Mr. P.K. Mohapatra I.A.S

Additional Chief Secretary to Government, Health & Family Welfare Deptt. Government of Odisha



Loka Seva Bhawan

Bhubaneswar - 751001

Ph.: 0674 - 2394935/2536632

Fax: 0674 - 2392438/2395235

E-mail: orhealth@nic.in

Letter No. 16128/ACSHFW, Dated 08-07-2020

To

All collectors

All heads of Medical Institutions/Hospitals/Clinics (Govt. and Non-Govt.)

Regarding Prevention and Response to Healthcare Associated Infections (HAIs) at COVID and Non-COVID Health Facilities.

Madam/Sir

Healthcare Workers and Health- Care Facilities (both COVID and Non-COVID) are at the forefront of fighting COVID-19 pandemic. Government of Odisha recognizes health-work force as very valuable and scarce resource and assigns high priority to their safety.

The healthcare personnel working at these facilities are not only at higher risk of infection but also can amplify outbreak within health care facilities if they become ill. Any infection among health care providers has a huge detrimental effect in the fight against the pandemic and can seriously dislocate the health care system by progressively reducing the no of Health Care Workers available for service

The recent rise in the number of such cases indicates the possibility of breach in Infection Prevention and Control (IPC) measures within the institution. Several instructions have been issued on IPC by the Health and Family Welfare Department, Govt. of Odisha and Gol. Considerable efforts have also been made for training of the health work-force in the state. Now, along with training, robust mechanism to ensure enforcement of recommended IPC measures is highly essential.

Therefore, in order to prevent HAIs and to ensure strict compliance to IPC guidelines following actions are to be taken immediately at your end:

- 1. All health care facilities shall constitute a Hospital Infection Control Committee (HICC) The HICC in the health facility is responsible for implementing the Infection Prevention and Control (IPC) activities and organizing regular trainings on IPC for HCWs and nominate a Nodal Officer as Infection Control Officer.
- 2. A Nodal Officer (Infection Control Officer) shall be identified by each hospital to address all matters related to Healthcare Associated Infections (HAIs)
- 3. The nodal officer shall ensure that all Healthcare workers have undergone training on Infection Prevention and Control and they are aware of common signs and symptoms, need for self-health monitoring and need for prompt reporting of such symptoms.
- 4. Healthcare workers in different settings of hospitals shall use PPEs appropriate to their risk profile as detailed in the guidelines issued by this Ministry (available at: https://www.mohfw.gov.in/pdf/GuidelinesonrationaluseofPersonalProtectiveEquip https://www.mohfw.gov.in/pdf/UpdatedAdditionalguidelinesonrationaluseofPerson alProtectiveEquipmentsettingapproachforHealthfunctionariesworkinginnonCOVID 19areas.pdf)
- 5. The HICC and Nodal officer should develop a SOP to monitor the adherence of IPC measures at least twice a day. A check list shall also be prepared to facilitate and recording of such monitoring which should be kept in custody of Nodal officer.
- 6. The HICC shall take remedial action wherever necessary in coordination with Hospital administration.

- The HICC to meet at least once a week, verify above reports and take corrective measures. Proceedings of such meeting to be kept and produced as when required.
- 8. State Level Mentor Teams constituted for mentoring COVID facilities shall periodically visit Non-Covid Health facilities as well and report on IPC measures.
- 9. District level mentoring teams are to visit all health institutions in the district and on a fortnightly basis to the Director Public (dph.orissa@gmail.com). All DPHOs shall act as the District Nodal Officer for monitoring such activities.
- 10. IPC protocols to be displayed at prominent places for both Health care providers and visitors.
- 11. Details of HICC and Nodal officers (Infection Control Officer) to be shared through link latest by 10.7.2020. https://docs.google.com/forms/d/e/1FAIpQLSe5DPDyypID2rFXNTLI8C HDDnUc v419rUisCJPl1kVV4Forg/viewform?usp=sf\_link
- 12. The Department will review implementation of above instructions through the Director, Public Health, Odisha.

