

4 Preventive measures to be adopted by RCHE staff against communicable diseases



Apart from general hygienic practice and vaccination, staff of RCHEs should also adopt appropriate preventive measures against communicable diseases. The measures fall under two main categories:

- Standard precautions - applicable to all staff and residents
- Transmission-based precautions - precautions based on the mode of transmission

In addition, isolation of residents with communicable diseases, urging visitors to observe the RCHE's rules on prevention of communicable diseases and nursing high-risk residents with greater caution will also help to minimize the chance of outbreak of communicable diseases in the RCHE. The ICO of the RCHE should be responsible for the supervision and coordination.

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4.1 Standard precautions

4.1.1. What are standard precautions?

Standard precautions are designed to reduce the risk of transmission of infective agents from recognized or unrecognized sources of infection. They are applicable to all staff and residents. When coming into contact with or taking care of the residents, staff should regard

blood, all body fluids, secretions and excretions (except sweat) like excreta, saliva, sputum, vomitus or secretions from wounds, non-intact skin like wound, and mucous membrane as potentially infectious, and adopt appropriate and relevant protective measures in different situations.



4.1.2 Aspects include:

- Hand hygiene
- Use of personal protective equipment
- Handling of contaminated articles
- Handling of sharps

4.2 Hand hygiene

Hand hygiene is a general term referring to any action of hand cleansing. It is a basic infection control measure to prevent the spread of communicable diseases. The common hand hygiene practices recommended include hand washing and proper use of alcohol-based handrub.

4.2.1. Basic rules of hand-washing

- Research shows that washing hands properly is the most effective way to prevent transmission of communicable diseases. Staff who have neglected the importance of proper hand-washing often become carriers of different infective agents and lead to cross-infection in the institution (please refer to section 1.2.2 for mode of transmission). Therefore, both hands should be washed with liquid soap before and after caring for each resident. Even though gloves are worn, hands should still be washed with liquid soap after the gloves have been taken off.
- Alternatively, if hands are not visibly soiled, application of alcohol-based handrub is equally effective.
- Improper hand drying will also result in cross-infection to others through contaminated hands. Both disposable paper towel and hand dryer are proper means for hand drying.
- Proper hand hygiene techniques should be observed and followed irrespective of whether water with liquid soap or alcohol-based handrub is used.



4.2.2. Proper procedures for handwashing ([Appendix E](#)):

Please refer to section 3.1.3 for details.

4.2.3 Use of alcohol-based handrub

If hands are not visibly soiled, application of alcohol handrub is equally effective.

- Apply alcohol-based handrub and rub the palms, backs of hands, between fingers, backs of fingers, thumbs, finger tips and wrists for at least 20 seconds.
- Let the alcohol evaporate naturally. Do not use paper towels to dry.

4.3 Use of personal protective equipment (PPE)

To minimize the risk of being infected or becoming the vector unknowingly, staff should use appropriate PPE at work according to the risk of the nursing procedure and the physical condition of the resident so as to safeguard themselves and others. Appropriate PPE should be stocked up.

4.3.1 Gloves:

Gloves should be worn when handling blood, body tissues, excreta, body fluids, secretions or any other contaminated wastes. Mucosa and wounds should only be touched after putting on clean gloves. Gloves contaminated by body secretions should be changed beforehand even though the same resident is being nursed. Take off used gloves and perform hand hygiene immediately before nursing other residents so as to avoid transmission of infective agents to other residents or contamination of the RCHE's environment. Please note that wearing gloves cannot substitute for hand hygiene.



4.3.2 Surgical masks, goggles and face shields:

Surgical masks, goggles or face shields can protect the mouth, nose and eyes from contamination by droplets via sneezing/coughing, blood spill, body fluids, secretions and excreta like sputum, urine or faeces during the process of nursing.



4.3.3 Protective gowns:

Putting on clean protective gowns (not necessarily disinfected) can protect our skin and prevent our clothes from contamination by respiratory droplets, blood spill, body fluids, secretions, urine or faeces during the process of nursing. Contaminated protective gown should be taken off carefully and hand hygiene should be performed immediately afterwards to avoid spread of infective agents.



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4.3.4 Other PPE such as caps and shoe covers can protect hair and shoes from contamination by secretions during the process of nursing and hence minimize the risk of transmission of infective agents from the hair and shoes of the staff to other places.



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4.4 Handling of contaminated articles

Used articles may become indirect vectors for infective agents. Appropriate precautionary measures should therefore be taken in their handling.

