5 Outbreak of communicable disease

5.1 What does an outbreak of communicable disease mean?

From the epidemiological point of view, an outbreak occurs if the residents or staff in a RCHE develop similar symptoms one after another and the incidence rate is higher than that at ordinary times. A common example is the influenza outbreaks which have seasonal peaks in winter (January to March) and summer (July and August), while sporadic cases occur at other times.

The Infection Control Officers (ICOs) of RCHEs should monitor the health condition of residents and staff for any evidence of suspected outbreaks. Some examples are cited below for reference:

• The residents living in the same room or on the same floor develop similar symptoms in clusters within short period of time.

• The residents and staff concurrently develop similar symptoms in clusters, such as symptoms of influenza (fever, cough and sore throat). This means that cross-infection may have occurred in the RCHE.
• Two or more people develop similar symptoms after eating common food items. This means that a cluster of food poisoning may have occurred. The infective agent may be bacteria, viruses or toxins contained in the food.

• A single case of communicable disease may sometimes be treated as an outbreak. For example, a new disease unprecedented in the past or a situation which has major impact on public health such as avian influenza A (H5N1) in 1997 and SARS in 2003.

5.2 What should be done if an outbreak is suspected?

Early detection of occurrence of communicable disease is essential to the prevention of its spread. For such purpose, all healthcare workers, including the ICOs and other staff in the RCHEs, should be responsible for close monitoring of the physical conditions of the residents to enable early detection of communicable diseases, particularly the statutory notifiable infectious diseases, and notify the relevant parties according to Appendix H as soon as possible so that control measures can be implemented promptly.

5.3 Is notification only applicable to confirmed cases of statutory notifiable communicable diseases?

In Hong Kong, as of January 2015, there are 49 statutory notifiable infectious diseases in accordance with the Prevention and Control of Disease Ordinance (Cap. 599) (Appendix I). All registered medical practitioners are required to notify the CENO of CHP of all suspected or confirmed cases of these diseases. The ICO of RCHE should contact the attending doctor of the infected resident if there is query about the resident’s condition.

Furthermore, under Section 18 of the Residential Care Homes (Elderly Persons) Regulation (Cap. 459A), the home managers of RCHEs are required to report to the Director of Social Welfare (via LORCHE) of any suspected or confirmed cases of the statutory notifiable infectious diseases among the residents and staff of RCHEs.

Apart from statutory notifiable infectious diseases, CHP also encourages RCHEs to report suspected institutional outbreak of infectious diseases for investigation and recommendation of appropriate control measures. The LORCHE of SWD and the CGAT of HA (if applicable) should also be informed. Common examples of institutional outbreaks in RCHEs include respiratory tract infections, acute gastroenteritis and scabies.
5.4 General guidelines on management of suspected outbreak of communicable disease

- Isolate the suspected resident(s) properly.
- Arrange early medical treatment. Alert the attending health care providers of the occurrence of an outbreak in the RCHE.
- Keep proper medical records of residents to facilitate early detection of cases and prompt management.
- Reinforce the practice of standard precautions and additional precautions according to the mode of transmission of the communicable disease.
- Increase the frequency of environmental cleaning and disinfection. (Section 5.5)
- Notify relevant parties according to the established procedures for prompt investigation and implementation of control measures (Section 5.3). Please refer to the flow chart of the notification mechanism for communicable diseases in Appendix H.
- Inform the relatives, guarantors or guardians of the residents.
- Residents falling sick should avoid participating in group activities.
- Staff falling sick should refrain from work till fully recovered.
- Minimise contact between residents and staff of different floors to avoid cross-infection, and arrange staff of the same team to take care of a fixed group of residents as far as possible in preparation of the shift roster.
- In general, visit to the affected RCHE is discouraged. If visiting is necessary, personal hygiene should be strictly observed.
5.5 Cleaning and disinfection during outbreaks of communicable disease

- Increase the frequency of environmental cleaning and disinfection.

- Disinfect furniture, floors and toilets with 1 in 49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water). Special attention should be paid to the disinfection of toilets, kitchens and objects which are frequently touched such as light switches, door knobs and handrails.

