Building up host immunity by having a well balanced diet, adequate rest and sleep, regular exercise, being a non-smoker and avoiding alcohol consumption are vital to the prevention of communicable diseases. Vaccination should be given to high risk groups. Moreover, good personal hygiene, environmental hygiene and food safety should be observed.

3.1 Personal hygiene

Observing personal hygiene is an important tip in prevention of communicable diseases. It includes hand hygiene, respiratory hygiene and cough manners, skin care and avoiding sharing of personal items such as towels, combs, toothbrushes, etc.

3.1.1 Hand hygiene

Hand hygiene is a prerequisite for the prevention of many infections. Two hand hygiene practices are recommended: hand washing with liquid soap and using alcohol-based handrub.
Home managers of RCHEs should provide adequate hand washing facilities and place alcohol-based handrub at convenient locations to facilitate staff, residents and visitors to perform hand hygiene. They should also remind residents and staff of the following:

- Avoid wearing objects that may harbour infective agents such as artificial nails, rings, watches and bracelets, etc.
- Perform hand hygiene before wearing and after taking off gloves. Even though gloves are worn, hand hygiene can never be substituted.
- Observe proper hand hygiene techniques irrespective of whether hand washing with liquid soap or alcohol-based handrub is used.
- Staff should perform hand hygiene and encourage residents to perform hand hygiene when necessary, e.g. before each meal (for details, please refer to **Section 3.1.1 D**).

### A. Hand washing

- Wash hands with liquid soap and water when hands are visibly soiled or likely contaminated with body fluid.

- Steps for hand washing:
  
  (i) Wet hands under running water.
  
  (ii) Away from the running water, apply liquid soap on hands to make a soapy lather.
  
  (iii) Rub the palms, back of hands, between fingers, back of fingers, thumbs, finger tips and wrists. Do this for at least 20 seconds (for details, please refer to **Section 3.1.1 C**).
  
  (iv) Rinse hands thoroughly under running water.
  
  (v) Do not re-contaminate washed hands by touching the faucet directly. The tap may be turned off by wrapping the faucet with the paper towel, or clean the faucet by splashing with water or asking someone for assistance.
  
  (vi) Dry hands thoroughly with paper towel or a hand dryer.

- Never share towel with others.
- Dispose of used paper towel properly.
- Store personal towels properly and wash them thoroughly at least once daily.
B. Use of alcohol-based handrub

- Using 70-80% alcohol-based handrub to rub hands is effective to prevent contracting and spreading communicable diseases via hands when hands are not visibly soiled.

- Same as hand washing, apply adequate amount of alcohol-based handrub and cover all surfaces of the hands; rub the palms, back of hands, between fingers, back of fingers, thumbs, finger tips and wrists; rub for at least 20 seconds until the hands are dry (for details, please refer to Section 3.1.1 C).

- Allow alcohol to evaporate naturally for maximum effect and no need to use paper towels to dry the hands.

- Need to check the expiry date of alcohol-based handrub before using it.

C. Hand hygiene technique
D. When to perform hand hygiene

For staff, there are ‘Five moments for hand hygiene’:

- Before touching a resident;
- Before a clean or aseptic procedure, e.g. before nasogastric tube feeding or changing dressing;
- After blood, body fluid, secretion, excreta, wound or mucous membrane exposure risk, e.g. after changing diaper;
- After touching a resident;
- After touching contaminated items or resident surrounding environment.
Staff should also perform hand hygiene, and encourage residents to perform hand hygiene for the following situations:

- Before and after touching eyes, nose and mouth;
- Before handling or eating food;
- Before taking medications;
- After using the toilet;
- When hands are contaminated by respiratory secretions, e.g. after coughing or sneezing;
- After touching public installations or equipment, such as escalator handrails, elevator control panels or door knobs;
- After contact with animals or poultry.
3.1.2 Respiratory hygiene and cough manners

Respiratory hygiene and cough manners are recommended for all persons:

- Cover nose and mouth with tissue paper when coughing or sneezing.
- Dispose of soiled tissue paper in a garbage bin with lid or flush them away in the toilet.
- Wash hands thoroughly after contact with respiratory secretions or touching objects contaminated with respiratory secretions.
- Put on a surgical mask if there are respiratory symptoms.
Staff should ensure the availability of materials for residents to adhere to respiratory hygiene and cough manners.

