Government of India
Ministry of Health and Family Welfare
Directorate General of Health Services
[Emergency Medical Relief]

Guidelines for prevention of transmission and disinfection of hotels/ lodging facility where suspect/ confirmed COVID-19 cases have housed.

Scope: This document aims to provide interim guidance about the environmental cleaning /decontamination in hotels/lodging facility where persons with potential exposure to COVID-19 have housed.

The causative agent involved in the current outbreaks of COVID-19 acute respiratory disease, the SARS-CoV 2 is an enveloped RNA virus. Coronaviruses are transmitted in most instances through large respiratory droplets and contact transmission, but other modes of transmission have also been proposed worldwide.

The following guidelines should be followed:

Hotel Reception
Hotel staff at the reception should be well versed in hand hygiene, respiratory hygiene, and protocols to be followed if a guest develops symptoms. (Annexure 1, 2)

All Guests:
1. Ask guests whether they have resided in or history of travel to an affected area or contact with a known case in the past 14 days. (As per travel advisory on web site of MoHFW)
2. Advise to observe good personal hygiene, especially hand hygiene and respiratory (cough and sneeze) hygiene (Annexure 1 & 2).
3. Provide alcohol-based handrub containing 70% Alcohol to guests in public areas (Reception, lobby, Restaurants. Conference area, Business centre, Gym etc)
4. Provide surgical masks to guests if they develop respiratory symptoms. (Annexure 3- Guidelines for use of mask)

For guests with history of travel to or resided in the affected areas:
1. Provide information pamphlet upon check-in or visit https://mohfw.gov.in/node/4904
2. Guest(s) is/are advised to stay in the room if feeling unwell, wear a surgical mask and call hotel operator at once for assistance.
3. Encourage person with respiratory symptoms to sit away from others ideally at a distance of 1-2 m

Handling sick guest(s) with history of travel to or resided in the affected areas:
1. Advise and assist sick guest(s) who develop symptoms (fever, cough, sore throat, breathlessness, etc.) within 14 days after return from the affected areas, call control
room/identified hospital and inform about the condition of sick guest(s). Arrange for ambulance and consultation in Emergency Department.

2. Before seeking medical care:
   - Advice sick guest(s) to stay in his/her room and put on a surgical mask.
   - Group and relocate any asymptomatic roommate(s) to another room, and they should stay in the relocated room(s).
   - Minimize contact with sick guest(s), and other guest(s) travelling along with the sick guest(s).
   - Staff should put on PPE while interacting with/ shifting sick guest.
   - Staff should be aware of the symptoms, and should report immediately if they develop any symptoms and should be immediately referred to an identified healthcare facility.

**Environmental cleaning:** Due to the potential survival of the virus in the environment for about a week, the premises and potentially contaminated areas 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 SARS-CoV 2 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 hotels/lodging facility housing people exposed/ potential exposure to SARS-CoV 2.

**Personal Protective Equipment (PPE):**

*Wear appropriate PPE while carrying out cleaning and disinfection work.*

1. Wear disposable gloves (heavy duty), disposable long-sleeved gowns, eye goggles or a face shield, and an N95 mask. (Annexure 4: Donning and Doffing PPE)

2. Avoid touching the eyes, nose and mouth

3. Gloves should be removed and discarded if they become soiled or damaged, and a new pair worn.

4. All other disposable PPE should be removed and discarded after cleaning activities are completed.

5. PPE should be discarded in a thick plastic bag, sealed, labelled and sent to the nearest health facility for discarding as an infectious waste.

6. Hands should be washed with soap and water immediately after each piece of PPE is removed, following completion of cleaning.

7. The cleaning crew should be aware of the symptoms, and should report immediately if they develop symptoms and should be immediately referred to an identified healthcare facility.