- Use strong absorbent disposable materials to preliminarily clean up surfaces contaminated with vomitus or excreta before performing the above disinfection procedure.

- Avoid using household bleach on metal surfaces since it contains sodium hypochlorite which is corrosive to metal. Use 70% alcohol if disinfection of metal surfaces is required.

5.6 Specific recommendations on management of selected communicable diseases

5.6.1 Outbreak of respiratory tract infection

- Notify relevant parties by filling in and faxing the notification form (Appendix J) if there are increased numbers of residents and/or staff with respiratory symptoms such as cough, sore throat, runny nose and fever.

- Provide names of people suspected to be infected and details of their medical records as advised by the CHP of DH for investigation.

- The RCHE should implement standard precautions and additional droplet precautions.

- Reinforce stringent hand hygiene, respiratory hygiene and cough manners among the residents and staff.

- Improve indoor ventilation by switching on exhaust fans and opening windows, if possible.

- Infected residents not admitted to hospitals should wear surgical masks and be relocated to the same designated area or room for isolation as far as possible.
• Group activities should be suspended during the outbreak period.
• Sick staff should refrain from work till fully recovered.
• Minimise staff movement, arrange the same group of staff to take care of the same group of residents as far as possible and provide them with appropriate PPE.
• Enhance health surveillance for other residents like measuring body temperature.
• Depending on the situation, the DH will consider giving vaccination to staff and residents who have not yet received seasonal influenza vaccination as well as distributing prophylactic medicines against seasonal influenza.

5.6.2 Outbreak of scabies

• Notify relevant parties by filling in and faxing the notification form (Appendix J) if there is a cluster of residents and/or staff with symptoms of scabies such as intensive itchiness.
• Provide names of people suspected to be infected and details of their medical records as advised by the CHP of DH for investigation.
• Thoroughly trace the infected cases and the contacts (including staff, relatives or visitors) and arrange proper medical treatment for them.
• Implement contact precautions and preferably isolate the infected residents until treatment has been completed.
• Clothing and linen of infected persons should be handled separately and ensure that high temperature disinfection procedures are performed properly to kill the mites and eggs (Appendix L).
• Staff should put on protective gowns and gloves before touching infected residents under treatment and should wash their hands thoroughly after taking off the protective gowns and gloves.
• Instruct and supervise staff on the proper way to use and apply anti-scabies medication following doctor’s instruction.
• Staff should regularly and repeatedly check the skin condition of both the infected residents and other residents, and seek medical advice if any suspected case is found.
5.6.3 Outbreak of acute gastroenteritis

- Notify relevant parties by filling in and faxing the notification form (Appendix J) if there are increased numbers of residents and/or staff with gastrointestinal symptoms such as vomiting and diarrhoea.

- Provide names of people suspected to be infected and details of their medical records as advised by the CHP of DH for investigation.

- For acute gastroenteritis caused by norovirus, please refer to Appendix M.

- Reinforce good personal, food and environmental hygiene in the RCHE.

- Disinfect articles or places soiled by excreta or vomitus.

- Clean and disinfect commodes and toilets with 1 in 49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water).

- Save stool specimens for investigation as advised by the CHP of DH.

- Infected staff, especially food handlers, should refrain from work till fully recovered.

5.6.4 Food poisoning

- Notify relevant parties by filling in and faxing the notification form (Appendix J) if there are two or more persons developing similar symptoms such as vomiting, diarrhoea and abdominal pain after eating common food items.

- Provide names of people suspected to be infected, details of their medical records, and the food menus as advised by the CHP of DH for investigation.

- Save food remnants and stool specimens for investigation as advised by the CHP of DH.

- Disinfect articles or places soiled by excreta or vomitus.

- Clean and disinfect commodes and toilets with 1 in 49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water).

- Reinforce good personal, food and environmental hygiene in the RCHE.

- Maintain a hygienic environment in the kitchen and make sure that the refrigerator works properly.

- Infected staff, especially food handlers, should refrain from work till fully recovered.