतोतंत पालन करणे क्रमप्राप्त आहे.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने,

(डॉ.संजय मुखर्जी ) सचिव,महाराष्ट्र शासन

प्रति,

१.प्रधान सचिव ,मा.मुख्यमंत्री सचिवालय,मंत्रालय,मुंबई.

२.मा.उपमुख्यमंत्री,मंत्रालय,मुंबई यांचे खाजगी सचिव

३.मा.मंत्री,सार्वजनिक आरोग्य विभाग,मंत्रालय ,मुंबई यांचे खाजगी सचिव.

४.मा.मंत्री ,वैद्यकीय शिक्षण विभाग ,मंत्रालय ,मुंबई यांचे खाजगी सचिव.

५.मा.राज्यमंत्री,सार्वजनिक आरोग्य विभाग/ वैद्यकीय शिक्षण विभाग,मंत्रालय,मुंबई यांचे खाजगी सचिव.

६.उपसचिव,मा.मुख्यसचिव कार्यालय,मंत्रालय, मुंबई.

७.प्रधान सचिव, सार्वजनिक आरोग्य विभाग,मंत्रालय ,मुंबई.

८.प्रधान सचिव,मंत्रालय कोरोना नियंत्रण कक्ष,मंत्रालय मुंबई.

९.प्रधान सचिव,नगरविकास विभाग,मंत्रालय,मुंबई.

१०.संचालक, वैद्यकिय शिक्षण व संशोधन, मुंबई / संचालक, आरोग्य सेवा ,मुंबई/आयुक्त,सर्व महानगरपालिका यांना विनंती करण्यात येते की सदर परिपत्रक आपल्या अधिपत्याखालील संस्थांच्या तसेच खाजगी रूग्णालयांच्या निदर्शनास आणून यातील मार्गदर्शक सूचनांची काटेकोर अमंलबजावणी करण्याबाबत आपल्या स्तरावरून योग्य तो पाठपुरावा करण्यात यावा.

११.सर्व विभागीय आयुक्त/सर्व जिल्हाधिकारी/ मुख्य कार्यकारी अधिकारी सर्व जिल्हापरिषदा यांना आवश्यक कार्यवाहीस्तव.

# No.A-45013/5/2020-HPE Government of India Ministry of Health and Family Welfare HPE section

Nirman Bhavan, New Delhi - 110011 Dated 2.4.2020

To

Principal Secretaries (HFW) of All States/UTs.

Subject: Urgent need for the States to assess actual requirements of Essential Medical Devices and proper distribution- req.

\*\*\*\*

I am directed to say that as per the decision taken in 3<sup>rd</sup> meeting of Empowered Group for ensuring availability of essential medical equipment such as PPE, Masks, Gloves and Ventilators; Production, Procurement, Import & Distribution, constituted under the Disaster Management Act, 2005, held on 1.4.2020, the following action are required to be taken by States/UTs on urgent basis:

- (i) To revisit the actual requirement of crucial medical devices for COVID 19 management like Personal Protection Equipment, N95 masks and Ventilators and to aggregate States' demand and come up with a specific figure on a rational basis. This would include fortnightly requirement of State for COVID 19
   (ii) State Governments/UTs.
- (ii) State Governments/UTs may not go for procurement of crucial medical equipments like PPEs, N95 masks and Ventilators and that these should be procured centrally by Ministry of Health & FW and distributed to the States.
- (iii) Certain States have been found to be holding sufficient stocks of material with them but the field functionaries have been reported to be functioning without such equipments. The State Governments should ensure timely distribution of the key equipments to field functionaries timely.
- (iv) Some inventories of ventilators might be lying in the States not in working conditions for want of some intervention. The State Health Departments may look into this inventory management and to ensure that such crucial medical equipments are put in working conditions at the earliest to address the needs for Covid 19 management. Further adequate assessment of skilled and trained manpower to operate these equipments should also be assessed by the State and adequate training modules should be organized for this skill upgradation.
- (v) Oxygen Cylinders availability in the States needs to be quantified and the States to ensure their sufficient availability for the Management of Covid patients.
- States/UTs to take necessary action accordingly.
- This issues with the approval of Competent Authority.

(G.K. Pillai)

Under Secretary to the Government of India)

Tel: 23061213

471 HIERWAND \_ 3172020.

# महाराष्ट्र शासन

### तात्काळ

दुरध्वनी क्र.०२२-२२६१७३५३ E-mail - medd.prasha२@gov.in क्रमांक:- कोरोना -२०२०/ प्र.क्र. ०२/प्रशा-२ वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, गोकुळदास तेजपाल रूग्णालय आवार, गो.ते.संकुल इमारत, ९ वा मजला, लोकमान्य टिळक मार्ग, नवीन मंत्रालय, मुंबई - ४०० ००१. दिनांक: ०३ एप्रिल,२०२०.

विषय:- हाफिकन जीव- औषध निर्माण महामंडळ अंतर्गत खरेदी कक्षाच्या संकेत स्थळावरून औषधे व यंत्रसामुग्री खरेदीचे दर व उत्पादक यांची माहिती संकेतस्थळावरून मिळवण्याबाबतची कार्यपध्दती

संदर्भः- १. पत्र क्र.३३३४/हाफिकन/ खरेदी कक्षा/ संकेतस्थळ/२०१९-२०, दि.०१.०४.२०२०

२. सार्वजनिक आरोग्य विभाग पत्र क्र. करोना-२०२०/प्र.क्र.५८/आरोग्य-५, दि.२४.०३.२०२०

सोबत हाफिकन जीव- औषध निर्माण महामंडळ अंतर्गत खरेदी कक्षाचे दि.०१.०४.२०२० चे उपरोक्त विषयाबाबतचे पत्र व सहपत्रे माहिती व आवश्यक कार्यवाहीकरिता पाठविण्यात येत आहे.

