# ALL INDIA INSTITUTE OF MEDICAL SCIENCES

## Ansari Nagar, New Delhi - 110029

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A Ready Reckoner for Hospital Infection Control related practices in the context of COVID-19, AIIMS, New Delhi, received from Hospital Infection Control Committee (HICC), AIIMS, is endorsed herewith, for information & n/action.

## (DR. D.K. SHARMA) MEDICAL SUPERINTENDENT

#### Copy to:

- 1. Chief(s) of all Centres & Head(s) of all the departments.
- 2. Medical Superintendent (RPCOS) / Addl. M.S. of all centres.
- 3. All Faculty of Hospital Administration.
- 4. Chairperson, Hospital Infection Control Committee (HICC), AIIMS.
  - 5. Prof. In-charge Computer Facility (with a request to forward to all Chief(s) of Centre, Head(s) & faculties of all Departments through e-mail and also on Notice Board).
  - 6. C.N.O. / Duty Officer, Control Room.

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## Ready Reckoner for Hospital Infection Control related practices in the context of COVID-19 AIIMS, New Delhi

S. No.	Scenario	PPE& Standard Precautions	Further Action	Disinfection & Other Infection Prevention activity
1	COVID suspect in Emergency Screening area	<ul> <li>For Screening&amp; Sampling:</li> <li>Level 2 kit</li> <li>Use face shield for AGPs</li> <li>Standard Precautions</li> </ul>	• Shift patients needing hospitalization to designated area for suspects (e.g. C6/D6)	<ul> <li>Standard precautions</li> <li>Disinfection as per routine protocol</li> <li>Routine BMWM with double bagging and labeling as 'COVID waste'</li> </ul>
2	COVID suspect in designated area for suspects e.g.C6/D6	<ul><li>HCP to wear Level 3 kit</li><li>Use face shield for AGPs</li><li>SA to wear Level 3 kit with heavy duty gloves and boots</li></ul>	• If all patients in a cubicle are COVID negative: shift to parent departments	<ul> <li>Perform 2 step cleaning (detergent + disinfectant)</li> <li>Routine BMWM with double bagging and labeling as 'COVID waste'</li> </ul>
		• Standard Precautions	• COVID positive patient: shift patient to Trauma Centre	<ul> <li>Perform 2-step cleaning* (detergent + disinfectant) plus fogging with H<sub>2</sub>O<sub>2</sub></li> <li>Soak patients' linen in 1% sod. hypochlorite solution.</li> <li>Routine BMWM with double bagging and labeling as 'COVID waste'</li> </ul>
			• If one or more patients test COVID positive and if the cubicle had other patients who are COVID negative: shift the negative patients to the respective units, which preferably should have a designated area for cohorting of such patients.	<ul> <li>After shifting of COVID positive patient to designated area and COVID negative patients are shifted out, the empty cubicle should undergo terminal disinfection: 2-step cleaning* plus fogging.</li> <li>If unable to shift COVID negative patient due to any reason: perform</li> </ul>