*N.B.: Masks are effective if worn according to instructions and properly fitted. Masks should be discarded and changed if they become physically damaged or soaked. (Annexure 3)*
<table>
<thead>
<tr>
<th>Area/Items</th>
<th>Item/Equipment</th>
<th>Process</th>
<th>Method/Procedure*</th>
</tr>
</thead>
<tbody>
<tr>
<td>General cleaning</td>
<td>Detergent and warm water</td>
<td>Daily mopping</td>
<td>• Scrub floors with hot water and detergent with using minimal water. (Do not pour the water.)</td>
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<tr>
<td></td>
<td>Mop</td>
<td>Floors</td>
<td>• Clean with plain water.</td>
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<td></td>
<td>Two buckets Clean utility gloves</td>
<td>Thorough washing</td>
<td>• Allow to dry</td>
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<tr>
<td></td>
<td>Hand mops 1% freshly prepared sodium Hypochlorite</td>
<td></td>
<td>• Mop with 1% Sodium Hypochlorite</td>
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<td></td>
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<td></td>
<td>Note: Recommend general cleaning procedure should be done twice a day.</td>
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<tr>
<td>Lockers, tables, cupboards,</td>
<td>Damp duster with 1% Sodium Hypochlorite</td>
<td>Damp dusting</td>
<td>• Damp dust with 1% Sodium Hypochlorite</td>
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<td>wardrobes, benches, shelves,</td>
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<tr>
<td>and cots</td>
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<tr>
<td>Railings</td>
<td>Detergent/ Sanitizer-hot water, sodium hypochlorite</td>
<td>Daily dusting</td>
<td>• Damp dust with warm water and detergent followed by disinfection with sodium hypochlorite</td>
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<tr>
<td></td>
<td>1%</td>
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<tr>
<td></td>
<td>Three small buckets/ or big bowls</td>
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<td></td>
<td>One with plain water</td>
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<td></td>
<td>One with detergent solution</td>
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<td></td>
<td>One for sodium hypochlorite 1%</td>
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<td></td>
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<tr>
<td>Mirrors and Glass</td>
<td>Warm water Detergent water/ cleaning solution</td>
<td>Cleaning</td>
<td>• 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 dry finish.</td>
</tr>
<tr>
<td>Sluice room/Stainless steel/</td>
<td>Powder cleanser Detergent powder Wiper Cloth</td>
<td>Cleaning</td>
<td>• Sinks are to be cleaned with a powder cleanser.</td>
</tr>
<tr>
<td>Any other sink</td>
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<td></td>
<td>• First wet the sink. Sprinkle on a little powder cleanser and work around the surface with a cloth, include the plughole.</td>
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<td></td>
<td>• Do not use the powder cleanser on dry sink.</td>
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<td></td>
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<td></td>
<td>• After removing spillage and any stains, flush away with running water. Wipe down the surface of the sink.</td>
</tr>
<tr>
<td>Telephone</td>
<td>70% alcohol wipes</td>
<td>General cleaning</td>
<td>• Damp dust with 70% alcohol wipes</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Pay special attention to the ear and mouth piece.</td>
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<tr>
<td>Desks</td>
<td>Damp cloth in 1% Sodium Hypochlorite /70% alcohol</td>
<td>Damp cleaning</td>
<td>• Wipe top sides and draw handles with a damp cloth.. Pen holder etc. to be wiped with the damp cloth with 1% Sodium Hypochlorite or wipe with 70% alcohol wipes</td>
</tr>
<tr>
<td></td>
<td>wipes</td>
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<tr>
<td></td>
<td>Furniture polish</td>
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<tr>
<td><strong>Chairs (Vinyl)</strong></td>
<td><strong>Cleaning</strong></td>
<td><strong>Wipe down with warm water and detergent. Wipe with 1% sodium hypochlorite. Remove any marks under arms and seat.</strong></td>
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</tr>
<tr>
<td><strong>Furniture and fittings</strong></td>
<td><strong>Cleaning</strong></td>
<td><strong>Using 1% Sodium Hypochlorite, damp dust all furniture and fittings, including chairs, stools, beds, tables, cupboards, wardrobes, lockers, trolleys, benches, shelves and storage racks, wastebins, fire extinguishers, televisions,window sills.</strong></td>
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</tr>
<tr>
<td><strong>Bed tables, bedside lockers</strong></td>
<td><strong>Cleaning</strong></td>
<td><strong>Wipe down over bed table. Wipe top and underneath base and stand, using 1% sodium hypochlorite. Wipe down the bedside. Remove marks from fronts of drawers and sides.</strong></td>
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</tr>
<tr>
<td><strong>Light switches and over-bed lights</strong></td>
<td><strong>Cleaning</strong></td>
<td><strong>Light switches to be cleaned of dust, spots and finger marks. Clean with a damp cloth (never wet). Over-bed lighting to be damp dusted. Clean with damp cloth or alcohol wipes.</strong></td>
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</tr>
<tr>
<td><strong>Curtains</strong></td>
<td><strong>Washing</strong></td>
<td><strong>Using hot water cycle wash with detergent or disinfectant in water at 70°C for at least 25 minutes.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Linen, quilts, covers and Towels</strong></td>
<td><strong>Washing</strong></td>
<td><strong>Should be washed under running water and soaked in 1% sodium hypochlorite for 20 minutes. Note: PPE should be worn while washing soiled linen.</strong></td>
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</tr>
<tr>
<td><strong>White clothes</strong></td>
<td><strong>Washing</strong></td>
<td><strong>Tap water</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Mattress and pillow covers (cloth)</strong></td>
<td><strong>Washing</strong></td>
<td><strong>Mattress and pillows should be covered with a reusable mattress cover. It should be changed for each guest and when soiled sent to the laundry according to schedule and washed as linen.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Mattress/Pillow with resin cover</strong></td>
<td><strong>Terminal</strong></td>
<td><strong>Sodium hypochlorite 1%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Normal/without resin</strong></td>
<td><strong>Damp dusting and cleaning</strong></td>
<td><strong>If with resin cover, can be cleaned with 1% sodium hypochlorite before use for next guest. If routine mattress, dry it in bright sunlight for 1-2 days before using for next guest.</strong></td>
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</tr>
<tr>
<td><strong>Water jars</strong></td>
<td><strong>Cleaning</strong></td>
<td><strong>Recommended boiled water for drinking. Water jars should be scrubbed/cleaned with soap and water and boiled water before filling with water.</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Always use freshly prepared 1% sodium hypochlorite. Avoid flushing down the used sodium hypochlorite in the sanitary sewer. Discard in the mud pits.*