( वि.गं.शिंदे)

सोबतः- वरीलप्रमाणे.

कक्ष अधिकारी, महाराष्ट्र शासन

प्रती:-

- १. सर्व विभागीय आयुक्त (कोकण/ नाशिक/ पुणे/ औरंगाबाद/ अमरावती/नागपूर)
- २. सर्व जिल्हाधिकारी
- ३. सर्व मुख्य कार्यकारी अधिकारी, सर्व जिल्हा परिषद
- ४. संचालक, वैद्यकीय शिक्षण आणि संशोधन, मुंबई
- ५. संचालक, आरोग्य सेवा संचालनालय, मुंबई व पुणे
- ६. सर्व अधिष्ठाता, शासिकय वैद्यकीय महाविद्यालये व रुग्णालये
- ७. सहसंचालक, आरोग्य सेवा (खरेदी) मुंबई
- ८. सर्व जिल्हा शल्य चिकीत्सक
- ९. सर्व जिल्हा आरोग्य अधिकारी, जिल्हा परिषद
- १०. व्यवस्थापकीय संचालक, हाफकीन जीव व औषध निर्माण महामंडळ, परळ, मुंबई
- ११. सहसचिव, औषधे, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई
- १२. उपसचिव, प्रशासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई
- १३. कक्ष अधिकारी, प्रशा-१/ प्रशा-२/ औषधे-१, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई
- १४. निवडनस्ती (प्रशा-२) वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई

प्रत:- माहितीसाठी अग्रेषित

- १. प्रधान सचिव, सार्वजनिक आरोग्य विभाग, मंत्रालय, मुंबई यांचे स्वीय सहायक
- २. मा.सचिव , वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग यांचे स्वीय सहायक

वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, शासन पत्र क्रमांक: करोना-२०२०/प्र.क्र.०३/प्रशा-२,

# दि.०३.०४.२०२० सोबतचे विवरणपत्र

हाफिकन महामंडळाच्या संकेतस्थळावरील माहिती प्राप्त करुन घेण्याची कार्यपध्दती:

१. सर्च इंजिनमध्ये VaccineHaffkine procurement Cell टाईप करावे.

# किंवा

ॲड्रेस बारमध्ये खालील नमूद युआरएल टाईप करावे. (https://www.vaccinehaffkine.com/procurement-cell.htm)

- दर्शविलेल्या पृष्ठावर टायटल बॉक्समध्ये जावे व ज्या बाबींचे पुरवठा आदेश पाहिजे असेल त्याचे नाव टंकलिखित करावे. उदा. N-95 Mask, Ventilator (Adult & pediatric, Neonatal, Transport), Paracetamol, Tab.
- ३. त्याच पृष्ठावरती सबमिट क्वेरी या बटनावरती क्लीक करावे.
- हाफिकन महामंडळातंर्गत खरेदी कक्षामार्फत निर्गमित केलेले पुरवठा आदेश दर्शविले जातील.
- ५. दर्शविलेल्या पुरवठा आदेशाच्या वर्णनाच्या व्ह्यू (View) या लिंकवर क्लीक करावे.
- ६. पुरवठा आदेश दर्शविला जाईल. त्यात उत्पादकाचे नाव, दर व विर्निदिष्टये दर्शविले जातील.

\*\*\*\*

# (Hollbines)

हाफिकन जीव- औषध निर्माण महामंडळ मर्यादित अंतर्गत (खरेदी कका)

> महाराष्ट्र शासनाचा अंगीवृत उपग्रम आचार्य दोंदे मार्ग, परळ, मुंबई ४०० ०१२.

फोन नं. ०२२-२४१२९३२०-२३ व्यवस्थापकीय संचालक-०२२-२४१५०६२८ **द्व** जनरल मॅनेजर (खरेदी कक्ष)-०२२ २४१००४७८

संकेतस्यळःhttp:/www.vaccinehaffkine.com

ई.ਸੇਲ ∶ procurementcell@vaccinehaffkine.com

कञ्ज ३३७ हाफकिन/खरेदी कक्ष/ संकेतस्थळ / /२०१९-२० दिनांक :- ०९ (०ञ्क २०२०

प्रति,

मा. सचिव वैदयकीय शिक्षण व औषधी द्रव्ये विभाग, ९ वा मजला गो. ते. रुग्णालय आवार, मंत्रालय मुंबई.

विषय - हाफिकन अंतर्गत खरेदी कक्षाच्या संकेतस्थळावर पुरवठा आदेश शोधणेवावत.

आदरणीय महोदय,

दि. २४.०३.२०२० रोजीच्या सार्वजनिक आरोग्य विभागाच्या परिपत्रकानुसार औषधी व यंत्रसामुग्री खरेदीचे अधिकारी प्रत्येक जिल्हयाच्या जिल्हाधिका-यांना देण्यात आले आहे. तरी संबंधिंतांना औषधी व यंत्रसामुग्री खरेदी करण्याकरीता त्यावावतचे हाफिकनचे दर व उत्पादक यांची माहीती हाफिकन महामंडळाच्या संकेत स्थळावर उपलब्ध आहे.

तरी हाफिकन अंतर्गत खरेदी कक्षामार्फंत निर्गमित केलेले पुरवठा आदेश शोधणेवावतचे परिपत्रक व विवरण सोबत जोडलेले आहे.

आपला विस्वास्

2022M/-

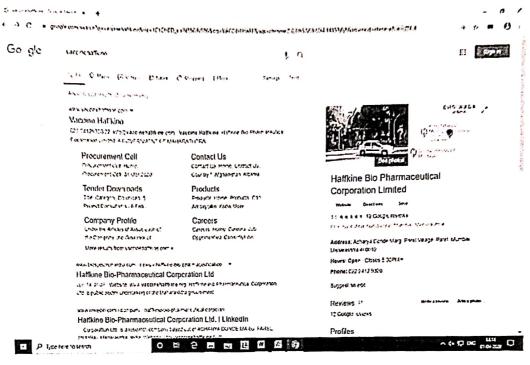
(डॉ. राजेश देशमुख) व्यवस्थापकीय संचालक हाफिकन जीव औषघ निर्माण महामंडळ, मुंबई.