S.	Scenario	PPE& Standard	F	urther Action	Dis	infection & Other Infection
No.		Precautions				evention activity
			•	Test patients between day 5 & 14 of exposure or earlier if symptoms appear, in consultation with ID team. HCPs looking after such patients to wear Level 2 kit. Use face shield for AGPs	•	surface disinfection of all beds and other equipments with either 1% sodium hypochlorite or 70% alcohol. Soak COVID positive patients' linen in 1% sod. hypochlorite solution followed by routine treatment.
3	COVID patients' ward	<ul> <li>HCP to wear Level 2 kit</li> <li>Use face shield for AGPs</li> <li>SA to wear Level 2 kit with heavy duty gloves and boots</li> <li>Standard Precautions</li> </ul>		-	•	Perform disinfection of vacant beds with 1% sodium hypochlorite or 70% alcohol. Soak COVID positive patients' linen in 1% sod. hypochlorite solution followed by routine treatment.
4	COVID patients' ICU and HDU	<ul> <li>HCP to wear Level 3 kit</li> <li>Use face shield for AGPs</li> <li>SA to wear Level 3 kit with heavy duty gloves and boots</li> <li>Standard Precautions</li> </ul>		-	•	Perform disinfection of vacant beds with 1% sodium hypochlorite or 70% alcohol. Soak COVID positive patients' linen in 1% sod. hypochlorite solution followed by routine treatment.
5	NON-COVID emergency screening area	• HCP to wear Level 1 kit &Standard precautions	•	Shift patients without suspicion to parent department	-	
6	NON-COVID wards	HCP to wear Level 1 kit &Standard precautions	•	If patient has acute respiratory symptoms: test for COVID -19 in consultation with ID/faculty.	-	
7	NON-COVID ICUs	<ul><li>HCP to wear Level 2 kit</li><li>Use face shield for AGPs</li></ul>	•	If patient has acute respiratory symptoms: test for COVID -19 in consultation with ID/faculty.	•	

S.	Scenario	PPE& Standard	Further Action	Disinfection & Other Infection
No.		Precautions		Prevention activity
		&Standard precautions		
8	Incidental COVID positive in NON-COVID areas	HCPs looking after the COVID diagnosed patient to use Level 2 kit and face shield till patient is transferred to Trauma Centre.	• If patient was in an Isolation room with a single bed: Shift COVID positive patient to Trauma center	<ul> <li>Perform 'Terminal Cleaning' of the room using 2-step cleaning*method plus fogging.</li> <li>Disinfection of lifts and transport pathway.</li> </ul>
		Level 2 kit for HCPs shifting patient. SA to wear Level 2 kit with heavy duty gloves and boots to perform Terminal Cleaning	<ul> <li>If cubicle has other patients who are COVID negative: Shift COVID positive patient to Trauma center and Shift the negative patients to a designated area decided by parent department and do cohorting of the exposed patients and monitor.</li> <li>Test between day 5 &amp; 14 or if symptoms appear, in consultation with ID team. If discharging, advice strict home quarantine.</li> </ul>	<ul> <li>Perform 'Terminal Cleaning' of the cubicle using 2-step cleaning*method plus fogging.</li> <li>Disinfection of lifts and transport pathway.</li> </ul>
			• Contact the 'Contact Tracing' team helpline.	

<b>S.</b>	Scenario	PPE& Standard	Further Action	Disinfection & Other Infection
No.		Precautions		Prevention activity
			<ul> <li>If cubicle has other patients who are COVID negative: Shift COVID positive patient to Trauma center and If unable to shift COVID negative patients due to any reason, continue care in same cubicle and follow disinfection guidelines.</li> <li>Contact the 'Contact Tracing' team helpline.</li> </ul>	• Perform 'Terminal Cleaning' of the COVID positive patients' bed and surroundings by surface disinfection with 1% sodium hypochlorite/70% alcohol and linen management (dip in 1% sod hypo sol)
9	Incidental contacts of positive case (other patients in same place e.g. CT room etc.)	-	• Assessment of risk of contact by 'Contact tracing team' and decision on quarantine.	-
10	EHS patient with ILI	For screening: Level 1 kit For sampling: Level 2 kit + face shield	<ol> <li>Contact the EHS helpline</li> <li>If EHS patient has mild symptoms shift to NPW for isolation till RT-PCR report is received.</li> <li>If EHS patient has moderate to severe symptoms shift to C6 till RT-PCR report received.</li> <li>*Refer to Point No. 2 for 'Further actions'</li> </ol>	*Refer to Point No. 2 for disinfection activity
11	Procedure rooms (Labour room, Dialysis, Endoscopy room, etc)	<ul> <li>HCP to wear Level 2 kit</li> <li>Use face shield for AGPs and long boots if required.</li> <li>For procedures that require aseptic</li> </ul>	-	Disinfection as per routine protocol.

