Ministry of Health
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Ministère de la Santé
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Directive RCPE 03-01
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DIRECTIVE TO ALL ACUTE CARE FACILITIES REGARDING THE APPLICATION OF RESPIRATORY AND CONTACT PRECAUTIONS (ENHANCED) WITH:
PATIENTS WITH FEBRILE RESPIRATORY ILLNESS AND A SARS CONTACT HISTORY;
PERSONS UNDER INVESTIGATION;
SARS PATIENTS; AND,
SARS UNITS

TABLE OF CONTENTS

1 PATIENT ACCOMMODATION 1

2 PREPARATION OF THE PATIENT ROOM 1

3 PATIENT ROOM WITH AN ANTEROOM 2

4 STAFF WORKING IN RESPIRATORY AND CONTACT PRECAUTIONS (ENHANCED) ... 2

4.1 ROUTINE PROCEDURE FOR APPLYING PERSONAL PROTECTIVE EQUIPMENT PRIOR TO ENTERING PATIENT ROOM 3

4.2 ROUTINE PROCEDURE FOR REMOVING PERSONAL PROTECTIVE EQUIPMENT ON EXIT FROM THE ROOM 3

5 PATIENT CARE ACTIVITIES 4

6 PATIENT DISCHARGE 4

7 HIGH-RISK RESPIRATORY PROCEDURES 4

8 CLEANING ON THE UNIT WITH A SARS PATIENT OR DESIGNATED SARS UNIT 5

8.1 DAILY CLEANING OF A SARS ISOLATION ROOM 5

8.2 CENTRAL AREAS 6

8.3 OUTSIDE PATIENT ROOMS 6

8.4 TERMINAL CLEANING 6

8.5 TERMINAL CLEANING IS PERFORMED WHEN A PATIENT IS TRANSFERRED OR DISCHARGED FROM A SARS ISOLATION ROOM. 6

9 ESTABLISHMENT OF A SARS UNIT 8

1 PATIENT ACCOMMODATION

Those patients who have been assessed and fit the SARS case definition of Persons Under Investigation (PUI), suspect or probable SARS require Respiratory and Contact Precautions (Enhanced). Patients should be moved to the appropriate accommodation as quickly as possible and placed as follows (in decreasing order of preference):

- Negative pressure room with toilet facilities, (with or without anteroom) with at least 6 air exchanges per hour or 12 air exchanges if the building is a new facility, as per Canadian Standards Association, September 2001 (highest preference).
- Single room with toilet facilities and portable HEPA filtration unit that achieves at least 9 air exchanges per hour.
- Single room with own toilet facilities.
- Semi-private room, with own toilet facilities cohorted with patients with similar SARS risk factors and/or symptoms or diagnosis.

Negative pressure rooms must:

- Be monitored daily to ensure supply and exhaust system function.
- Have an exhaust system supplied by emergency power.

2 PREPARATION OF THE PATIENT ROOM

- SARS units and critical care SARS patient rooms must be single patient rooms with toilet facilities (i.e., no sharing of rooms).
- Hang isolation sign outside room.
- Hang posters which describe the appropriate order for Personal Protective Equipment (PPE) to be donned outside room.
- Hang posters which describe the appropriate order for PPE to be removed inside the room.
- Place alcohol hand sanitizer inside and outside the room for easy access.
- Ensure sufficient supplies of Personal Protective Equipment (PPE) (gowns, gloves, face shields/goggles, N95 masks or equivalent) are stocked outside the patient room as well as a supply of hospital grade disinfectant and disposable cloths available.
- Remove all unnecessary items from the room. This includes bed curtains, window drapes (where not required for patient privacy), upholstered furniture, extra beds, tables, chairs. NOTE: in single patient rooms, bed curtains are not necessary and should not be used.
- Place linen hampers and garbage receptacles in the patient room.
- Dedicate patient equipment. If any equipment must be shared, such as oxygen saturation probes, glucometers, doppler, etc., it is to be thoroughly cleaned with cloths saturated with hospital disinfectant (diluted as per manufacturer's directions). Dedicated patient care equipment must be stored in the patient room in a designated place, or in an anteroom, once cleaned.
- Stock and maintain adequate supplies in the room (e.g., gloves, patient surgical masks, disinfectant and disposable cloths); however, do not overstock the room.
- Post exiting procedure inside the room which outlines how PPE should be removed.
- Ensure a contact tracking sheet of all persons entering room is placed outside of room and used until discharge.

- Use call bells with voice system or telephones for ease of communication in patient rooms.
- Clearly designate the soiled utility room for pick up of waste in SARS units.

3 PATIENT ROOM WITH AN ANTEROOM

An anteroom at the entrance may serve as several functions including:

- A storage place for supplies for patients whose care requires a large volume of supplies or equipment close at hand
- A place to put on **or** remove personal protective equipment for infection control purposes (see below)
- To assist with maintaining unidirectional airflow, either positive or negative with respect to the hallway.