Scanned with CamScanner

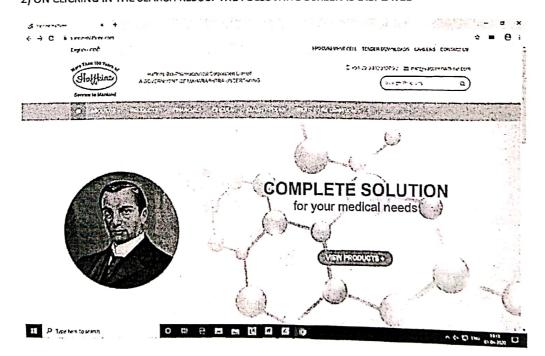
Yru

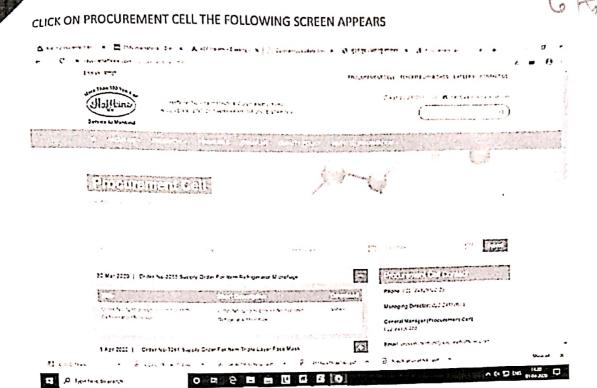
# SEARCH PROTOCOL FOR HAFFKINE ORDERS

# 1) IN SEARCH ENGINE TYPE VACCINE HAFFKINE



# 2) ON CLICKING IN THE SEARCH RESULT THE FOLLOWING SCREEN IS DISPLAYED

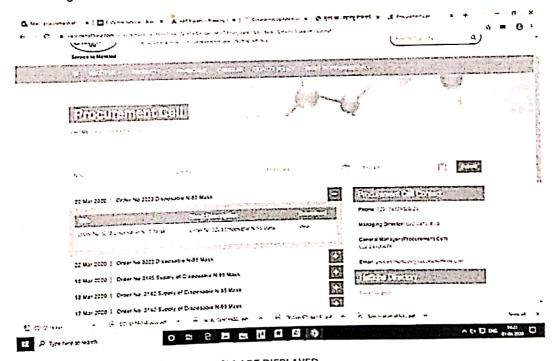




4) IN THE TITLE BOX TYPE THE ITEM FOR WHICH ISSUED ORDER IS NEEDED

e.g. N-95 masks

P Ignter to scan



- 5) THE ISSUED ORDERS OF ITEM ARE DISPLAYED
- 6) CLICK ON VIEW LINK
- 7) THE ORDER IS DISPLAYED

Scanned with CamScanner

# Minding our minds during the COVID-19

These can be difficult times for all of us as we hear about spread of COVID-19 from all over the world, through television, social media, newspapers, family and friends and other sources. The most common emotion faced by all is Fear. It makes us anxious, panicky and can even possibly make us think, say or do things that we might not consider appropriate under normal circumstances.

# **Understanding the importance of Lockdown**

Lockdown is meant to prevent the spread of infection from one person to another, to protect ourselves and others. This means, not stepping out of the house except for buying necessities, reducing the number of trips outside, and ideally only a single, healthy family member making the trips when absolutely necessary. If there is anyone in the house who is very sick and may need to get medical help, you must be aware of the health facility nearest to you.

# **Handling Social isolation**

Staying at home can be quite nice for some time, but can also be boring and restricting. Here are some ways to keep positive and cheerful.

- 1. Be busy. Have a regular schedule. Help in doing some of the work at home.
- 2. Distract yourself from negative emotions by listening to music, reading, watching an entertaining programme on television. If you had old hobbies like painting, gardening or stitching, go back to them. Rediscover your hobbies.
- 3. Eat well and drink plenty of fluids.
- 4. Be physically active. Do simple indoor exercises that will keep you fit and feeling fit.
- 5. Sharing is caring. Understand if someone around you needs advice, food or other essentials. Be willing to share.
- 6. Elderly people may feel confused, lost and need help. Offer them help by getting them what they need, their medicines, daily needs etc.
- 7. If you have children at home, keep them busy by allowing them to help in the household chores make them feel responsible and acquire new skills.

# Focus on facts, reject rumours and theories

- Knowledge is power; the more you know about a certain issue, the less fearful you may feel. Make sure to access and believe only the most reliable sources of information for self-protection.
- 2. Do not follow sensational news or social media posts which may impact your mental state. Do not spread or share any unverified news or information further.
- 3. Do not keep discussing all the time about who got sick and how. Instead learn about who got well and recovered.
- 4. Stick to the known advice- hand hygiene and keeping a physical distance from others. It is being careful about yourself, and also about care of others.
- 5. A common cold is not Corona infection. The symptoms of Corona have been well described. Follow etiquette of sneezing, coughing, avoiding spitting in public places etc.

6. In most people, the Corona infection causes mild symptoms and the person only needs to follow social distancing till he/she stops being infective, usually 2 weeks. Mild infection does not require a person to be admitted in hospital. Only people who have breathing difficulties need to be in hospital. Most people recover.