<b>S.</b>	Scenario	PPE& Standard	Further Action	Disinfection & Other Infection
No.		Precautions		Prevention activity
		precautions, sterile		
		gown, sterile gloves		
		should be used in		
		addition.		
		Standard precautions		
Infec	tion Control policies for Labo		gical and Imaging investigations from	om COVID areas
12	Virology Lab performing	Level 2 kit	-	Routine BMWM with double
	RT-PCR for coronavirus			bagging and labeling as 'COVID waste'
				• Surface disinfection with 1% sodium hypochlorite/70% alcohol
				• Fogging, if required
13	All labs processing respiratory samples (other than virology lab)	Level 1 kit	-	<ul> <li>Outer surface of all containers with samples received from COVID suspect/confirmed cases should be disinfected with 1% sodium hypochlorite.</li> <li>Process samples in Biosafety cabinet</li> <li>Routine BMWM with double bagging and labeling as 'COVID waste'</li> </ul>
14	All other labs (other than S. Nos. 8 & 9)	N95 mask <b>plus</b> gloves	-	Outer surface of all containers with samples received from COVID suspect/confirmed cases should be disinfected with 1% sodium hypochlorite. Routine BMWM with double

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				<ul> <li>bagging and labeling as 'COVID waste'</li> <li>Standard precautions</li> </ul>
15	Blood Bank	N95 mask <b>plus</b> gloves	-	<ul> <li>Outer surface of all containers with samples received from COVID suspect/confirmed cases should be disinfected with 1% sodium hypochlorite.</li> <li>Routine BMWM with double bagging and labeling as 'COVID waste'</li> <li>Standard precautions</li> </ul>
16	<ul> <li>Radiodiagnosis/NMR/ Nuclear Medicine/ related investigations</li> <li>COVIDpositive/suspect patient</li> </ul>	Level 2 kit Use face shield for AGPs	-	• Disinfect equipment as per AIIMS guidelines in consultation with
	COVID negative patient	N 95 plus gown Use face shield for AGPs	-	<ul> <li>guidelines from manufacturer.</li> <li>Disinfect equipment as per AIIMS guidelines in consultation with guidelines from manufacturer.</li> </ul>
	ation Theaters	1	1	
17	All OTs for COVID suspect/confirmed cases	Level 3 kit <b>plus</b> sterile impervious gowns <b>plus</b> long boots/covered boots with impervious shoe covers <b>plus</b> water proof apron/mackintosh <b>plus</b> face shields	-	• Any samples to be sent out during surgery (e.g. blood bank, ABG etc.) the outer surface of all containers with samples should be disinfected with 1% sodium hypochlorite. Put in double zip lock pouches.

S. No.	Scenario	PPE& Standard Precautions	Further Action	Disinfection & Other Infection Prevention activity
		For OTs, non-valved N95 masks should be used. If only valved N95 is available, then wear a 3- ply surgical mask in front of N95 mask.		<ul> <li>HCW who will hand over samples to HA should remove gown and gloves and don new gown and gloves and additional shoe covers (small ones) before leaving OT.</li> <li>Samples to be handed over at patient exit site.</li> <li>One telephone line with '0' dialing facility to co-ordinate. Clean telephone with 70% alcohol. Disinfection of OT: 2 step cleaning plus fogging after every procedure</li> </ul>
Misc	ellaneous			
18	Donning areas	-	-	<ul> <li>Appropriate PPE kits in adequate numbers</li> <li>In addition to posters /checklists/chair the donning areas SHOULD have</li> <li>Gloves of different sizes</li> <li>N95 masks of different fits</li> <li>Alcohol based Hand rub</li> </ul>
19	Doffing areas	-	-	<ul> <li>In addition to posters/check list/2 chairs labeled 'dirty' &amp; 'clean', SHOULD have following additional items:</li> <li>Alcohol based hand rub</li> <li>Gauge pieces soaked in alcohol for cleaning any soiling of PPE and for cleaning shoes</li> <li>Box of non-sterile gloves</li> </ul>