- Provide tissue paper and garbage bin with lid for disposal.
- Ensure that supplies for hand washing (i.e. liquid soap and paper towels) are consistently available near sinks and provide dispensers of alcohol-based handrub in convenient locations.
- Put up signage and remind residents and visitors not to spit on floor.
- Put up signage to remind visitors to put on surgical mask if there are respiratory symptoms.

### 3.1.3 Skin care

Staff should pay attention to the following points for residents’ skin care:

- Help residents to check their skin condition and pay particular attention to skin fold under the armpit, around the neck and groin area.
- Assist dependent residents to dry the skin fold between the toes properly and do not use talcum powder as it forms crusts and causes skin irritation.
- Cleanse and cover abrasion, if present, with dressing to prevent wound infection.
- Advise ambulant residents to put on socks or shoes to prevent abrasion around the soles or toes.
3.2 Environmental hygiene

3.2.1 General cleaning

- Always keep the windows open for good indoor ventilation. Fans or exhaust fans can be used to improve indoor ventilation.

- Clean the dust filters of air-conditioners regularly.

- Clean and disinfect frequently touched surfaces, furniture, rehabilitation aids, floor, toilets and bathrooms regularly, for example daily clean and disinfect with 1 in 99 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 99 parts of water).

- For places soiled by vomitus, excreta or secretions, clean up the visible matter with strong absorbent disposable material, then disinfect with 1 in 49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water).

- For spillage of blood, clean the visible matter with strong absorbent disposable material, then disinfect with 1 in 4 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 4 parts of water), leave for 10 minutes and then rinse with water and keep dry.

- Clean the floor regularly and increase the frequency as the circumstances require. The floor should be kept dry after cleaning so that residents and staff will not slip on it. Carpets should be kept clean by regular washing and daily vacuum cleaning.

- Clean and examine the bedside cupboards of the residents regularly to avoid food remnants and hence the breeding of pests and rodents.

- Keep appropriate distance between beds or groups of beds (not less than 1 metre as far as possible or with partitioned barrier between beds) to reduce the chance of transmission of infective agents by droplets.

- Empty water in the saucers underneath flower pots and change water in vases at least once a week. Top up all defective ground surfaces to prevent accumulation of stagnant water and breeding of mosquitoes. To prevent rodent infestation, avoid stacking of unnecessary articles.
• Commence clean-up actions immediately when there are any signs of pest or rodent infestation such as excreta of rats, cockroaches, mosquitoes and flies. In case of need, call the Food and Environmental Hygiene Department hotline at 2868 0000 or relevant departments to follow up.

• For a hygienic environment, it is not advisable to keep pets such as dogs and cats in RCHEs.

3.2.2 Disinfection

Generally speaking, household bleach, which normally contains 5.25% sodium hypochlorite, is the most convenient and effective disinfectant when it is diluted appropriately (Appendix C). Care should be taken to avoid its use on metal surfaces since sodium hypochlorite is corrosive to metal. Please refer to Appendix D for procedures of preparing diluted bleach.

• 1 in 99 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 99 parts of water) is sufficient for general cleaning purpose.

• 1 in 49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water) should be used for places contaminated with vomitus, excreta or secretions and in outbreak situations.

• 1 in 4 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 4 parts of water) should be used for places contaminated with blood spillage.

• Use 70% alcohol to disinfect metal surfaces.

Apart from household bleach and alcohol, there are many detergents in the market that claim to have disinfection property. Purchasers should seek more information on the effectiveness and the directions for use from the supplier.
3.2.3 Cleaning and disinfection for toilets and bathrooms

- Keep toilets and bathrooms dry and clean.
- Provide liquid soap for washing hands.
- Provide disposable paper towels or hand dryers for drying hands.
- Place garbage bins with lids inside toilets and bathrooms.
- Ensure the flushing system of the toilet is in proper function all the times.
- Make sure that the drain pipes are built with U-shaped water traps. Do not alter the pipelines without authorisation.
- Pour about half a litre of water into each drain outlet regularly (about once a week) so as to maintain the water column in the pipe as water lock to prevent the spread of microorganisms.
- Make sure that the soil pipes are unobstructed and the sewage drains are functioning properly without leakage so as to avoid breeding of infective agents.

3.2.4 Domestic waste disposal

- Garbage bins should be covered with lids.
- Rubbish should be properly wrapped up and discarded into garbage bins with lids.
- Garbage bins should be emptied at least once a day. Staff should wash their hands thoroughly after handling refuse.
- Please refer to Section 4.1.7 for proper clinical waste disposal.