# Handling emotional problems

- At times of anxiety, practice breathing slowly for a few minutes. Try and distance the thoughts that are making you anxious. Think of something calm and serene, and slow down your mind.
- 2. When feeling angry and irritated, calming your mind, counting back from 10 to 1, distracting yourself helps.
- 3. Even when feeling afraid, deal with it by asking yourself:
  - a. What is under my control?
  - b. Am I unnecessarily worrying about the worst thing that can happen?
  - c. When I have been stressed in the past, how have I managed?
  - d. What are the things I can do to help myself and be positive?
- 4. Feeling lonely or sad is also quite common. Stay connected with others. Communication can help you to connect with family and friends. Call up people whom you haven't spoken to and surprise them. Discuss happy events, common interests, exchange cooking tips, share music.
- 5. If any of these emotions persist continuously for several days, despite your trying to get out of it, talk about it with someone. If the feelings worsen, a person may feel helpless, hopeless and feel that life is not worth living. If that happens, call at helpline number (080-46110007) for advice from a mental health professional or contact your doctor / mental health professional.

#### What is NOT advisable

- Avoid tobacco, alcohol and other drugs. Use of tobacco or alcohol or other drugs to cope with emotions or boredom can worsen physical, mental health and reduce immunity. People who already have a substance use problem may require professional help, especially when they feel low in mood or stressed.
- 2. Do not shun or judge people with a CoVid infection. While you need to maintain a physical distance and keep yourself safe to prevent such infection, remember they need care and concern. If you know someone who might have the infection, tell them about precautions, and how to get medical assistance, if required.
- 3. If you happen to get infected with Corona, remember most people get better. Do not panic. Practice self-isolation and take medications that are advised.

# **Emotional issues after recovery**

- 1. While it is wonderful to recover from Covid infection, you may actually face stress after you have recovered and wish to get back into the community. You may have fear about your loved ones falling ill.
- 2. People who do not understand the illness well may actually keep you at a distance, which is also very stressful and isolating.

- 3. You may experience feelings of guilt that you were not able to work or care for others. This may lead to feelings of depression, helplessness or frustration.
- 4. Use the ways mentioned earlier to deal with these feelings. Share your positive story that it is possible to recover from COVID infection.

# Recognise mental health problems in your near and dear ones

Just as you can recognise your own mental health problems, be sensitive to such problems in your near and dear ones, which may include:

- 1. Changes in sleep patterns
- 2. Difficulty in sleeping and concentrating
- 3. Worsening of health problems
- 4. Increased use of alcohol, tobacco or drugs

Be supportive to them. If the problems persist, please contact the helpline (080-46110007) or contact your doctor or a mental health professional.

# Persons with mental illness

Persons who had previous mental illness may face newer challenges during selfisolation or Covid infection:

- 1. They would also have the same fears and stress as others which may worsen their previous mental health condition
- 2. Social isolation may make them more withdrawn, moody and irritable
- 3. They may not seek/ get easy access to medicines and counselling

Help and support is vital for persons with mental illness from their families and other care givers. Health helplines can provide support, in addition to regular taking of prescribed medication, a regular daily routine, keeping engaged and positive.

Remember, good mental status in the difficult times may win you the battle more easily!

# Advisory on use of Homemade Protective Cover for Face & Mouth

- 1. We are aware that social distancing and personal hygiene are keys to prevent COVID 19 infections. Certain countries have claimed benefits of homemade face cover for the general public. Such homemade face cover is a good method for maintaining personal hygiene. Such usage certainly will help in maintaining overall hygienic health conditions.
- 2. Therefore, it is suggested that such people who are not suffering from medical conditions or having breathing difficulties may use the handmade reusable face cover, particularly when they step out of their house. This will help in protecting the community at large.
- This face cover is not recommended for either health workers or those working with or in contact with COVID 19 patients or are patients themselves as these categories of people are required to wear specified protective gear.
- 4. It is advised that two sets of such face covers be made so that one can be washed while the other is used. Hand washing would still remain essential criteria and hand should be washed before wearing the face cover. Such face covers should also not be thrown anywhere but kept safely, washed properly with soap and hot water and dried properly before they are used.
- 5. These face covers could be made out of clean cloth available at home, which needs to be thoroughly cleaned and washed before a face cover is stitched/made. The face cover should be prepared in such a manner that it can cover the mouth and nose completely and can be tied over the face easily.

6. There must not be a sharing of face covers and a face cover must be used by only one individual. So, in a family of several members, each member should have a separate face cover.

\* \* \* \* \*

Issued by the Office of the Principal Scientific Advisor to the Government of India\_ April 3, 2020



# Face Covers for Curbing the Spread of SARS-CoV-2 Coronavirus

Manual on Homemade Protective Cover for Face and Mouth.

Proposed guide is meant to provide a simple outline of best practices to make, use and reuse face covers to enable NGOs and individuals to make face protection themselves.

The key criteria for proposed designs are Ease of Access to Materials, Ease of Making at Home, Ease of Use and Reuse.

The homemade face cover should be prepared in such a manner that it can cover the mouth and nose completely and can be tied over the face easily.

This face cover is not recommended for either health workers or those working with or in contact with COVID 19 patients or are patients themselves as these categories of people are required to wear specified protective gear.

Wearing of face covers is especially recommended for people living in densely populated areas across India.

You can easily make a face cover at home to protect yourself.

Option 1. Make a Face Cover using a Sewing Machine \*

# Things you will need:

100% cotton material

Any used cotton cloth can be used to make this face cover. The colour of the fabric does NOT matter but you must ensure that you wash the fabric well in boiling water for 5 minutes and dry it well before making the face cover. Adding salt to this water is recommended.

2.



Four pieces of cloth strips

3.



**Scissors** 



**Sewing Machine** 



**1.a Cutting Fabric – Cut cloth for the face cover at the** following sizes as required:

Adult: 9 inch x 7 inch Child: 7 inch x 5 inch





1.b Cutting Strips – Cut 4 strips for tying and piping

from cloth: Two pieces at 1.5"x 5" and Two pieces at 1.5"x 40"

\*You can also make this face cover without a sewing machine

Inch(")=2.5cms

Illustration by MoHFW

#### **Process demonstrated below is for Adult Size Face Cover**







Take the cut fabric, attach the 1.5x5" strip to be used as piping to the fabric on one end as shown.