All above instructions are to be followed in letter and spirit and any deviation from the above guidelines will be viewed seriously.

Encl: Checklist for Nodal Officer and IPC instructions attached for reference.

Additional Chief Secretary to Government

Memo No. 16129/ACSHFW, Dated 08-07-2020

Copy forwarded to all Dean & Principal of all Medical College & Hospitals / Dental Colleges/ CDM&PHOs/ Director of Health Services/Director of Public Health/Director, Medical Education & Training for information and necessary action.

Additional Chief Secretary to Government

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

# Advisory for managing Health care workers working in COVID and Non-COVID areas of the hospital

#### Background

The health care personnel working in hospitals are at increased risk of acquiring the COVID-19 disease, if there is a breach in the personal protection while managing patients.

The health-work force is a valuable and scarce resource. Large number of COVID-19 affected health personnel getting isolated for treatment and their close contacts undergoing quarantine affects the health/hospital service delivery.

#### Purpose of the document

The purpose of the document is to provide guidance on preventive measures, isolation and quarantine of health care functionaries.

# Institutional Mechanism for preventing and responding to Healthcare Associated Infections (HAIs) among HCWs

Hospitals shall activate its Hospital Infection Control Committee (HICC). The HICC in the health facility is responsible for implementing the Infection Prevention and Control (IPC) activities and organizing regular trainings on IPC for HCWs.

A Nodal Officer (Infection Control Officer) shall be identified by each hospital to address all matters related to Healthcare Associated Infections (HAIs). With reference to preventing such infection among healthcare workers, he/she will ensure that:

- Healthcare workers in different settings of hospitals shall use PPEs appropriate to their risk profile as detailed in the guidelines issued by this Ministry (available at: <a href="https://www.mohfw.gov.in/pdf/GuidelinesonrationaluseofPersonalProtectiveEquipment.pdf">https://www.mohfw.gov.in/pdf/GuidelinesonrationaluseofPersonalProtectiveEquipment.pdf</a> and <a href="https://www.mohfw.gov.in/pdf/UpdatedAdditionalguidelinesonrationaluseofPersonalProtectiveEquipmentsettingapproachforHealthfunctionariesworkinginnonCOVID19areas.pdf">https://www.mohfw.gov.in/pdf/UpdatedAdditionalguidelinesonrationaluseofPersonalProtectiveEquipmentsettingapproachforHealthfunctionariesworkinginnonCOVID19areas.pdf</a>)
- All healthcare workers have undergone training on Infection Prevention and Control and they are aware of common signs and symptoms, need for self-health monitoring and need for prompt reporting of such symptoms.
- iii. Provisions have been made for regular (thermal) screening of all hospital staff.
- All healthcare workers managing COVID-19 cases are being provided with chemo-prophylaxis under medical supervision.
- Provisions have been made for prompt reporting of breach of PPE by the hospital staff and follow up action

#### 4. Action for Healthcare Workers

- Ensure that all preventive measures like frequent washing of hands/use of alcohol based hand sanitizer, respiratory etiquettes (using tissue/handkerchief while coughing or sneezing), etc. are followed at all times.
- ii. He/she shall use appropriate PPE at all times while on duty.
- A buddy system\* to be followed to ensure that there is no breach in infection prevention control practices.
- iv. Any breach in PPE and exposure is immediately informed to the nodal officer/HoD of the department
- v. HCWs after leaving the patient care units (wards/OPDs/ICUs) at the doctor's duty rooms/hostels/canteen or outside the HCF must follow social distancing and masking to prevent transmission to/acquiring infection from other HCWs who may be positive.
- vi. Pregnant/lactating mothers and immuno-compromised healthcare workers shall inform their medical condition to the hospital authorities for them to get posted only in non-Covid areas

\*Buddy system: Under this approach, two or more-person team is formed amongst the deployed hospital staff who share responsibilities for his/her partner's safety and well-being in the context of (i) Appropriately donning and doffing of PPEs, (ii) maintaining hand hygiene and (iii) taking requisite steps on observing breach of PPEs.