*70% Alcohol/ Chloroxylenol (4.5-5.5%)/ Benzalkonium Chloride can be used as per manufacturer's instructions to wipe down surfaces where the use of bleach is not suitable, e.g. metal.*
### Cleaning of Toilets

<table>
<thead>
<tr>
<th>Areas</th>
<th>Agents / Toilet Cleaner</th>
<th>Procedure</th>
</tr>
</thead>
</table>
| Toilet pot/commode | Sodium hypochlorite 1% / Soap powder / long handle angular brush | - Inside of toilet pot/commode.  
- Scrub with the recommended agents and the long handle angular brush.  
- Outside: Clean with recommended agents; use a scrubber. |
| Lid/commode    | Nylon scrubber and soap powder 1% Sodium Hypochlorite | - Wet and scrub with soap powder and the nylon scrubber inside and outside.  
- Wipe with 1% Sodium Hypochlorite |
| Toilet floor   | Soap powder and scrubbing brush/ nylon broom 1% Sodium Hypochlorite | - Scrub floor with soap powder and the scrubbing brush  
- Wash with water  
- Use sodium hypochlorite 1% dilution |
| Sink           | Soap powder and nylon scrubber 1% Sodium Hypochlorite | - Scrub with the nylon scrubber.  
- Wipe with 1% Sodium Hypochlorite |
| Showers area / Taps and fittings | Warm water Detergent powder  
- Nylon Scrubber 1% Sodium Hypochlorite 70% alcohol | - Thoroughly scrub the floors/tiles with warm water and detergent  
- Wipe over taps and fittings with a damp cloth and detergent  
- Care should be taken to clean the underside of taps and fittings.  
- Wipe with 1% Sodium Hypochlorite/ 70% alcohol |
| Soap dispensers | Detergent and water      | - Daily dusting  
- Should be cleaned weekly with detergent and water and dried |

*Always use freshly prepared 1% sodium hypochlorite. Avoid flushing down the used sodium hypochlorite in the sanitary sewer. Discard in the mud pits.  
*70% Alcohol/ Chloroxylenol (4.5-5.5%)/ Benzalkonium Chloride can be used as per manufacturer’s instructions to wipe down surfaces where the use of bleach is not suitable, e.g. metal.*

- Cleaning and disinfection of public area such as lifts, elevators, telephones, washrooms and lobby with disinfectant 1% sodium hypochlorite every six hours or earlier if a positive/suspect case is detected; Special attention should be paid to frequently touched areas like walls, lift buttons, rails, door handles, arm rests, tables, switches of light and air control keyboards.
- Clean and disinfect the air-conditioning system at least once per week.
- Switch off the central air condition in the room in which there is a suspect case.
- To prevent cross contamination, discard cleaning material made of cloth (mop and wiping cloth) in appropriate bags after cleaning and disinfecting. Wear new pair of gloves and fasten the bag.
- Disinfect all cleaning equipment after use and before using in other area.
- Disinfect buckets by soaking in bleach solution or rinse in hot water.
**Table 1: Guidelines for Preparation of 1% sodium hypochlorite solution**

<table>
<thead>
<tr>
<th>Product</th>
<th>Available chlorine</th>
<th>Amount to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite – liquid bleach</td>
<td>3.5%</td>
<td>1 part bleach to 2.5 parts water</td>
</tr>
<tr>
<td>Sodium hypochlorite – liquid</td>
<td>5%</td>
<td>1 part bleach to 4 parts water</td>
</tr>
<tr>
<td>NaDCC (sodium dichloroisocyanurate) – powder</td>
<td>60%</td>
<td>17 grams to 1 litre water</td>
</tr>
<tr>
<td>NaDCC (1.5 g/tablet) – tablets</td>
<td>60%</td>
<td>11 tablets to 1 litre water</td>
</tr>
<tr>
<td>Chloramine – powder</td>
<td>25%</td>
<td>80 g to 1 litre water</td>
</tr>
<tr>
<td>Bleaching powder</td>
<td>70%</td>
<td>7g8 g to 1 litre water</td>
</tr>
<tr>
<td>Any other</td>
<td>As per manufacturer’s instructions</td>
<td></td>
</tr>
</tbody>
</table>