Create three downward facing pleats of approximately 1.5" each folding cloth as shown.

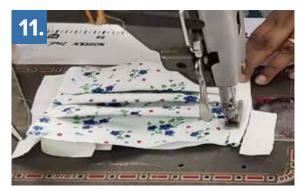






Turn the pleated cloth to the other side and repeat steps for pleating on this side as shown above. Once the pleats have been made, the height of the pleated cloth will be reduced from 9" to 5".







Secure the pleats with piping on both sides as shown above. Take extra care to keep all pleats facing downward as shown.







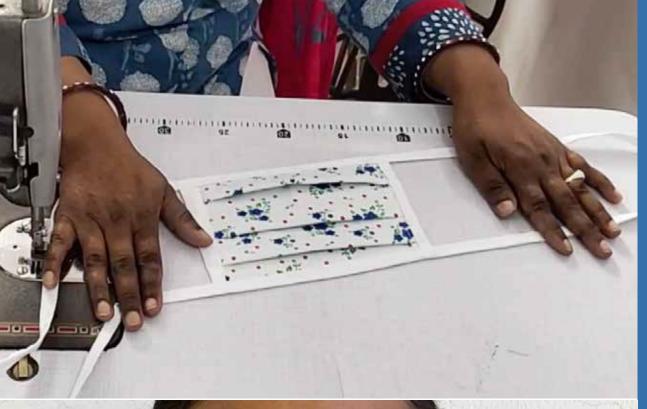
Now begin attaching the long 40" strips used for tying the face cover to the top and bottom as shown.







Once again fold both these strips three times and stitch as shown above.





- Your face cover is now ready
- Ensure that the face cover fits around your mouth and nose and there is no gap between it and your face. When wearing the face cover, the side facing you should show the pleats as facing downwards.
- You must never reverse the face cover for reuse. Always thoroughly wash it after every use following process shown further.

This face cover is currently being used by community health workers of organizations in South Rajasthan including, Amrit Clinic, Arth Hospital, and Shreyas Hospital. Images and process courtesy: Jatan Sansthan, Udaipur

# Make sure the face cover fits your face well and there are no gaps on the sides...















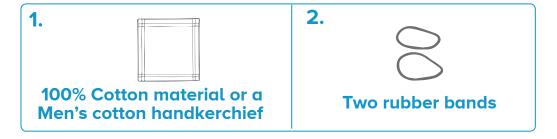


Remember to still maintain up to 2 meter distance from others at all times, wash your hands thoroughly when back home and do not touch your face or eyes!

Demonstrated by Dr. Gargi Goel, Pediatrician, Rajasthan

## Option 2: Making a Face Cover at Home Without a Sewing Machine

Things you will need:



Step 1

Step 2

Step 3



Fold the handkerchief from one side to little above the middle of the cloth



Now fold over the other edge to go above the first fold



Fold this again evenly from the middle as shown

## Step 4

Take a rubber band and tie it on left side of the cloth as shown

## Step 5

Now tie the other side with another rubber band Ensure that the area in the middle of the two rubber bands is big enough to cover your mouth and nose

## Step 6

Take one edge of the cloth on the side of the rubber band and fold over it. Do this for both sides

## Step 7

Now take one fold and insert in to the other fold





1. Your face cover is now ready



2. Please ensure that the face cover fits around your mouth and nose comfortably but that there is no gap left between the face cover and the mouth.



3. To wear this face cover just wrap each rubber band around your ears



4. You must follow all precautions and instructions outlined above when using the face cover

#### **IMPORTANT PRECAUTIONS:**

## Before using the handmade face cover remember:

- 1. Thoroughly wash and clean the face cover (as shown in next page) before wearing it.
- 2. Wash your hands thoroughly before wearing the face cover.
- 3. As soon as the face cover becomes damp or humid, switch to another face cover and clean the used face cover.
- 4. Never reuse a face cover after single use without cleaning it.
- 5. Never share the face cover with anyone. Every member in a family should have separate face cover.



## When removing the face cover:

- Do not touch the front or any other surface of the face cover, remove it only with strings behind
- For string face cover, always untie the string below and then the string above
- After removal, immediately clean your hands with 65% alcohol-based hand sanitizer or with soap and water for 40 seconds
- Drop it directly into a soap solution or boiling water to which salt has been added

# How to Clean and Sanitize your Homemade Face Cover Everyday

1. Thoroughly wash the face cover in soap and warm water and leave it to dry in hot sun for at least 5 hours. If you do not have access to the sun, follow Option 2:

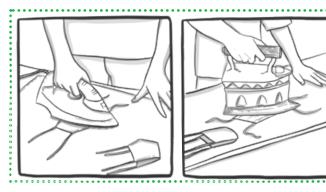


2. Place the face cover in water in a pressure cooker and pressure boil it for at least 10 minutes and leave it to dry. Adding salt to the water is recommended. In the absence of a pressure cooker, you may boil the cloth face cover in hot water for 15 minutes.

If you do not have access to a pressure cooker/boiling water, follow Option 3:

3. Wash and clean with soap and apply heat on the face cover for up to five minutes. (You may use an iron).





### How to Store your Clean Face Cover

It is recommended that you make two face covers so you can wear one, while the other is washed and dried



Take any plastic bag at home



Clean it thoroughly with soap and water



Let it dry well on both sides



Keep your extra clean face cover in this clean bag



Keep it sealed well



Now you can rotate your face covers for daily use

Issued by the Office of the Principal Scientific Advisor to the Government of India\_ April 3, 2020 Homemade reusable face covers only reduce the chances of inhaling droplets still in the air from an infected person, they do not give full protection. Homemade reusable face covers must be washed and cleaned each day, as instructed. Reuse without washing should NEVER be done. Never share your face cover with anyone. Social distancing must still be maintained.