# 5. SOP for health work force deployment during COVID-19

# 5.1 SOP to be followed in case HCW reports exposure/breach of PPE

All the Healthcare workers must report every exposure to COVID-19 to the concerned nodal officer and HoD of the concerned department immediately

The Nodal officer will get the exact details of exposure to ascertain whether the exposure constitutes a high risk or low risk exposure as described below;

#### High risk exposure:

- HCW or other person providing care to a COVID-19 case or lab worker handling respiratory specimens from COVID-19 cases without recommended PPE or with possible breach of PPE
- Performed acrosol generating procedures without appropriate PPE.
- HCWs without mask/face-shield/goggles:
  - having face to face contact with COVID-19 case within 1 metre for more than 15 minutes
  - having accidental exposure to body fluids

#### · Low risk exposure:

Contacts who do not meet criteria of high risk exposure

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

- High risk contacts will be quarantined for 14 days, tested as per ICMR testing protocol, actively
  monitored for development of symptoms and managed as per laid down protocol,
  - If they test positive but remain asymptomatic they will follow protocol for very mild/mild/presymptomatic cases as described in para 5.2.1 (a) below.

- If they test negative and remain asymptomatic, complete 14 day quarantine and return to work.
- Should symptoms develop, follow the guidance para 5.2.
- Low risk contacts shall continue to work. They will self-monitor their health for development of symptoms. In case symptoms develop, the guidance under para 5.2 would be followed.

## 5.2 SOP to be followed in case HCW reports symptoms suggestive of COVID-19

- 5.2.1 If any healthcare worker who is manifesting signs and symptoms suggestive of COVID-19, he/she will be isolated immediately and the following procedure will follow:
  - a. In case of mild/very mild/pre-symptomatic case, he/she will have an option of home isolation, subject to the conditions stipulated in the revised guidelines for home isolation of very mild/pre-symptomatic COVID-19 cases (available at: <a href="https://www.mohfw.gov.in/pdf/RevisedguidelinesforHomeIsolationofverymildpresymptomaticCOVID19cases10May2020.pdf">https://www.mohfw.gov.in/pdf/RevisedguidelinesforHomeIsolationofverymildpresymptomaticCOVID19cases10May2020.pdf</a>). Such cases would end their home isolation as per timeline provided in the said guidelines.
  - In cases where home isolation is not feasible, such mild/very mild/pre-symptomatic cases will be admitted to a COVID Care Center<sup>6</sup>.
  - Moderate cases that require oxygen therapy shall be managed at a Dedicated COVID Health Center<sup>n</sup>
  - d. Severe cases will be managed in a Dedicated COVID Hospital<sup>a</sup>.

For cases admitted COVID Health facilities, their discharge will be governed guidelines available at: https://www.mohfw.gov.in/pdf/ReviseddischargePolicyforCOVID19.pdf

# The details of categorization of health facilities as COVID Care center, Dedicated COVID Health Center and Dedicated COVID Hospitals along with categorization of patients (mild/moderate/severe) is available at: https://www.mohfw.gov.in/pdf/FinalGuidanceonMangaementofCovideasesversion2.pdf.

- 5.2.2 Those who test negative, will be managed as in non-COVID area as per their clinical diagnosis. Their resuming work will be based on the clinical diagnosis and the medical certification by the treating doctor.
- 5.2.3 For HCWs (with low risk exposure), who continue to work and develop symptoms:
  - And test positive, further management would be based on their clinical presentation and as described in para 5.2 (1) (a) above
  - · Those who test negative, will return to work subject to medical certification for ailment
- 5.2.4 Discharge of COVID-19 positive HCWs will be in accordance with the discharge policy (available at: https://www.mohfw.gov.in/pdf/ReviseddischargePolicyforCOVID19.pdf).

