

Guidelines on Prevention of Communicable Diseases in Schools / Kindergartens /Kindergartens-cum-Child Care Centres / Child Care Centres

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Introduction

Effective prevention of communicable diseases in schools/centres* not only safeguard the health of children and staff by minimising the harm caused by the diseases, but also ensure a delightful learning environment to support the healthy development of children. It is incumbent on every school/centre staff to learn how to prevent communicable diseases.

We intend to provide some practical information on infection prevention measures in this set of guidelines for those working in schools/centres. Every school/centre staff has the responsibility to understand the guidelines and undertake preventive measures accordingly. The guidelines comprise seven major sections. While individual staff may refer to the relevant sections as necessary, person-in-charge of schools/centres and/or the designated staff should familiarise with the content to coordinate the infection control issues and prevent the spread of communicable diseases within their settings.

This set of guidelines is not meant to be exhaustive. For the most updated information, please visit the Centre for Health Protection (CHP) website at www.chp.gov.hk.

Lastly, we would like to take this opportunity to thank the Social Welfare Department (SWD) and the Education Bureau (EDB) for their generous and valuable advice on the preparation of the guidelines.

Centre for Health Protection
Department of Health
June 2014

*Schools/centres will be used to refer to schools, kindergartens, kindergartens-cum-child care centres and child care centres in this set of guidelines.

1. Concepts of communicable diseases

1.1 What are communicable diseases?

Communicable diseases refer to diseases that can be transmitted and make people ill. They are caused by infective agents (pathogens), that invade the body or release toxins to cause damages to normal body cells and their functions. In severe cases, they may lead to death.

1.2 Chain of infection: infective agent transmission —host

— source of infect

Besides the infective agent, there are three crucial factors for the spread of communicable diseases, namely the source of infection, the mode of transmission and the host—the so-called “chain of infection”.

1.2.1 Infective agents

Infective agents are micro-organisms (e.g. bacteria, viruses, fungi and parasite) that will cause an infection.

1.2.2 Source of infection

This refers to any environment, in which infective agents can live, parasitise and breed. It includes human (e.g. patients, carriers and people with latent infections), livestock, insects and soil. The source of infection will normally form the basis for infective agents to infect humans.

1.2.3 Mode of transmission

This refers to the method of transfer by which the infective agent moves or is carried from one place to another.

| Mode of transmission | Process | Examples of communicable diseases |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact transmission | Through direct body contact with the infected persons, e.g. playing together with direct skin contacts; or indirect through contact with objects contaminated by infective agents, e.g. sharing towels, combs and clothes | <ul style="list-style-type: none"> • Hand, foot and mouth disease • Acute conjunctivitis • Head lice • Scabies • Chickenpox[#] |
| Droplet transmission | Inhale or contact of droplets expelled from the sick during sneezing, coughing, spitting and speaking, or through subsequent touching of mucous membranes of the mouth, nose and the eyes, etc with hands contaminated with infective agents | <ul style="list-style-type: none"> • Influenza • Common cold • Acute bronchiolitis • Pneumonia • Severe acute respiratory syndrome (SARS) • Scarlet fever |
| Air-borne transmission | The infective agents float in the air for some time and enter the body through the respiratory tract | <ul style="list-style-type: none"> • Chickenpox[#] • Measles • Pulmonary tuberculosis |
| Food-borne / water-borne transmission | Through ingestion of contaminated food or water, or use of contaminated eating utensils | <ul style="list-style-type: none"> • Viral gastroenteritis • Food poisoning • Cholera • Bacillary dysentery • Hepatitis A • Hepatitis E |
| Vector-borne transmission | Through vectors, usually insects. The infective agents parasitise and breed in the bodies of the insects. | <p>Mosquito-borne</p> <ul style="list-style-type: none"> • Dengue fever • Malaria • Japanese encephalitis |
| Blood / body fluid transmission | Through blood transfusion, tattooing, ear piercing or sexual intercourse | <ul style="list-style-type: none"> • Hepatitis B • Acquired immunodeficiency syndrome (AIDS) |
| Congenital infection | From the pregnant mother to the foetus | <ul style="list-style-type: none"> • Congenital rubella syndrome |

[#]Some communicable diseases have more than one mode of transmissions (e.g. chickenpox).

1.2.4 Host

Hosts refer to the susceptible population. Some people are more prone to infection and become hosts. For instance, young children and patients with chronic diseases are more susceptible to infection because of weakened body immunity.

1.3 Why are schools/centres* more vulnerable to outbreaks of communicable diseases?

Schools/centres are gathering places where children learn and play. Some children may be too young to take proper personal care. As such, communicable diseases can easily spread through close person-to-person contact. The source of infection can be children, staff and parents. Person-to-person contact may lead to cross-infection, i.e. the transmission of infective agents from one person to another. For example, a member of staff who fails to wash hands after caring for a sick child before making contact with another child, he/she may spread the infective agents from that child to the next child he/she cares for.