4.4.1 Linen

- Infective agents can be transmitted through contact with linen. Therefore, all linen should be washed thoroughly before re-use and appropriate PPE (e.g. gloves, masks, and if appropriate, disposable gowns/aprons) should be used during the process of handling.
- Cleaning procedures include removal of stains with detergent, rinsing with water, drying, ironing and storage in clean and dry cabinets.
- All soiled clothes should have the solid and bulky waste cautiously removed first and handled separately. They should be immersed in 1 in 49 diluted household bleach (mixing 1 part of 5.25% bleach with 49 parts of water) for 30 minutes before routine treatment.

4.4.2 Instrument

- To avoid cross-infection within the RCHE, all instruments or articles used should be cleaned and disinfected thoroughly before re-use.
- If stained with large amount of blood, wipe it with thick paper towels dipped in 1 in 4 diluted household bleach (mixing 1 part of 5.25% bleach with 4 parts of water) and leave for 10 minutes before cleansing and disinfection.
- Please refer to [Appendix I](#) for cleansing and disinfection of articles commonly used in RCHEs.

4.5 Handling of Sharps

- Take extra care when disposing of sharps.
- Do not recap used needles.
- If recapping is necessary, use recapping aids to avoid being pricked by contaminated needles.
- Syringes and sharps must be disposed of in a puncture-proof and spill-proof container labeled "Sharp Box" and "Biohazard" on the outside.
- Take note of the capacity of the sharp box. While mandatory daily disposal of sharp boxes is not necessary, a sharp box should not be overloaded and should be disposed of properly when it is 3/4 full.
- Keep sharp boxes clean and dry.
- Seal the sharp box and dispose in a well-fastened robust plastic bag with a warning signs reading "Biohazard" or "Beware of Sharps" to alert others during disposal. Please refer to the guideline on the disposal of clinical waste by Environmental Protection Department for details. If there is a substantial amount of clinical wastes and sharps for disposal, it is best to contact a clinical waste collector. Pay attention to any amendment of the legislation on clinical waste handling and make the corresponding arrangements for compliance. If in doubt, contact the Territory Control Office of the Environmental Protection Department at 2835 1055 for enquiry.



4.6 Transmission-based precautions

In addition to general hygiene practices, vaccination and standard precautions, specific preventive measures should be adopted when dealing with diseases with different modes of transmission.

Preventive Strategy	Examples of Disease	Preventive Measures
Standard precautions	All communicable diseases	- As list under section 4.1.
Droplet precautions	Influenza, SARS	<ul style="list-style-type: none"> - Maintain good indoor ventilation. - Cover mouth and nose when sneezing or coughing. - Use tissue paper to contain respiratory secretions and dispose them in garbage bin with lid. - Keep both hands clean. In particular, perform hand hygiene properly and immediately after making contact with patients or handling respiratory secretions. - Sick residents, staff and visitors should wear surgical masks. - Try as much as possible to keep a distance of at least one meter from the patient. - Adopt proper isolation. - Use appropriate PPE when necessary.
Airborne precautions	Pulmonary tuberculosis (smear positive)	<ul style="list-style-type: none"> - Maintain good indoor ventilation. - Cover mouth and nose when sneezing or coughing. - Dispose used tissue paper properly. - Keep both hands clean. In particular, perform hand hygiene properly and immediately after making contact with patients or handling respiratory secretions. - Sick residents, staff members, carers or relatives should wear surgical masks. - Adopt proper isolation.
Contact precautions	Conjunctivitis, Head lice, Scabies, Gastroenteritis	<ul style="list-style-type: none"> - Keep both hands clean and perform hand hygiene properly. - Clean and disinfect items used by patients properly. - Do not share towels and other personal items. - Wear gloves when making contact with patients. - Adopt proper isolation.

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Note: Some diseases can be transmitted by more than one mode. To prevent the spread of such diseases, combined preventive measures should be considered.

4.7 Isolation measures

If a resident is suspected to have contracted a communicable disease, he/she should be temporarily isolated. Infection control measures should be strictly implemented so as to protect uninfected residents, staff members and visitors and to stop the spread of the communicable disease. Isolation measures include:

- Reserve some quiet, separate designated area/rooms in the RCHEs for nursing those residents showing respiratory symptoms or infected with communicable diseases.
- Carers should try, as much as possible, to attend to both the physical and psychological needs of the isolated resident in order to reduce sense of loneliness.
- Staff members entering the designated area/rooms to work should take appropriate protective measures, including hand hygiene, wearing surgical mask and the use of other suitable PPE.
- Separate designated area/rooms should be available at any time and should not be used for any other purpose.

If a resident is confirmed or suspected of SARS or other serious communicable diseases, staff from the DH will help the RCHE to delineate "high risk" and "low risk" zones and draw up working procedures. For details, please follow the instruction of DH staff.