# 5.3 Regular quarantine of healthcare workers after performing duty in COVID-19 areas

Quarantine of healthcare workers, other than what is stipulated above is not warranted.

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

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

# CHECKLIST TO ASSESS THE INFECTION PREVENTION AND WASTE MANAGEMENT PRACTICES AT NON COVID HOSPITALS

Date	of the assessment:			
Asse	ssor's name and designation:			
Nam	e of Hospital:			
Addr	ess:			
Nam	e of Nodal Officer (Infection Control Officer): _			114
Cont	act Number:	Email	ID:	
SI	Observation Points		Ves /	If not

SI	Observation Points	Yes / No	If not implemented, mention reasons and action taken to address the issue
A	HOSPITAL INFECTION CONTROL COMMITTEE		
A.1	Is the Hospital Infection control committee functional(Earlier Infection control committee under the quality assurance) with members updated?		
A.2	Infection control audit is done regularly at the facility  Collection of Samples for surfaces form critical and high-risk areas (LR and OTs) for microbiological surveillance Record keeping for HAI (Hospital Acquired infection) and analysis of HAI rates.  Audit committee meeting regularly with presentation of audit report		
В	SCREENING FACILITY		
B.1	8.1 Is there any separate designated screening area / space for everyone (all staff, patients and attendants) entering the hospital (preferably at the entrance) being used?		
B.2	Are the protocols ensured for screening?  The screening staff are trained  The screening staff are adequately protected (Triple layer mask, gloves, sanitiser, Imetre spacing between patients, patients wear masks)		

c	The protocols are displayed The screening person able to guide the suspected COVID patient for testing facility and counsel on the prevention of spread Screening checklist being used by staff FEVER CLINIC	
C.1	Is there a separate fever clinic (away from the main working area of the Hospital) being functional for the purpose of screening SARI / ILI / suspected Covid-19 cases and persons coming from hotspot areas?	
	Is the person asking and checking for the following?  a. Fever (infrared thermometer) b. Upper Respiratory Tract Infection c. Pneumonia (Hypoxia using pulse oximeter SPO2 < 90%, Respiratory Rate >30/min)	
D	TRIAGE FACILITY	
D.1	Is there a Triage area/Emergency area for the patients arriving at the hospital? Triage area: sitting area for patients; designated person in charge; separated by glass shield or sitting at a distance of at least 1 meter.	
D.2	Are the protocols ensured for triaging?  All the designated persons wearing PPE (Triple layer mask and Gloves)  Are the designated persons separated by at least 1 meter / glass shield  The designated person doing the routine screening  Fever (infrared thermometer),  Upper Respiratory Tract Infection,  Pneumonia (RR, SpO2)  Person have the knowledge of what to do after Triaging once a suspected case is identified?  suspect patient given a medical mask and directed to a separate area / isolation room  minimum distance of 1 metre being maintained between the suspected patient and other patients  instructions been given to all patients to maintain respiratory hygiene (cover nose and mouth during coughing or sneezing with a tissue or flexed elbow for others)	