Where available, the anteroom's use in providing respiratory and contact precautions (enhanced) may facilitate the process of putting on or removing infection control personal protective equipment (PPE). Some principles that must be understood in using an anteroom properly are:

- The anteroom can be used to either put on **or** remove PPE
- The anteroom must be used consistently for putting on **or** removing PPE but <u>never for both</u>. Therefore, if the decision is made to use the anteroom for putting on PPE, then the anteroom must be viewed as "clean" and only used for this purpose. Similarly, if the anteroom is designated as the space for removing PPE, then it is a "dirty" space and should not be used otherwise. Signage should indicate whether anteroom is "clean" or "dirty".
- Both doors should be kept closed. When entering or exiting only open one door at a time so as to preserve negative airflow.
- The patient room is considered contaminated (i.e., "dirty").
- The hallway is considered uncontaminated (i.e., "clean").
- If an anteroom is not available, then use the clean hallway to put on the PPE and remove it inside the patient room.

Whether a hospital decides to use their anterooms as dirty or clean is determined by the size and configuration of the patients' rooms, anterooms, hallways and the general work areas.

4 STAFF WORKING IN RESPIRATORY AND CONTACT PRECAUTIONS (ENHANCED)

- All staff are required to have had N95 respirator fit testing completed and have appropriate N95 masks or equivalent available to them
- It is essential to train all staff who participate in providing care to SARS patients in the manoeuvres of putting on and removing PPE according to the configuration of the patients' room/anteroom. (Practice sessions to drill the choreography of putting on and removing PPE with critique by experienced practitioners are an excellent way to hone these skills.)

- Personal Protective Equipment (including N95 masks or equivalent, protective eyewear, gown, gloves, full face shield and hair covering) must be worn by staff for all patient contact.
- During any change of apparel, staff must continue to wear N95 mask or equivalent and take all efforts to minimize aerosolization. Personal uniforms should be carefully placed in a plastic bag and washed separately at home in hot soapy water.
- Staff should organize care to limit the total time spent in the room with each patient interaction.

4.1 Routine procedure for applying personal protective equipment prior to entering patient room

- Sanitize hands with alcohol gel
- Put on protective equipment in the following order:
  - Long-sleeved gown,
  - N95 mask or equivalent
  - Hair cover
  - Eye protection
  - Face shield
  - Gloves* should go over gown cuffs

  * Extra gloves may be required during procedures where heavy contamination of the gloves is anticipated.

4.2 Routine procedure for removing personal protective equipment on exit from the room

- While still inside the room:
  - Specimens to be placed in a clean specimen bag using a two person transfer method
  - Remove gloves and discard using a glove to glove skin to skin technique
  - Use alcohol hand rinse or, if available, a hand sink; do NOT use patient bathroom to wash hands
  - Remove gown (discard in linen hamper in a manner that minimizes air disturbance)
- Just prior to leaving or immediately after leaving the room:
  - Use alcohol hand rinse again
  - Remove face shield/fluid shield and eye protection and discard or place in clear plastic bag and send for decontamination
  - Remove hair cover and discard
  - Remove N95 mask or equivalent and discard
  - Use alcohol hand rinse again
- At least once per hour, wash hands at nearest hand washing sink (but NOT in a patient washroom) to remove residue from alcohol hand wash and reduce skin irritation
- To minimize the effect of fatigue on compliance with precautions, staffing (RN, RT, housekeepers etc.) should be adequate to meet care requirements
- Hospitals must give consideration to shorter shifts, limit overtime, longer breaks, off-unit breaks, etc.
- Infection Control or designate to monitor compliance with precautions daily

5 PATIENT CARE ACTIVITIES

Patients will remain in their rooms at all times.

All persons entering the room are to complete a contact tracking sheet, and:

- Patient to wear surgical mask at all times when anyone else is in the room.
- Staff should position themselves to avoid being exposed to droplets.
- Staff to stay a minimum of two metres away from the patient whenever possible.
- Staff are to change their gloves and wash their hands after contamination prone activities, such as tracheotomy care. Alternatively staff may double glove when entering the room and remove the outer gloves after providing direct patient care. Patients should be asked to turn their head away as necessary e.g., when in close proximity such as when blood is being taken and when coughing, sneezing etc.
- Tympanic temperature probes should be used where possible and if not possible, adult patients should take own oral electronic temperature and report to nurse.
- If the patient requires a nasal or throat swab their surgical mask should be moved to expose only the mouth or nose as required. Staff may use a nasopharyngeal swab/aspirate or nasal swab as per hospital procedure.
- Optimal use of anti-nauseants to minimize vomiting is essential.
- Bed linens should be changed in ways that minimize dust generation (i.e., gently roll sheets and place in linen hamper).
- Minimize air turbulence when emptying linen and garbage bags.
- **Do not** rinse bedpans with a spray wand, or bedpan washer in patient rooms or in the dirty utility room. While wearing all personal protective equipment described above, carefully pour out urinals and bedpans into toilet. Place soiled urinals, bedpans and washbasins in a leak proof sealable bin with cover or a biohazard bag. Arrange for transport to central processing/sterilization department for low level disinfection by an automated cleaning process.
- Replace patient urinals and bedpans after each use.