Remember to wash your hands frequently with soap for 20 seconds.





## National Institute of Mental Health and Neuro Sciences (Institute of National Importance)



### Taking care of Mental Health of Children during COVID-19

The outbreak of COVID -19 and its consequences can make children anxious and stressed. Take care of their mental health with these simple strategies.

#### PROVIDE ASSURANCE WHENEVER NEEDED

It is important to reassure your children.

Listen to their concerns and try answering their queries related to the outbreak. Spend quality time with them and give them the attention they need. Reading them stories to put them to sleep will make them feel loved.



### KEEP THEM IN CONTACT WITH THEIR FRIENDS

Physical distancing from friends can be a cause of distress for the children. Encourage them to talk to their friends, cousins and loved ones by calling them up or through video calls. You can also involve your children and their friends in some fun activities which they can do together by staying connected virtually.



#### MANAGE YOUR CHILD'S ANXIETY

It is normal for your child to become anxious at this time. Look out for the emotional cues in your child and talk to them regarding the same. Avoid being judgemental when they express their feelings. Do not avoid their questions related to COVID or speak to them harshly. This can increase their fear and anxiety. Instead, make them understand that things will be better if we take proper care. Remember that this is a new situation for your children and do not get irritated with them,



#### GIVE THEM CLEAR INFORMATION

It is not advisable to provide children with a lot of reports and news related to the outbreak. However it is important to give them correct information as to what is happening around the world. Give them proper facts in a way that they can understand so that they do not remain confused, as this may increase their anxiety. You can make the explanations creative through pictures and drawings.



#### ENGAGE THEM IN INDOOR ACTIVITIES

During this time, children may get easily bored. Involve them in indoor games to cut down the boredom. You can also make their learning fun by giving them puzzles to solve and teaching them crafts. Encourage them to pick up a hobby. Involve the children in some stretching exercises, yoga or dancing which they will enjoy. You can also involve them in doing simple household activities to keep them engaged



### MAKE A ROUTINE OF LEARING AT HOME

At this time, schools are closed, however this should not stop the children from learning.

Ensure that they have a regular habit of studying by giving them small assignments related to their lessons. Check the assignments to understand their progress



Above all, take good care of your children's health. Ensure that they practise hand washing and cover their mouth and nose with bent elbow when they cough or sneeze. Watch out for any symptoms of COVID-19 and reach out to the doctor if necessary. Have a plan in advance in case your child falls sick. Ensure that the children eat healthy food and get good sleep and rest.

#### IN CASE YOU NEED ANY HELP

Please contact COVID -19 Psycho social toll free helpline at 080-46110007 or consult your doctor or a mental health professional



## National Institute of Mental Health and Neuro Sciences (Institute of National Importance)



### Taking care of Mental Health of elderly during COVID-19

During the COVID-19 outbreak, all of us should take some extra time and care for ourselves. Follow some simple strategies to improve your well-being

#### SPEND TIME WITH FAMILY

Spending quality time with family and getting involved in family discussions, while staying at home during this period will help reduce anxiety and distress. Try to connect with your family members through phone call or video call if they stay far from you.



### GETTING INVOLVED IN DAILY ACTIVITIES

Keep doing small activities at home to reduce boredom. Keeping yourself busy in the daily activities like gardening, cleaning and cooking will help reduce anxiety. If there is no other family member to help you, identify a support system to buy groceries, medicines and other essentials.



### SPEND TIME ON RECREATIONAL ACTIVITIES

During this stressful time, it is important that you make some time for things you like. Engage in recreational activities like solving puzzles, playing some board games like carrom board or chess, listening to music, reading etc. These will help reduce boredom



#### CONNECTING TO LOVED ONES

During this time, you might be worried about your loved ones such as children and grandchildren, who stay away from you. Connect with them once in a while through phone calls or video call to keep the stress at bay and for any emergencies.



#### MAKE SOME TIME FOR EXERCISE

It is important to be physically active. Simple stretching exercises, simple yoga postures, walking indoors or meditation will be beneficial not only for your physical health but also mental health.



#### **CUT DOWN ON LISTENING TO NEWS**

With the news of the pandemic everywhere, it is difficult to filter out reliable news. Do not watch news reports all the time as it may be upsetting and misleading. Seek information from credible sources like the website of Ministry of Health and Family Welfare (mohfw.gov.in). In case of doubt, ask your loved ones.



Take special care of elderly persons in your family. Remind them to practice hand washing as often as possible. Make sure to tell them to cover their mouth and nose with bent elbow, when they cough or sneeze. Watch out for any symptoms of COVID-19 and reach out for medical help, if necessary. Make sure they eat healthy food and get good sleep.

#### IN CASE YOU NEED ANY HELP

Please contact COVID -19 Psycho social toll free helpline at 080-46110007 or consult your doctor or a mental health professional

#### **PSYCHOSOCIAL ISSUES AMONG MIGRANTS DURING COVID-19**

Migrants are less familiar in their new environment in which they temporarily live. They are prone to various social, psychological and emotional trauma in such situations, emanating from fear of neglect by the local community and concerns about wellbeing and safety of their families waiting in their native places. Migrants are forced to leave their native places in search of better opportunities and earnings, sometime leaving behind their families. In many instances, the families in native places depend partially or entirely on the money sent by the migrant earning members of the family.

During outbreak of communicable diseases, such a COVID-19, and the restrictions imposed on routine activities as part of social distancing norms to prevent the spread of the disease, scores of migrant workers tend to move back to their native places. During the prevailing COVID pandemic also, many migrant workers used all possible means to reach their destinations. Many of them are however stuck at borders, including state, district and at national border areas. These are the most marginalized sections of the society who are dependent on daily wages for their living, and in times of such distress need sympathy and understanding of the society.