	Counselling on Respiratory and hand hygiene etiquette	
Е	RECORDS AND REPORTING	
E.1	Is the reporting register kept at the Screening area, Fever clinic and Triage area to report SARI/IL1 to IDSP surveillance.	
E.2	Records maintained on HAI data at SNCU, ICU, OT for Infection control Audit.	
E.3	Records on the vaccination of the medical staff (Hep B, TT)	1
E.4	Records on the supply of PPE supply and consumption	
E.5	Minutes of meeting of Infection Control Audit	
E,6	Records on cleaning of water tank, services of drinking water filters	
F	CAPACITY OF WORKFORCE IN IPC	
F.1	Have all healthcare workers undergone training on Infection Prevention and Control? Check Training Record, Trainers in the facility, Regular disinfection of equipment	
F.2	Are the workers aware of common signs and symptoms, need for self-monitoring and prompt reporting of such symptoms? (installation of Arogya Setu App and knowledge on App use, regular self-assessment)	
F.3	Do all staff members (doctors and paramedics) know how to properly don and doff PPEs?	
F.4	Do the Cleaning staff trained on the Cleaning procedures and BMW	
G	ISOLATION WARD	
G.1	Is there a space / ward or room earmarked for suspected Covid-19 patients (awaiting test results) being identified/used?  Isolation room / ward segregated from other patient areas Separate toilet for isolation ward not common to other patients Staff deployed here are not allowed to work in other areas of the hospital.	
H	WASH	
H.1	Is functional hand washing stations and/or- sanitizer dispensers available near the entrance & other important areas being used regularly? (Emergency room, labour room, OT, Dental clinics, ENT clinics, Ophthalmology, injection	

	rooms)	
H.2	Is the use of masks, sanitisers, hand washing, and social distancing ensured within the hospital being functional?	
H.3	Is there adequate stock of all PPE available? (check stock registers). Also, check for rational use.	
H.4	Are donning and doffing areas kept separate	
	Is the close contact of suspected person counselled on wearing mask, Handwashing, use of Mask, knowledge of signs and symptoms, where to report once any symptom develop, home quarantine	
H.5	24X7 Water availability at the facility     Drinking water available with disposable cups     Water tank cleaned every 3 months	
H.6	Toilets functional and clean     All toilets are functional with running water 24X7     Functional hand washing area with soap	
1	BMW MANAGEMENT	
1.1	Are separate colour coded bins/bags/containers available in rooms, wards, corridors etc to segregate waste as per BMWM rules being used?	
1.2	<ul> <li>Are all articles like swab, syringes, IV set, PPE etc being discarded in yellow bag.</li> <li>All sharps like needles etc are being collected in puncture proof container and then being discarded in yellow bag.</li> </ul>	
1.3	Is waste from all over the hospital carried in trolleys to a central demarcated area for segregation and disinfection?	
1.4	Do the janitorial staff transporting, segregating and disinfecting waste use appropriate PPE?	
1.5	Is the disinfected waste taken out for disposal by the identified agency on a daily basis and disposed off properly? (check log)	
I.6	Is freshly prepared Hypochlorite solution (1% or more) used for disinfection purposes? (check log)	- v.
1.7	Are all commonly touched surfaces (door handles, taps, lift buttons etc) disinfected thoroughly at least once every 3 hours? (check log)	7
1.8	Are all rooms, wards, corridors etc cleaned and disinfected thoroughly and frequently (at least once every 8 hours)? (check log)	
J	IEC	

J.1	IEC Protocols displayed in all the concerned areas			
K	AMBULANCE SERVICES			
K.1	Is there a mechanism for providing information to ambulance service providers once a suspected/confirmed COVID patient (transported); identified during screening?			
K.2	Is the ambulance staff orientated on how to disinfect once suspected/confirmed COVID patient transported as per Gol guidelines?			
L	IP PRACTICES BY STAFF			
L.1	Are all patients / inmates wearing masks at all times?			
L.2	Is sample collection and other aerosol generating procedures taking place in an adequately ventilated room? *			
L.3	Sample Collection, Storage and Transport:			
	HCWs who collect specimens wearing a particulate respirator**     HCWs who collect specimens using other appropriate PPE (eye protection, long-sleeved gown, gloves)?  All personnel who transport specimens are trained in safe handling practices and spill decontamination procedures (As per Hospital Policy)?			
L.4	For high risk areas like triage, fever clinics, aerosol generating procedures like Emergency room, labour room, OT, Dental clinics, ENT clinics, Ophthalmology, injection rooms, Specimen collection areas are the HCWs using recommended PPE with particulate respirator?**			
L.5	I TO A CONTRACT CONTR			
L.6	Are the number of HCWs, family members and visitors in contact with a suspect case limited? Is a record being maintained?			
L.7	Facility ensures standard practices for sterilisation and disinfection of instruments and equipment-Autoclave facility			
M	DIRTY UTILITY AREA & LAUNDRY SERVICES	7		
M.1	Is laundry / linen handling precautions and hygiene being maintained (esp. for suspected cases):			
	1. All soiled clothing bedding and linen			