**Fogging with Hydrogen peroxide with silver nitrate (such as Ecoshield, Envishield, Radix Sil 10, Silvox, etc)** (in alphabetical order):

- **Equipment**: Portable 4-Direction Fogger/ Fogger/Mobile fogger
- **Solution**: Stabilized hydrogen peroxide 11% w/v with 0.01% w/v diluted silver nitrate solution.
- **For surface disinfection**: 10% v/v solution in de-ionized water with contact time of 60 min.
- **For fogging**: 1 litre of 20% v/v solution /1000 cu. ft of space in 60 min. (or as per manufacturer's instructions)

**References:**

6. Ministry of Health (MOH) and the National Environment Agency (NEA), of Singapore, Interim Guidelines for Environmental Cleaning and Disinfection of Areas Exposed to Confirmed Case(s) of COVID-19 in Non-Healthcare Premises. 28Feb 2020
Annexure 1: Steps of Hand Hygiene

Hand-washing technique with soap and water

1. Wet hands with water
2. Apply enough soap to cover all hand surfaces
3. Rub hands palm to palm
4. Rub back of each hand with palm of other hand with fingers interlaced
5. Rub palm to palm with fingers interlaced
6. Rub with back of fingers to opposing palms with fingers interlocked
7. Rub each thumb clasped in opposite hand using a rotational movement
8. Rub tips of fingers in opposite palm in a circular motion
9. Rub each wrist with opposite hand
10. Rinse hands with water
11. Use elbow to turn off tap
12. Dry thoroughly with a single-use towel

Steps from 2-9 are same while using alcohol-based hand rub
Annexure 2: Respiratory Hygiene

- Cover mouth and nose when coughing or sneezing or if tissue not immediately available, in the flexed elbow.
- Use tissue paper to contain respiratory secretions and dispose it promptly in lid dustbin
- Perform hand hygiene after hands have been in contact with the respiratory secretions

**Respiratory and cough hygiene**

- Cough or sneeze into a clean tissue, not into your hands.
- Dispose of the tissue immediately into the nearest waste bin.
- If you do not have a tissue, cough or sneeze into your upper sleeve.
- Always clean your hands after coughing or sneezing, either using soap and warm running water, alcohol handrub or hand wipes.

These steps will help prevent the spread of colds, flu and other respiratory infections
Annexure 3: Guidelines for use of mask

The correct procedure of wearing triple layer surgical mask:

1. **Perform hand hygiene**
2. Unfold the pleats; make sure that they are facing down.
3. Place over nose, mouth and chin.
4. Fit flexible nose piece over nose bridge.
5. Secure with tie strings (upper string to be tied on top of head above the ears – lower string at the back of the neck.)
6. Ensure there are no gaps on either side of the mask, adjust to fit.
7. Do not let the mask hanging from the neck.
8. Change the mask after six hours or as soon as they become wet.
9. Disposable masks are never to be reused and should be disposed off.
10. While removing the mask great care must be taken not to touch the potentially infected outer surface of the mask
11. To remove mask first untie the string below and then the string above and handle the mask using the upper strings.
12. Disposal of used masks Used mask should be considered as potentially infected medical waste. Discard the mask in a closed bin immediately after use.
Annexure 4: Donning & Doffing of PPE

Donning & Doffing procedures should be diligently & carefully followed as given below.

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN
   - Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
   - Fasten in back of neck and waist

2. MASK OR RESPIRATOR
   - Secure ties or elastic cords at middle of head and neck
   - Fit flexible band to nose bridge
   - Fit snug to face and below chin
   - Fit-check respirator

3. GOGGLES OR FACE SHIELD
   - Place over face and eyes and adjust to fit

4. GLOVES
   - Extend to cover wrist of isolation gown

USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform Hand Hygiene
HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE)
EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door. Remove PPE in the following sequence:

1. **GLOVES**
   - Outside of gloves are contaminated!
   - If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove.
   - Hold removed glove in gloved hand.
   - Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove.
   - Discard gloves in a waste container.

2. **GOoggles OR FACE SHIELD**
   - Outside of goggles or face shield are contaminated!
   - If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Remove goggles or face shield from the back by lifting head band or ear pieces.
   - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container.

3. **GOWN**
   - Gown front and sleeves are contaminated!
   - If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties.
   - Pull gown away from neck and shoulders, touching inside of gown only.
   - Turn gown inside out.
   - Fold or roll into a bundle and discard in a waste container.

4. **MASK OR RESPIRATOR**
   - Front of mask/respirator is contaminated — **DO NOT TOUCH**!
   - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front.
   - Discard in a waste container.

5. **WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE**