

5. Outbreak of communicable disease

5.1 What does outbreak of communicable disease mean?

From the epidemiological point of view, if people in a RCHD develop similar symptoms one after another and the attack rate is higher than that at usual times, there is an outbreak. A common example is seasonal influenza, outbreaks of which tend to occur more frequently during the influenza peak seasons in January to March and July to August each year.

To decide whether there is an outbreak, day-to-day information on cases of communicable diseases in the RCHD has to be monitored. Some examples are cited below for reference. The ICO should closely monitor the situation if:

- Residents in the same room or on the same floor develop similar symptoms in clusters within a short period of time.
- 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 RCHD.
- 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 like avian influenza in 1997 and SARS in 2003.

5.2 What should be done if outbreak is suspected?

Early detection of communicable disease is crucial to the prevention of its spread. Not only the ICOs but all staff members should be responsible for close monitoring of the physical conditions of their residents to ensure early detection of communicable diseases. For any suspected institutional outbreaks of communicable diseases, apart from arranging medical consultation for the sick residents, staff should report the situation to Central Notification Office (CENO) of the Centre for Health Protection (CHP) for investigation.

Staff should notify the relevant parties according to Appendix H as soon as possible so that effective control measures can be implemented promptly.

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

Some communicable diseases are highly infectious and cause severe problems to such an extent that they threaten human lives and affect the economy. If there are effective precautionary or control measures in place, the disaster posed by these communicable diseases can be averted. The evolution of outbreaks of communicable diseases and their management vary to a certain extent with different countries or regions, where the types of communicable diseases occur and the living environment are different. To safeguard public health and safety, every country or region has legislation stipulating certain communicable diseases as statutory notifiable diseases that warrant special precautions, and policies are developed to prevent outbreaks and contain their spread.

In Hong Kong, as at 8th Oct 2010, there are 47 statutory notifiable communicable diseases under the Prevention and Control of Disease Ordinance (Cap 599) – “List of statutory notifiable diseases” (Appendix I).

According to the Cap 599, the attending doctor is required to report to the Department of Health through CENO of CHP when he/she has reasons to suspect his/her patient is suffering from any statutory notifiable communicable disease.

When a staff member suspects or knows a case or case contact of statutory notifiable communicable disease, he/she should immediately arrange medical consultation and report to the Director of Social Welfare. The ICO should contact the attending doctor if there is query about the resident’s condition.

Apart from statutory notifiable communicable diseases, any suspected institutional outbreak of communicable diseases should also be reported to CENO for investigation and recommendation of appropriate control measures, and to the Registration Office of Private Residential Care Homes for Persons with Disabilities (ROPRCHD) of Social Welfare Department for information. Some common examples are as follows:

- Respiratory tract infections
- Acute gastroenteritis
- Acute conjunctivitis
- Scabies
- Hand, foot and mouth disease
- Head lice

The notification form is shown in Appendix J. Please refer to Appendix K for content of the relevant information.

5.4 General guidelines on management of suspected outbreak of communicable disease

- Isolate the patients properly and arrange medical consultation promptly.
- Notify relevant parties according to the established procedures soon after settling down the sick resident so that these parties can implement control measures promptly. Please refer to “Notification Mechanism for Communicable Diseases in RCHDs” (Appendix H) for details.
- Inform the relatives or guardians of the residents.
- Keep medical records of residents and sick records of staff properly.
- Restrict group activities during outbreak period.
- Minimise contact between persons of different floors and arrange staff of the same team to take care of a fixed group of residents as far as possible in preparing duty roster.
- Alert the attending health care facilities such as clinics, hospitals etc. that there is currently an outbreak of communicable disease in the institution.
- Discourage visits.
- Increase the frequency of environmental cleansing and disinfection.
- Disinfect all non-metal frequently-touched surfaces, such as furniture, floors and toilets with 1 in 49 diluted household bleach, leave for 15-30 minutes before rinsing with water and wiping dry. For metal items, such as handrails, door knobs, use 70% alcohol and let it dry.