gathered without creating much motion / fluffing.  2. No shaking of sheets when removing them from the bed.  3. Hand hygiene being carried out after handling soiled laundry items.  4. Laundry is disinfected in freshly prepared 1% bleach and then transported to laundry in tightly sealed and labelled plastic bag.	
MORTUARY	
Are dead body management protocols for suspected / confirmed Covid-19 patients in place and staff trained?	
Necessary PPE equipment and Dead body handling kit available.	
	fluffing.  2. No shaking of sheets when removing them from the bed.  3. Hand hygiene being carried out after handling soiled laundry items.  4. Laundry is disinfected in freshly prepared 1% bleach and then transported to laundry in tightly sealed and labelled plastic bag.  MORTUARY  Are dead body management protocols for suspected / confirmed Covid-19 patients in place and staff trained?  Necessary PPE equipment and Dead body

- \* With natural ventilation with at least 160 l/s/patient air flow or negative pressure rooms with at least 12 air changes per hour (ACH) and controlled direction of air flow when using mechanical ventilation
- \*\* at least as protective as a NIOSH-certified N95, EU FFP2 or equivalent. User performing a seal check while putting on a disposable particulate respirator.

# Environmental cleaning and disinfection principles for COVID-19 in Health Care SOP for IPC instructions

# Routine environmental cleaning SOP on IPC:

Cleaning is an essential part of disinfection. Organic matter can inactivate many disinfectants. Cleaning reduces the soil load, allowing the disinfectant to work.

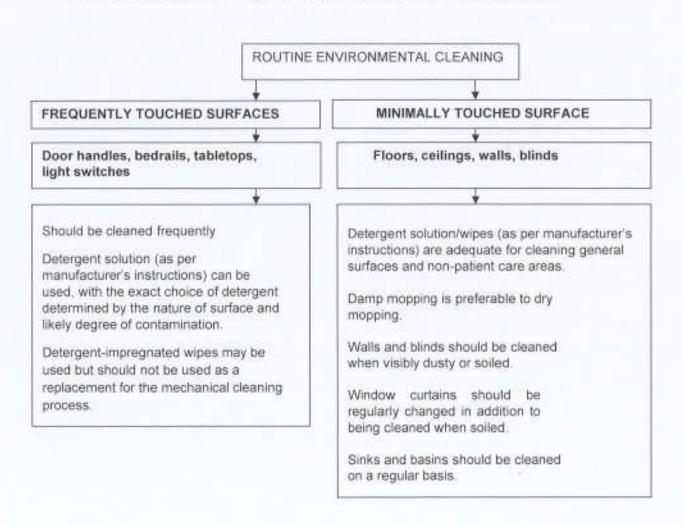
Removal of germs such as the virus that causes COVID-19 requires thorough cleaning followed by disinfection.

It is good practice to routinely clean surfaces as follows:

Clean frequently touched surfaces with detergent solution (see diagram below).

Clean general surfaces and fittings when visibly soiled and immediately after any spillage.

Routine environmental cleaning requirements can be divided into two groups1:



# Hand hygiene:

Soap and water should be used for hand hygiene when hands are visibly soiled and alcoholbased hand rub at other times (e.g. when hands have been contaminated from contact with environmental surfaces). Cleaning hands also helps to reduce environmental contamination.

# Information for cleaning staff:

Information for cleaning staff on cleaning and disinfecting can be found below.