Immediate concerns faced by such migrant workers relate to food, shelter, healthcare, fear of getting infected or spreading the infection, loss of wages, concerns about the family, anxiety and fear. Sometimes, they also face harassment and negative reactions of the local community. All this calls for strong social protection.

As an immediate response, measures to be taken should include, ensuring community shelters and community kitchens, making other relief material available, emphasising on the need for social distancing, identification of suspected cases of infection and adherence to protocols for management of such cases, putting up mechanisms to enable them reach to the family members through telephone, video calls etc. and ensuring their physical safety.

Migrant workers faced with the situation of spending a few days in temporary shelters, which may be quarantine centres, while trying to reach to their native places, are filled with anxieties and fears stemming from various concerns, and are in need of psycho-social support. As part of such support, following measures can be adopted:

- 1. Treat everyone migrant worker with dignity, respect, empathy and compassion
- 2. Listen to their concerns patiently and understand their problems
- 3. Recognise specific and varied needs for each person/family. There is no generalisation.
- 4. Help them to acknowledge that this is an unusual situation of uncertainty and reassure them that the situation is transient and not going to last long. Normal life is going to resume soon.
- 5. Be prepared with all the information about possible sources of help. Inform them about the support being extended by Central Government, State Governments/ NGOs/ health care systems etc.
- Emphasise on the importance of their staying in their present location and how mass movement could greatly and adversely affect all efforts to contain the virus.
- 7. Make them realise their importance in the community and appreciate their contributions for the society.
- 8. Remind them that they have made their place with their own efforts, acquired the trust of their employer, sent remittances to their families and therefor deserve all respect.
- 9. Reassure that even if their employer fails them, local administration and charitable institutions would extend all possible help.
- 10.Out of desperation, many may react in a manner which may appear insulting.
  Try to understand their issues and be patient.
- 11. If somebody is afraid of getting affected, tell them that the condition is curable, and that most recover from it.
- 12. Remind them that it is safer for their families if they themselves stay away from them.
- 13. Instead of reflecting any mercy, seek their support in the spirit of winning over the situation together.

#### Advisory for Jhuggi Jhopdi Clusters/Slums in view of COVID-19

WHO has declared the COVID-19 (SARS-CoV-2) as Public Health Emergency of International Concern.

For communities, inadequate shelter and overcrowding are risk factors in the transmission of diseases with epidemic potential such as COVID-19.

Unauthorized colonies and Jhuggi-Jhopri clusters pose a serious human problem as a huge population is living in these colonies.

Jhuggi-Jhopri" means small roughly built house or shelter usually made of mud, wood or metal having thatch or tin sheet roof covering. "Slum" means an area consisting of badly built, overcrowded houses, buildings or Jhuggi-Jhopri cluster.

#### General types of Unplanned Dwelling Units and Population

Jhuggi Basti	Encroached on public land
Resettlement Colonies	Incorporated within the expanded city with good shelter
	consolidation without adequate services
Unauthorised Colonies	Illegal colonies in violation of Master Plans, no clear land title
Notified Slum Areas (Katras)	Notified under Slum Areas
Urban Village	Notified under Municipal Corporation Act
Homeless and Pavement	-
Dwellers	

The **local representatives/ward members and influencers** in these areas can ensure following **DO's and DON'T'S** to prevent the residents from COVID-19 infection.

- 1. Stop all mass gatherings.
- 2. Elderly (more than 60 years) to stay indoors.
- Common areas like toilets, water supply areas, surfaces, likely to be touched by residents to be cleaned frequently using any available disinfectant. Toilets are closed spaces and potential source of infection to others.
  - a. Ensure cleaning of toilets frequently.
  - b. Prevent crowding around public amenities such as toilets, drinking water sources, ration shops.

- c. People waiting should maintain a distance of 1m and face away from each other and refrain from touching their eyes, nose and mouth
- 4. Ensure all residents have access to soap and water for frequent hand-washing for at least 20 sec.
- 5. Any family member working as domestic help in neighborhood should request exemption from service for a short period of two weeks so as to ensure that neither the employer nor employee acquires and spreads COVID-19. If they are required to go to work, they should practice proper hand washing with soap and water at and after work.
- 6. Any recreational facility to be closed to avoid gathering.
- 7. People can use neighborhood parks subject to strict maintenance of 1-meter distance.
- 8. No outdoor activities are to be allowed.
- 9. Local leaders need to check the spread of rumors and misinformation. For clarifications they can contact national helpline number 1075 or 011-23978046 or Whatsapp number 9013151515. Unverified/fake messages received on social media are not to be shared with the others. Only information received from authentic/official sources are to be believed and circulated.
- 10. In case any positive case is detected in the locality, 'Containment Plan' will be put in place for which you are required to cooperate with the health authorities.
- 11. Identified volunteers to ensure that those who have been advised to follow home quarantine do not venture outside their homes and ensure home quarantine for designated time. Any breach in home quarantine can lead to unchecked transmission of infection in the locality. The list of those advised home quarantine will be shared with local representatives/ward members by the health authorities. In case of breach of home quarantine by the residents please inform national helpline number 1075 or 011-23978046 or Whatsapp number 9013151515.
- 12. Government of India's approved Information, Education & Communication material of COVID-19, hand hygiene and respiratory etiquettes will be provided to local representatives/ward members in hard copies. Local representatives/ward members to ensure their display at prominent places.