3.2.5 Cleaning and disinfection of cleaning tools

- To minimise the risk of cross-transmission, different sets of cleaning tools are recommended for different areas such as kitchen, toilets, general areas, isolation room or cohort areas.
- Rinse floor mop, wiper or other cleaning tools with water to remove solid or bulky waste if any. Wash with detergents.
- Disinfect by immersing them in 1 in 49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water) for 30 minutes.
- Rinse with water.
- Reuse after drying.
3.3 Food safety and hygiene

It is important for RCHEs to ensure food safety and hygiene to prevent food-borne diseases.

3.3.1 Food handlers

- Staff should not handle food if suffering from illnesses such as fever, diarrhoea or vomiting.
- Cover wounds with waterproof dressing to prevent passing infective agents from the wounds to food.
- Wash hands properly before preparing food.
- Do not smoke while preparing or handling food.

3.3.2 Maintain a clean and hygienic kitchen

- Keep the kitchen clean and tidy.
- Clean the exhaust fan and range hood regularly.
- Keep worktops and floor in the kitchen clean and dry.
- Store eating utensils in a clean cupboard.
- Do not store personal items such as clothes and shoes in the kitchen.
- Cover garbage bins properly to avoid breeding of cockroaches, flies and rodents.

3.3.3 Choice of food

- Buy fresh meat and vegetables.
- Do not patronise illegal food hawkers.
- Do not buy packaged food without proper labelling, beyond its expiry date or with damaged packages.
- Do not buy ready-to-eat food or drinks that are displayed together with raw products.
- Do not buy food which looks, smells or tastes abnormal.
- Avoid unpasteurised dairy products like raw milk.
- Do not buy excessive food to avoid prolonged storage.
3.3.4 Food Preparation

- Wash food thoroughly and scrub with a brush when appropriate.
- Handle or store raw foods and cooked foods separately.
- Use separate knives and chopping boards for raw and cooked food to avoid cross-contamination.
- Discard the outer leaves of leafy vegetables and wash the vegetables thoroughly.
- Frozen meat or fish must be thawed completely before cooking.
- Cook food thoroughly before consumption.
- Sample food with a clean spoon, not with fingers.
- Consume food as soon as it is cooked.
- Do not prepare too much food at one time to avoid over-stocking.
- Cooked food taken out from the refrigerator should be reheated thoroughly before consumption.
- Do not touch cooked food with bare hands.

3.3.5 Food Storage

- Keep the storage place clean to avoid pest infestation.
- Store food in covered containers.
- Never leave perishable food at room temperature.
- Store perishable food in refrigerator immediately after purchase. Before refrigeration, pack the food into smaller portions if it is not intended for use in one go.
- Store raw meat at the bottom shelf of the fridge so that juices do not drip onto cooked food.
- Surplus food should preferably be disposed of or stored in the refrigerator. All leftovers should not be kept for more than 2 days.
- Make sure that the refrigerator is clean and functioning properly, and clean it at regular intervals. Keep the temperature inside the refrigerator at or below 4°C and the freezer at or below -18°C. The temperature of each refrigerator should be checked daily.
- Avoid overcrowding to allow adequate ventilation inside the refrigerator.
- Do not wrap food with newspaper, unclean paper or coloured plastic bags.

In summary, staff and residents should adopt safe food handling practice based on the ‘5 Keys to Food Safety’ (Appendix E).
3.4 Vaccination

Vaccination should be arranged for residents and staff of RCHEs according to the recommendations of the Department of Health (DH) to prevent them from acquiring vaccine-preventable communicable diseases and to minimise the risk of outbreak occurrence in RCHEs.

3.4.1 Vaccination for residents

- Residents of RCHEs may develop severe or even fatal complications when they suffer from influenza. DH offers free seasonal influenza vaccination to eligible residents of RCHEs annually through the Residential Care Home Vaccination Programme. They are encouraged to receive seasonal influenza vaccination unless they have contraindications.

- Free pneumococcal vaccinations are also provided for those eligible residents who are aged 65 or above and have never received the vaccination before.

3.4.2 Vaccination for staff

- All staff in RCHEs are offered free seasonal influenza vaccination annually through the Residential Care Home Vaccination Programme. Operators or home managers of RCHEs should encourage the staff to receive seasonal influenza vaccination.

- For other vaccinations, please refer to the latest recommendations by DH.