#### CLEANING STAFF

The risk when cleaning is not the same as the risk when face to face with a sick person who may be coughing or sneezing.

Environmental cleaning is complex infection prevention and control intervention that requires a multipronged approach, which may include training, monitoring, auditing and feedback, reminders and displaying SOPs in key areas.

Training for cleaning staff should be based on the policies and SOPs of the health-care facility and national guidelines. It should be structured, targeted, and delivered in the right style (e.g. participatory, at the appropriate literacy level), and it should be mandatory during staff induction to a new workplace.

The Cleaning staff should be informed to avoid touching their face, especially their mouth, nose, and eyes when cleaning.

Cleaning staff should wear impermeable disposable gloves and a surgical mask plus eye protection or a face shield while cleaning.

Cleaners should use alcohol-based hand rub before putting on and after removing gloves.

Alcohol-based hand rub should also be used before and after removing the surgical mask and eye protection.

The surgical mask and eye protection act as barriers to people inadvertently touching their face with contaminated hands and fingers, whether gloved or not.

- The disinfectant used should be one for which the manufacturer claims antiviral activity, meaning it can kill the virus (such as chlorine-based disinfectants, which are commonly used - see below)
- If there is visible contamination with respiratory secretions or other body fluid, the cleaners should wear a full length disposable gown in addition to the surgical mask, eye protection and gloves
- Advice should be sought from your work health and safety consultants on correct procedures for wearing PPE.

#### Use of disinfection

Use freshly made bleach solution and follow manufacturer's instructions for appropriate dilution and use (see below for dilution instructions).

Wipe the area with bleach solution using disposable paper towels or a disposable cloth.

Dispose of gloves and mask in a leak proof plastic bag

Wash hands well using soap and water and dry with disposable paper or single-use cloth towel. If water is unavailable, clean hands with alcohol-based hand rub.

#### Preparation of disinfectant solution

Gloves should be worn when handling and preparing bleach

solutions. Protective eye wear should be worn in case of splashing.

Bleach solution should be:

made up daily

used mainly on hard, non-porous surfaces (it can damage textiles and metals).

Sufficient time is required to kill the virus, i.e., at least 10 minutes contact time,

Household bleach comes in a variety of strengths. The concentration of active ingredient hypochlorous acid<sup>2</sup> — can be found on the product label.

Table 1. Recipes to achieve a 1000 ppm (0.1%) bleach solution

Original strength of bleach		Disinfectant recipe		Volume in standard 10L bucket
%	Parts per million	Parts of bleach	Parts of water	
1	10,000	1	9	1000 mL
2	20,000	1	19	500 mL
3	30,000	1	29	333 mL
4	40,000	1	39	250 mL
5	50,000	1	49	200 mL

# Social contact environments and non-health care work settings:

Social contact environments include (but are not limited to), transport vehicles, shopping centres, canteens etc. and private businesses.

The risk of transmission of COVID-19 in the social and non-health care work settings(Administrative Offices, stores, workshops, pharmacy etc.) can be minimised through a good standard of general hygiene. This includes:

#### Promoting Social Distancing

Promoting cough etiquette and respiratory hygiene.

Routine cleaning of frequently touched hard surfaces with detergent/disinfectant solution/wipe.

Providing adequate alcohol-based hand rub for staff and consumers to use. Alcohol-based hand rub stations should be available, especially in areas where food is on display and frequent touching of produce occurs.

Training staff on use of alcohol-based hand rub.

# Health care settings (Refer Table-2)

### Primary and community care

#### Patient areas

Clean and disinfect frequently touched surfaces with detergent and disinfectant wipe/solution between each episode of patient care (according to normal infection prevention and control practice).

Take care to clean/disinfect surfaces in areas that patients have directly in contact with or have been exposed to respiratory droplets.

Gross contamination of an area following a patient may require a terminal clean (see below).

Comply with '5 Moments' of hand hygiene.