13. Local informal health service providers are encouraged to report any suspect case of COVID-19.

#### Instructions for the Residents of JJ clusters/slums:

If you have any contact with a confirmed case of COVID-19, then you need to follow the following instructions

- 1. Subject yourself to home quarantine for 14 days.
- 2. If you develop fever, cough, running nose, difficulty in breathing please call immediately on local representatives/ward members and or identified volunteers and national helpline number 1075 or 011-23978096 or Whatsapp number 9013151515, for further assistance as regards to testing, medical care which will be provided by Health department, FREE OF COST, at identified hospitals, patient will be transported using ambulance services.
- Details of all the persons who had close contact with the suspected case shall be shared with concerned health officials and have to be subjected to home quarantine for observation.

#### **Taking Care of Children**

- 1. Discourage children from playing outside in groups.
- 2. Parents are advised to engage kids in indoor activities.
- 3. Educate kids on cough etiquette, hand hygiene and social distancing to spread of infection.
- 4. Parents should ensure that children wash hands with soap and water frequently and after coming back home from outside.
- Parents/caregivers are advised to counsel their children on COVID-19 and importance of preventive measures so that they understand the reasons of restrictions on their activities.

Support and cooperation from your side is highly necessary as this would reduce the transmission of COVID-19 infection in the community.

### Guidelines for elderly and high risk groups to safeguard from COVID-19 Outbreak

If a COVID-19 outbreak happens in a community, it may last for a long time. An outbreak is when a large number of people suddenly get sick. Depending on how severe the outbreak is, public health officials may recommend community actions that can slow the spread and reduce the impact of disease to reduce people's risk of being exposed to COVID-19.

People 60 years or above with any comorbidity are at high risk. They should keep themselves well hydrated, exercise and eat right as a routine practice. They should be upto date on how the coronavirus is affecting their area and follow the advisories given by the government as the situation evolves on **mohfw.gov.in**.

#### \*People above 60 years of age with any of the following conditions:

- Chronic heart disease; hypertension, diabetes, chronic kidney disease, people undergoing dialysis, chronic liver disease
- Chronic respiratory diseases, such as asthma, chronic obstructive pulmonary disease (COPD), emphysema, bronchitis, cystic fibrosis or severe asthma
- Chronic neurological conditions, such as Parkinson's disease, motor neurone disease, multiple sclerosis (MS), a learning disability or cerebral palsy
- Problems with spleen such as sickle cell disease, splenectomy
- Weakened immune system as the result of conditions such as HIV and AIDS, or medicines such as steroid tablets or chemotherapy
- People with organ transplant and remain on ongoing immunosuppression medication
- People with cancer undergoing active chemotherapy or radiotherapy, cancers of the blood or bone marrow such as leukaemia who are at any stage of treatment

#### 1753503/2020/O/O IDSP-NCDC

#### Dos:

- Keep in touch with family and friends through phone, internet and social media
- Use telephone or online services for other essential services, drug delivery, banking, grocery delivery etc
- Wash hands often with soap and water for at least 20 seconds, especially after blowing their nose, coughing, or sneezing, or having been in a public place. If soap and water are not available, use alcohol based hand sanitizer that contains at least 70% alcohol.
- Follow respiratory etiquettes. Use a tissue or your sleeve to cover your mouth
  while coughing or sneezing and was your hands/ sanitise them after throwing the
  tissue in a closed bin.
- Avoid touching surfaces in public places elevator/ lift buttons, door handles, handrails. Use a tissue or their sleeve to cover your hand or finger if you must touch something.
- Avoid shaking hands with people, avoid hugging and kissing people.
- Maintain at least 1 metre (3 feet) distance with everyone.
- Contact the doctor to ask about obtaining extra necessary medicines to have at home in case of an outbreak of COVID-19 in their community and stay home for a prolonged period of time.
- Have enough household items and groceries on hand to be prepared to stay at home for a considerable period of time.
- Clean and disinfect home to remove germs: practice routine cleaning of frequently touched surfaces (for example: tables, doorknobs, light switches, handles, desks, toilets, faucets, sinks & cell phones) using available disinfectant

#### Don'ts

- Do not touch eyes, nose and mouth with unclean, unwashed hands
- Do not travel if not necessary or essential
- Do not go to the hospital for routine health checkups and use telephone to contact the doctor
- Do not come in close contact with those who are sick/ not well
- Do not go for gatherings with friends and family and stay away from large gatherings

#### Watch for symptoms and emergency warning signs

- Pay attention for potential COVID-19 symptoms like fever, cough, and shortness of breath. If you have symptoms, call helpline number 011-23978046; 1075.
- Wear mask, practice hand hygiene and take paracetamol for fever (avoid lbuprofen).
- If you develop emergency warning signs for COVID-19 call helpline number 011-23978046, 1075 and get medical attention immediately. In adults, emergency warning signs\*:
  - Difficulty breathing or shortness of breath
  - Persistent pain or pressure in the chest
  - New confusion or inability to arouse
  - Bluish lips or face

## \*This list is not all inclusive. Please consult the doctor for any other symptoms that are severe or concerning. What others can do to support older adults?

Older people can be helped to feel more positive if they engage with the world and stay active. Don't lock them up and try to protect them. Make sure they are not immobile for long periods of time, watching television for long periods or remaining bed bound.

- Identify an emergency contact and keep the number on speed dial of the phone and also visibly displayed at home.
- Identify a caregiver in family or any community volunteer or police to help elderly
  by providing them essential supplies and keep a watch on general wellbeing of
  the elderly esp. who are staying alone. Also determine who can care for them if
  their caregiver gets sick.
- Community preparedness planning for COVID-19 should include older adults and people with disabilities, and the organizations that support them in their communities, to ensure their needs are taken into consideration.
- Provide psychosocial support.

#### Long-term care facilities (old age homes)

They should be vigilant to prevent the introduction and spread of COVID-19. Identify Nodal person for COVID response at the facility who shall look into the following

- Rapid identification and isolation of ill residents to designated health facilities
- Considerations for visitors and consultant staff
- Supplies and resources
- Surge capacity for staffing, equipment and supplies