

## **5. Outbreak of communicable diseases**

### **5.1 What does an outbreak of communicable disease mean?**

5.1.1 If children or staff develop similar symptoms one after another and the incidence is higher than usual, occurrence of outbreak is suspected. Examples are three or more students in the same class develop symptoms of respiratory tract infections; and two or more students in the same class develop symptoms of hand, foot and mouth disease in succession within a short time.

5.1.2 To judge whether there is outbreak in schools/centres, the daily information on cases of communicable diseases has to be monitored. Some examples are cited below for reference. School/centre staff should keep a closer watch if the following happens:

- Children studying in the same room or on the same floor develop similar symptoms in clusters within a short period of time.
- Children and staff concurrently develop similar symptoms in clusters, such as symptoms of influenza (fever, cough and sore throat). This may mean cross-infection is occurring within schools/centres.
- Two or more people develop similar symptoms after eating common food or meals. This may mean food poisoning outbreak and the pathogen may be the bacteria, virus or toxin contained in the food.
- A single case sometimes may warrant outbreak investigation. A disease newly emerged or posing major impact on the overall public health system is one of such cases. Examples are the emergence of avian influenza in 1997 and SARS in 2003.

### **5.2 What should be done if an outbreak is suspected?**

Early detection of the occurrence of communicable disease is essential to prevent the disease spread. For such purpose, staff shall be responsible for keeping a close watch on the occurrence and outbreak of communicable diseases, particularly the statutory notifiable diseases. They should report promptly to CHP ([Appendix 2](#)) as soon as possible so that timely preventive measures can be implemented. They should also make a prompt report to the respective offices of SWD or EDB according to the flow chart in [Appendices 3 and 4](#).

Besides, staff should advise the parents/guardians of the sick children not to bring their children to schools/centres so as to avoid the spread of infections. The suitable time

for them to return to schools/centres depends on the nature of the diseases and the individual situations (please refer to [Appendix 13](#)).

### **5.3 What are statutory notifiable communicable diseases?**

Please refer to section 1.5 for details.

### **5.4 Is the notification requirement only applicable to confirmed cases of statutory notifiable communicable diseases?**

Apart from reporting statutory notifiable communicable diseases pursuant to the law, doctors should notify CHP of any suspected cases or outbreaks of other communicable diseases which may cause public health concern as soon as possible. In addition to statutory notifiable diseases, CHP encourages the persons-in-charge of schools/centres to report to them any case of communicable diseases other than the statutory notifiable ones such as hand, foot and mouth disease and acute conjunctivitis ([Appendix 2](#)).

### **5.5 General guidelines on the management of suspected outbreaks of communicable diseases**

School/centre staff should follow the steps below in managing a suspected outbreak:

- Take care of the sick first. Isolate the sick properly.
- Inform the parents/guardians of the sick child to take him/her to seek early medical consultation or to the nearby Accident and Emergency Department if necessary.
- Inform the relevant departments according to the established procedures after settling down the patient.
- Supply relevant information (please refer to [Appendix 15](#)) to CHP to facilitate epidemiological investigation.
- Keep records of children's and staff's personal particulars and medical histories properly. Seek consent in advance from parents/guardians of children before the start of school year for releasing such information to CHP or other relevant departments when necessary.
- Sick children or staff should avoid participating in group activities.
- Minimise contact between children and staff of different floors to avoid cross-infection, and arrange the same team of staff to take care of a fixed group of children as far as possible when preparing the shift roster.

- Assist CHP officers in monitoring the outbreak to ensure the effectiveness of preventive measures. The surveillance period for common communicable diseases is usually twofold of the longest incubation period from the onset of the last case.
- Inform all parents of the suspected or confirmed communicable disease outbreak and remind them that sick children should stay at home.
- Maintain close communication with parents on the condition of the children and report to CHP if the affected children have been admitted to hospitals.