4.8 Rules for visitors

Visitors should be advised to comply with infection control measures so as to prevent the spread of the disease. The followings are rules for visitors:

- Advise visitors to pay attention to their personal health conditions. In case of illness such as influenza, they should not visit the RCHE so as to avoid the spread of the disease to residents.
- Ask all visitors, including healthcare workers and relatives to wear surgical masks if they develop respiratory symptoms.
- If necessary, visitors should comply with the request of the RCHE by filling out the visiting dates and other information required for the necessary follow-up by the Department of Health.
- In case of outbreaks or by advice from the Department of Health, visitors should refrain from visiting the RCHE to prevent cross-infection. If necessary, other means such as telephone calls can be used to contact the residents. If visits must be made, advise visitors to take preventive infection control measures, including wearing surgical masks, cleaning hands thoroughly with liquid soap or alcohol-based handrub before and after visits or wearing appropriate PPE as recommended in accordance with the type of the disease and the severity of the outbreak.

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4.9 Guidance notes on nursing procedures

In addition to the correct use of PPE and implementation of preventive measures mentioned above, a proper and appropriate nursing protocol can also reduce the risk of infections in the residents. The followings are points to note for common nursing protocols adopted by RCHEs.

4.9.1 Residents requiring the insertion of urethral catheter are exposed to a higher risk of urethritis. Risk-reducing methods include:

- Minimize the need for catheters by means of bladder training.
- If insertion is required, use small-size catheters to lower the risk of infection.
- The catheter should be changed by experienced and qualified healthcare professional.
- Perform hand hygiene thoroughly before and after the insertion procedure.
- Residents without medical contra-indications should be encouraged to drink plenty of water to help dilute the urine and optimize the urine flow required for irrigation of the catheter.
- Check if the resident has cloudy and smelly urine, malaise or fever. If so, seek medical consultation promptly.
- Keep the urine bag clean and change it regularly as required. Keep watch on and record the urine output.
- Observe the height of the urine bag regularly, especially when helping the resident to change positions. The urine bag should always be placed below the level of the bladder to avoid reflux which may lead to urinary tract infection.
- Do not disconnect the urinary bag from the catheter. If deemed necessary, perform hand hygiene and disinfect the connection part with alcohol swab after disconnection and before reconnection.

4.9.2 Residents requiring nasogastric tube for feeding are exposed to a higher risk of aspiration pneumonia. Risk-reducing methods include:

- Observe proper feeding procedures and in particular the position of the resident (for example, bed-bound residents should be propped at an sitting angle of at least 30°).
- Make sure that the nasogastric tube goes into the stomach.
- Pay attention to the cleaning method of the feeding set, the temperature of the food and the distance between the feeding syringe/funnel and the resident.
- The nasogastric tube should be changed regularly by the resident nurse or the community nurse. After each feed, the feeding set should be flushed with running water and air dried before putting into box for the next use. The feeding funnel should be disinfected daily by boiling for 10 minutes. The feeding tubings should be disposed daily ([Appendix I](#)).
- Each resident should have separate feeding sets.
- All items should be thoroughly cleaned after use and kept in clean containers.
- Observe oral and nasal hygiene. Oral cavity should be cleansed at least three times a day with visual checking.

4.9.3 Prevention of pressure sore and associated infection is better than post-infection treatment

- Help residents to keep their skin and clothing clean and dry. Avoid prolonged skin contact with sweat, urine, faeces which will cause skin lesions and infection.
- Help bed-bound residents to maintain correct postures to minimize the risk of pressure sore.
- Apply proper techniques in lifting and transfer as well as proper positioning so as to avoid the development of pressure sore.
- Help residents to change posture at least once every two hours. When helping the resident change positions, avoid rubbing or bumping his/her body against the bed.
- Consider various pressure-reducing aids, such as cushioned mattress.
- Wear gloves when taking care of wounds. Observe aseptic procedures. Wash hands afterwards.
- Encourage regular exercise to enhance mobility and blood circulation.

4.9.4 Caring for residents with cognitive impairment

Residents suffering from cognitive impairment such as dementia, stroke or other brain lesions may develop difficulties in comprehension, expression and self-care. They may not cooperate with the staff members of the RCHes in implementing preventive infection control measures or meeting the requirements of such measures.

- For residents who retain certain degree of cognition, staff members can guide them to adopt good personal hygiene to prevent infection.
- For residents with serious cognitive impairment, staff should pay extra attention and do the cleaning for them so as to ensure proper personal and environmental hygiene.

4.10 Care of residents newly discharged from hospitals

- Staff should help these residents to wash their hair, bathe and change their clothes.
- Pay extra attention to their health conditions. Residents showing respiratory symptoms should wear surgical masks and have temperature taken everyday.
- Newly recovered residents, e.g. after Norovirus gastroenteritis or scabies infection, should stringently observe personal hygiene.