5.5 Disinfection and cleansing during an outbreak of communicable disease

5.5.1 Decontamination of the environment

- Use disposable absorptive materials for preliminary cleansing of surfaces soiled with vomitus or excreta before performing disinfection procedure.
- Disinfect furniture, floors, commodes and toilets with 1 in 49 diluted household bleach (Appendix F); leave for 15-30 minutes before rinsing with water and wiping dry; special attention should be paid to disinfection of toilets, kitchens and frequently-touched objects such as light switches, door knobs and handrails.
- Since household bleach contains chlorine, which is corrosive to metal, care should be taken to avoid its use on metallic surfaces. For disinfection of metallic surfaces, use 70% alcohol.

5.5.2 Handling of linen

- During outbreak situation, soak linen soiled with blood or secretions in 1 in 49 diluted household bleach for 30 minutes before washing.

5.6 Specific recommendations on management of selected communicable diseases

5.6.1 Outbreak of respiratory tract infection

- Definition of outbreak of respiratory tract infection: There are increased number of residents and/or staff with respiratory tract symptoms which include cough, sore throat, runny nose and fever above the usual pattern.
- List the names of affected people and details of their medical records and report to the Department of Health for investigation.
- Enhance health surveillance for other residents e.g. measuring body temperature.
- Switch on exhaust fans and open windows to improve indoor ventilation, if possible.
- Infected residents, who are not admitted to hospitals, should wear surgical masks and be isolated as far as possible.
- Be stringent with personal hygiene, especially hand hygiene, respiratory hygiene and cough manners.
- Suspend group activities during outbreak period.
- Ensure sick staff members are refrained from work until fully recovered.
- Minimise staff movement by arranging the same group of staff to take care of the same group of residents as far as possible and provide them with appropriate protective gear.
- Depending on the situation, the Department of Health may consider distributing prophylactic medicines against influenza and giving vaccination to staff and residents of RCHD who have not received influenza vaccination.

5.6.2 Outbreak of acute gastroenteritis (AGE)

- Definition of outbreak of acute gastroenteritis: There are increased numbers of residents and/or staff with symptoms of acute gastroenteritis, which include vomiting and/or diarrhoea above the usual pattern.
- List the names of affected people and details of their medical records and report to the Department of Health for investigation.
- Disinfect articles or places soiled by excreta or vomitus.
- Save food remnants, food samples and clinical specimens for investigation as advised by the Department of Health.
- Cleanse and disinfect commodes and toilets with 1 in 49 diluted household bleach.
- Ensure good personal, food and environmental hygiene.
- Do not allow infected staff on duty until fully recovered.

5.6.3 Outbreak of scabies

- List the names of affected people and details of their medical records and report to the Department of Health for investigation.
- Thoroughly trace the infested cases and their contacts (including staff, relatives or visitors) and arrange for proper medical treatment.
- Implement contact precautions and preferably isolate the infested residents until treatment has been completed.
- Handle clothing and linen of infested persons separately and ensure that high temperature procedures (60 °C or above for at least 10 minutes) are performed properly to kill the mites and eggs.
- Put on protective gown and gloves before touching infested residents and wash hands thoroughly after taking off protective gown and gloves.
- Instruct and supervise staff to use anti-scabies medication following doctor's instruction.
- Check the skin condition of all residents regularly. Seek medical advice if suspected case is found.

5.6.4 Food poisoning

- List the names of affected people, their medical details and consumed food details of these several days before the outbreak to the Department of Health for investigation and management.
- Save food remnants, food samples and clinical specimens for investigation as advised by the Department of Health.
- Disinfect articles or places soiled by excreta or vomitus.
- Cleanse and disinfect commodes and toilets with 1 in 49 diluted household bleach.
- Ensure good personal, food and environmental hygiene.
- Enhance hygiene practices in kitchen and make sure that the refrigerator works properly.
- Refrain infected staff from work, especially the food handlers to prevent spread of the disease.