## **5.6 Environmental disinfection during outbreak of communicable diseases**

- Disinfect furniture, floor and toilets with appropriate disinfectant (e.g. mixing 1 part of 5.25% bleach with 49 parts of water for non-metallic surface or using 70% alcohol for metallic surface); leave for 30 minutes before rinsing with water and mopping dry; pay special attention to disinfection of toilets, surfaces that are frequently touched such as door knobs and handrails.
- Use highly absorbent materials to clean up surfaces contaminated by vomitus or excreta preliminarily before performing the above disinfection procedures.

## **5.7 Specific recommendations on management for some communicable diseases**

### **5.7.1 Outbreak of acute gastroenteritis or food poisoning**

- Prepare a list of suspected patients and their medical records ([Appendix 15](#)) as well as the information on food consumed within the several days before the outbreak at schools/centres to facilitate epidemiological investigation by the CHP.
- Disinfect articles or places contaminated by excreta or vomitus.
- Clean and disinfect toilets with 1 in 49 diluted household bleach (mixing 1 part of 5.25% bleach with 49 parts of water).
- Ensure good personal, food and environmental hygiene in schools/centres.
- Maintain a hygienic environment in the kitchen and make sure that the refrigerator functions properly.
- Sick staff, especially the food-handlers, should take sick leave to prevent the spread of disease.

- Keep affected children and staff away from schools/centres until their diarrhoea or vomiting has subsided for at least 2 days or as advised by the doctor.

### **5.7.2 Outbreak of respiratory tract infection**

- Prepare a list of suspected patients and their medical records ([Appendix 15](#)).
- If children and staff develop symptoms of influenza such as fever, sore throat or cough, advise them to put on a mask and seek medical advice immediately.
- Require staff and students to notify the schools/centres if they develop influenza symptoms or are admitted to hospital.
- Require the sick to stay at home for rest until symptoms have improved and fever has subsided for at least 2 days.
- Enhance health surveillance for other children by, for example, measuring body temperature.
- Switch on exhaust fans and open windows as far as possible to improve ventilation.
- Avoid group activities during an outbreak.
- Minimise staff movement and arrange the same group of staff to take care of the same group of children as far as possible.
- Provide appropriate protective gear in place.

### **5.7.3 Outbreak of hand, foot and mouth disease and enterovirus 71 infection**

- Prepare a list of suspected patients and their medical records ([Appendix 15](#)).
- Require sick children and staff to notify the schools/centres if they develop symptoms of hand, foot and mouth disease or are admitted to hospital.
- Advise sick children and staff to stay at home and seek medical advice immediately if they develop symptoms. If hand, foot and mouth disease is confirmed, advise them to stay at home until all vesicles have dried up or as advised by the doctor. If one case is confirmed to be enterovirus 71 infection, all affected children in the schools/centres should take two more weeks of sick leave after all vesicles have dried up.
- Enhance health surveillance for other children by inspection whilst avoiding contact with the lesions.
- Instruct children on personal hygiene practices.

- Clean toys properly.
- Avoid group activities during an outbreak.
- Minimise staff movement and arrange the same group of staff to take care of the same group of children as far as possible.

#### **5.7.4 Class suspension**

CHP may consider advising the affected schools/centres to suspend classes for a period of time, based on factors such as the number of children affected, the number of children with severe illness and number of hospitalisations, the progression of the outbreak and whether it is responsive to control measures. School/centre staff should provide the necessary arrangement.

For influenza outbreaks, reference will also be taken from (but not solely dictated by) the indicators recommended by the "Expert Group Report on the Deaths of Three Children" released in April 2008\*.

\* The Expert Group recommended that "closure of an individual school during outbreaks may be considered taking reference from (but not solely dictated by) certain indicators, such as: when the sick leave rate is 10% or more, the hospitalisation rate is more than 1%, there are two or more ICU admissions, or any death in the school due to influenza in otherwise healthy children."