S. No.	Scenario	PPE& Standard Precautions	Further Action	Disinfection & Other Infection
110.				<ul> <li>Prevention activity</li> <li>Use Triple layered mask after removing N95.</li> <li>Mop with 1% sod. hypochlorite, (changed hourly).</li> </ul>
20	Patient Relatives	<ol> <li>Avoid attendants in ward.</li> <li>Symptomatic attendants should not be allowed to enter ward; should undergo testing as per guidelines.</li> <li>If not avoidable, within ward with the patient - asymptomatic attendant should be provided with a Triple layer mask + a gown. Practice Hand hygiene frequently.</li> </ol>	Close contacts of COVID positive patients should undergo screening as per guidelines.	Do not allow to crowd in patient areas. They should wait in 'waiting hall' near Old RAK OPD/ designated area. Called on phone when needed.
21	Person handling dead body of COVID positive patient	Level 2 kit with heavy duty gloves, boots and waterproof apron <b>plus</b> face shield for AGPs	-	<ul> <li>Wrap body in double bags and seal with tie.</li> <li>Disinfect the outer covering with 1% sod. hypochlorite.</li> <li>Shift to Trauma Centre mortuary.</li> <li>Disinfect hearse van with 1% sod. hypochlorite.</li> </ul>
22	Non-HCWs (Guards etc.)	N95 masks	-	Hand hygiene
23	Patients with respiratory symptoms	Triple layer mask, if tolerated	-	-
OPD				
24	General OPD/ specialty clinics (it is expected that	N95 + Gloves + Gown + Goggles	-	Standard precautions

S.	Scenario	PPE& Standard	Further Action	Disinfection & Other Infection
No.		Precautions		Prevention activity
	patients with respiratory			
	symptoms will be managed			
	in screening areas in			
	designated facility)			

HCP: Health Care Personnel, AGPs: Aerosol generating procedure

### Note:

1. Please remember that Standard Precautions should be followed all the time. For procedures that require aseptic precautions, sterile gown, sterile gloves should be used in addition.

2. For needle stick injuries: Routine protocol to be followed.

3. For patients receiving mechanical ventilation, use expiratory viral filters. It also may be preferable to use HME instead of heated wire humidifiers. Avoid nebulizations; use MDI with spacer if required.

5. Patients receiving oxygen therapy, high flow nasal cannula - should also use triple layer mask if tolerated.

### **Details of PPE Kits:**

Level	PPE Kit	Components
Level I	Gown based PPE kit	Gown + N-95 + Goggles + Gloves
Level II	Coverall (same material as of gown) based PPE kits	Coverall + N-95 mask + Goggles + Long shoe cover + Gloves.
Level III	Coverall (Tyvec/ Tychem/ Kimberly Clark) based PPE kit	Coverall + N-95 mask + Goggles + Long shoe cover + Gloves.

\*Face shields to be indented separately, for use during aerosol generating procedures and sampling

### **Quarantine policy**

S No	Scenario	PPE status	Action
1	HCW exposed to COVID positive patient or	1. With appropriate PPE	1. Observe for any symptoms and do testing if symptoms
	COVID positive HCW		appear.
			2. No need for isolation/quarantine.
			3. Continues to perform duties.
		2. Without appropriate PPE	1. Quarantine for 14 days.
			2. Test between day 5 and 14 or anytime if symptoms
			appear.
			Contact EHS Screening OPD/Contact tracing team
2	Patients cared for by a HCW who is later	-	• Cohort in the same ward/cubicle.
	detected to be COVID positive		• Should be screened for respiratory symptoms and those who are symptomatic should be tested.
			• Test other patients between day 5 & 14 of exposure or earlier, if symptoms appear, in consultation with ID
			team.

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