#### Non-patient areas

Perform routine cleaning of frequently touched surfaces with detergent/disinfectant solution/wipe at least daily or when visibly dirty.

Floors should be cleaned using a detergent solution.

#### Inpatient care

Clean and disinfect frequently touched surfaces with detergent and disinfectant wipe/solution at least daily or more frequently in high intensity (e.g. ICU) or high traffic (e.g. radiology, outpatients) areas.

Clean and disinfect equipment after each use (as per normal infection prevention and control practice).

Clean and disinfect surfaces that have been in direct contact with or exposed to respiratory droplets between each patient episode.

Table-2: Health-care setting: Recommended frequency of cleaning of environmental surfaces, according to the patient areas with suspected or confirmed COVID-19 patients.

Patient area	Frequency		Additional guidance
Screening/triage area	At least twice daily	*	Focus on high-touch surfaces, then floors (last)
Inpatient rooms / cohort - occupied	At least twice daily, preferably three times daily, in particular for high-touch surfaces		Focus on high-touch surfaces, starting with shared/comm surfaces, then move to each patient bed; use new cloth for each bed if possible; then floors (last)
Inpatient rooms – unoccupied (terminal cleaning)	Upon discharge/transfer	*	Low-touch surfaces, high-touch surfaces, floors (in that or waste and linens removed, bed thoroughly cleaned a disinfected
Outpatient / ambulatory care rooms	After each patient visit (in particular for high-touch surfaces) and at least once daily terminal clean	•	High-touch surfaces to be disinfected after each patient v Once daily low-touch surfaces, high-touch surfaces, floor that order), waste and linens removed, examination bed thoroughly cleaned and disinfected
Hallways / corridors	At least twice daily <sup>b</sup>	٠	High-touch surfaces including railings and equipment hallways, then floors (last)
Patient bathrooms/ toilets	Private patient room toilet: at least twice daily Shared toilets: at least three times daily		High-touch surfaces, including door handles, light switche counters, faucets, then sink bowls, then toilets and finally (in that order)  Avoid sharing toilets between staff and patients

# Spraying disinfectants not recommended (WHO)

In indoor spaces, routine application of disinfectants to environmental surfaces by spraying or fogging (also known as fumigation or misting) is not recommended for COVID-19.

Spraying individuals with disinfectants (such as in a tunnel, cabinet, or chamber) is not also recommended. Moreover, spraying individuals with chlorine and other toxic chemicals could result in eye and skin irritation, bronchospasm due to inhalation, and gastrointestinal effects such as nausea and vomiting.

### Terminal cleaning

Terminal cleaning is a complete and enhanced cleaning procedure that decontaminates an area following discharge or transfer of a patient with an infectious/communicable disease, sometimes also referred to as an 'infectious clean'. Terminal cleaning requires both thorough cleaning and disinfection for environmental decontamination. Cleaning should be followed by or combined with a disinfectant process (see 2-step clean and 2-in-1 step clean below).

Ensure room is prepared prior to cleaning, remove medical equipment and patient used items.

Wear PPE - surgical mask, protective eyewear and gloves

Change bed screens and curtains (including disposable curtains/screens) that are soiled or contaminated

Damp dust all surfaces, furniture and fittings

Clean windows, sills and frames

Clean all surfaces of bed and mattress

Mop floor

Remove PPE and perform hand hygiene

Clean all cleaning equipment and return it to the cleaners' room or storage area, discard any waste

Perform hand hygiene

#### 2-step clean

Physical cleaning with detergent followed by disinfection with a TGA-listed hospital-grade disinfectant with activity against viruses (according to label/product information) or a chlorinebased product such as sodium hypochlorite.

#### 2-in-1 clean

A physical clean using a combined detergent and TGA-listed hospital-grade disinfectant with activity against viruses (according to label/product information) or a chlorine-based product such as sodium hypochlorite, where indicated for use i.e. a combined detergent/disinfectant wipe or solution.