6 PATIENT DISCHARGE

SARS patients who are to be discharged should be assessed for on-going transmissibility of their infection. The same level of precautions should be observed on discharge as during their hospital admission unless advised otherwise by Infection Control. Inform the local public health unit of potential discharges. Ensure communication with community providers or family has been completed regarding the patient's infection status and on-going care needs as well as supplies that may be required at home. For example, surgical masks may be needed for home use if isolation is to continue and an initial supply must be provided by the hospital.

7 HIGH-RISK RESPIRATORY PROCEDURES

For details on how to manage high-risk respiratory procedures, please refer to:
Directive to All Acute Care Facilities for High-Risk Respiratory Procedures, October 22, 2003.

8 CLEANING ON THE UNIT WITH A SARS PATIENT OR DESIGNATED SARS UNIT

Frequent and thorough cleaning of surfaces and patient care equipment are important steps to minimize environmental contamination. A balance will need to be achieved between the cleanliness of each room and the exposure time of the cleaning staff. Each facility must have written procedures for daily and terminal cleaning of SARS isolation rooms. Each facility must ensure that housekeeping staff are trained and understand the precautions that must be taken during cleaning

8.1 Daily Cleaning of a SARS Isolation Room

NB: The door of the patient's room must be kept closed during cleaning.

- Put on protective apparel as outlined on the precaution signs posted on the door. If staff have any questions, check with nursing staff.
- Bring the following supplies into the room:
    - mop saturated with hospital grade disinfectant
    - a plastic bag containing at least 10 disposable cloths soaked in hospital grade disinfectant
    - clear plastic bag
    - garbage bags
    - alcohol gel, toilet paper and paper towels, if required
- Cleaning: Each cloth must be saturated with the hospital grade disinfectant (but not dripping wet). Surfaces must be cleaned with friction, and allowed to air dry.
- Clean all frequently touched surfaces. This includes but is not limited to:
    - IV poles, blood pressure cuffs, doors, door knobs, holders for alcohol hand gel, window sills, pull cord on blinds, call bells, telephones, pulls for lights, chairs, bed rails, over bed tables, television controls, spot clean wall where visibly soiled to a height of five feet.
    - Clean the bathroom last. The bathroom cleaning should include all touched surfaces including mirrors, sink, handles, soap dispenser, call bells, pull rails, light switches, door handles, toilet paper holders, flush handles, toilets. Spot clean walls where visibly soiled to a height of five feet. Shower/ bathtub should be cleaned twice per week if being used. Clean the toilet last.
- Discard rags.
- Tie up all garbage bags and leave beside the door. Line garbage cans with new garbage bags.
- Carefully close linen bag and place beside the door. Line linen cart with a clean linen bag.
- Wash the entire floor surface. Place soiled mop head in clear plastic bag to return to Housekeeping. Clean mop handle with cloth soaked in disinfectant solution, allow to air dry.
- Open door and place linen bag, garbage bag and clear plastic bag containing mop head and bucket outside the room.
- Exit the room following the "exit procedure" posted on the door of the room.

- Put on clean gloves and bring linen and garbage bags to designated soiled areas. Place the clear plastic bag containing mop head in the bag designated for soiled rags located on the housekeeping cart. Return these items to Housekeeping Department for cleaning at break and/or end of shift.
- Remove gloves and wash hands.

8.2 Central Areas

Clean all frequently touched surfaces and equipment at least daily with the surface being left wet to air dry.

- This includes but is not limited to: telephones, table tops, charts, computer keyboards, hand rails, light switches, door knobs, locker handles, med cart drawers, ice machine controls, refrigerator doors, blood taking equipment, carts, spot wash walls where visibly soiled to a height of five feet.

Cleaning involves:

- A new cloth, hospital-approved disinfectant (diluted as per manufacturer's instructions). Clean the surface thoroughly with a well-saturated cloth. Remove all visible soil and allow the surface to air dry.
- Change mop heads after cleaning each patient room, after cleaning central areas, and as necessary. For mops used in the patient room, change the mop head in the patient room and place in the laundry hamper. For mop heads used outside the patient room they are to be changed at the point of use or in the janitor's closet and placed in a plastic bag or directly into a laundry hamper.

8.3 Outside Patient Rooms

The intensity and frequency of cleaning outside of patient rooms will depend on the number of isolated patients located on the unit. This will need to be closely monitored by the Housekeeping Department. Clean all frequently-touched surfaces at least daily

- This includes, but is not limited to: doors, door knobs, supply carts, holders for alcohol hand wash, hand rails, walls adjacent to the door of patient rooms, to a height of five feet.

Cleaning involves:

- A new cloth, hospital approved disinfectant (diluted as per manufacturer's instructions) and bucket is used for each of the nursing station, the corridors, and the supply/equipment areas on the unit
- Clean the surface thoroughly with a well-saturated cloth. Allow the surface to air dry do not wipe dry.

8.4 Terminal Cleaning

Terminal cleaning is performed when a patient is transferred or discharged from a SARS isolation room.

- Observe the room and note if equipment or patient care supplies have been left in the room. Discuss with the nurse responsible for the room how these items should be disposed of. Report any concerns to your Housekeeping supervisor.
- Put on full protective apparel as outlined on the isolation signs posted on the door. Check with nursing staff regarding any questions.

- Bring the following supplies into the room:
    - mop saturated with hospital grade disinfectant
    - plastic bag containing disposable cloths soaked in hospital grade disinfectant.
    - clear plastic bags
    - garbage bags
    - alcohol gel, toilet paper and paper towels, if required
- Carefully remove linen from the bed to prevent aerosolization and gently place in linen hamper.
- Remove bedside curtain and shower curtain and place in clear plastic bag, if applicable. Remove window curtains place in clear plastic bag, if applicable.
- Carefully place reusable items such as bedpans, urinals, measuring canisters etc, in a clear plastic bag in such a way to prevent contamination of the exterior of the bag.
- Discard toilet paper rolls and paper towels if not fully covered by a dispenser.
- Close garbage bags and place beside the door (leave one open to put gloves and rags in when exiting the room)
- Place linen bag beside the door (leave partially open so you can put gown in when exiting the room)
- Cleaning: Each cloth must be saturated with the hospital grade disinfectant (but not dripping wet). Surfaces must be cleaned with friction, and allowed to air dry.
    - Clean patient care equipment such as IV poles and pumps, walkers, reclining chair, linen cart, etc. Clean commodes last.
    - Repeat cleaning of these items then place them in the hall.
    - Clean walls and doors head high, paying particular attention to areas coming in contact with hands e.g., doorknobs, door frames, light switches, wall area beside the bedside table and head of bed. Clean windowsill. Clean the inside and outside of the patient cupboard. Wipe down blood pressure cuff, clean bedside table, telephone, over bed table, complete bed and railings, wipe call bell, clean chain from light above bed and remove strings or tape if present. Clean TV, if present. Wipe inside and outside of garbage cans.
    - Clean sink in room, taps and soap dispenser in room if present, clean sink in bathroom and sink area, taps, soap dispenser, mirror.
    - Clean bathroom walls, fixtures and door head high. Clean support railing beside toilet, clean or change emergency bell cord or chain, clean toilet exterior, flush handle and spray handle. Clean toilet last.
    - Discard toilet brush and cloths in garbage bag.
- Wash entire floor surface, lifting bags placed near the door to ensure all areas are clean. Place mop head in clear plastic bag. Clean the mop handle with a cloth soaked in disinfectant solution, allow to air dry.
- Remove PPE as per the room exiting sign
- Bring equipment that has been cleaned to the clean utility room.
- Put on clean gloves. As the last cleaning step, clean the door handle or push plate.
- Empty garbage cans located outside the patient's room. Bring the garbage bags to designated area.
- Bring closed linen bags to the soiled utility room, or place in the soiled compartment of the nurse server. If full, call for immediate pick up.

- Place the clear plastic bags containing mop head and curtains in the bag designated for soiled rags located on the housekeeping cart. Return these items to Housekeeping Department for cleaning at break and/or end of shift
- The door of the patient's room must remain closed for one hour after the patient has left the room to allow for a complete air exchange. Until that time has elapsed, the room cannot be used for a new admission.

9 ESTABLISHMENT OF A SARS UNIT

Consider establishing a SARS unit when there are two or more persons under investigation (PUIs), suspect or probable SARS cases in the facility. Ideally this unit should allow health care workers to enter the building through a separate entrance and proceed to the unit without traveling through other patient care areas. There should be a "change area" buffer to don PPE prior to entering the unit. A convenient location in SARS unit corridor should be provided for health care workers to sanitize their hands and obtain additional PPE.

Prior to opening the SARS unit, a comprehensive testing of the ventilation system should be conducted. This should include a complete test and balance of the system to verify that the design parameters are met and to measure and record exhaust and supply volumes, damper positions, and fan operation and indicator panel status.

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