1.4 Principles of control of communicable diseases

As mentioned above, there are four factors crucial to the spread of communicable diseases. They include the infective agent, the source of infection, the mode of transmission and the host. Hence, the control of the spread of communicable diseases should focus on controlling all these four factors so as to break the chain of infection.

| Factors of transmission | Control measures |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infective agents | <ul style="list-style-type: none">• Disinfection to kill the infective agents |
| Source of infection | <ul style="list-style-type: none">• Early detection, isolation and treatment of patients• Removal of breeding sites |
| Mode of transmission | <ul style="list-style-type: none">• Maintenance of good environmental, personal and food hygiene• Adoption of infection control measures appropriate to the different modes of transmission |
| Host (susceptible population) | <ul style="list-style-type: none">• Building up personal immunity by immunisation and healthy lifestyles |

1.5 What are statutory notifiable communicable diseases?

Some communicable diseases are highly infectious and cause severe sequelae to such an extent that they threaten human lives and affect the economy. If there are proper 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, there are 47 statutory notifiable communicable diseases under the Prevention and Control of Disease Ordinance ([Appendix 1](#)). Attending doctors should report to the Central Notification Office (CENO), Centre for Health Protection (CHP) of the Department of Health if such cases are noted.

Furthermore, the persons-in-charge of schools are encouraged to report suspected outbreak of communicable diseases to the CHP with the form attached in [Appendix 2](#). They are also required to report to the respective offices of the Social Welfare Department (SWD) or the Education Bureau (EDB). ([Appendices 3 and 4](#))

*Schools/centres will be used to refer to schools, kindergartens, kindergartens-cum-child care centres and child care centres in this set of guidelines.

2. Communicable diseases in schools/centres

2.1 Signs and symptoms of some common communicable diseases

The typical signs and symptoms of some commonly encountered communicable diseases are listed in Appendix 5 for easy reference. The list is not meant to be exhaustive. For more information about different types of communicable diseases, please visit the CHP website at <http://www.chp.gov.hk/>.

2.2 Subtle signs and symptoms of infection among children

2.2.1 Not all children develop the typical signs and symptoms when infected. Some may have less obvious features. In addition, young children may not know how to express their discomfort. All these factors may delay the detection of infection and increase the risk of spread of disease. Hence, it is important for the staff to be vigilant to the subtle physical changes for early detection and treatment.

2.2.2 Staff should pay attention to the children who develop the following subtle signs and symptoms :

- Change in body temperature: Most children develop fever when infected but there are exceptions. Some children may have lower body temperature under normal condition. Their body temperature will not increase too much even when infected. If the temperature is higher or lower than his/her usual body temperature, he/she may have underlying infection.
- Crying and nagging for no reason, restlessness
- Loss of appetite
- Lack of energy
- Shortness of breath
- Frequent eye rubbing
- Frequent scratching

2.2.3 To facilitate the schools/centres staff to detect the changes, concerned staff should maintain proper personal health records for each child and

check their temperatures regularly as advised by CHP. In addition, staff should pay more attention to young children who have special health conditions since they are more vulnerable to infection than others.

2.3 Measuring body temperature

2.3.1 Most children develop fever when infected but there are exceptions. Some children have fluctuating temperature when infected. Therefore, it is important to measure and record children's body temperature properly as baseline for comparison. School/centre staff should exercise vigilance to identify children with fever, in particular during outbreaks of communicable diseases, such as influenza-like illnesses or when children develop symptoms of infection.

2.3.2 Core and surface temperature

Body temperature can be divided into core temperature and surface temperature. Core temperature refers to the temperature of deeper tissues and can be taken through the oral cavity, rectum or ear; whereas surface temperature is the temperature of surface skin tissues and can be taken at the armpit. Since body temperature (surface temperature in particular) is more susceptible to changes in the surroundings, the following should be noted to ensure accuracy in measurement:

- Familiarise with the correct use of thermometers before taking temperature.
- Take the daily temperature for each child by using the same method at around the same time of the day to minimise variation caused by different measurement methods or environment.
- Remind children to avoid doing exercise or having excessively cold or hot food and drinks within 30 minutes before taking temperature.

2.3.3 Reference range for temperature screening

If oral thermometer is used, temperature not higher than 37.5°C (99.5°F) is considered normal. If ear or rectal thermometer is used, the measured temperature will be 0.5°C (0.9°F) higher than that of an oral thermometer. As such, ear or rectal temperature not higher than 38°C (100.4°F) is considered normal.

2.3.4 Body temperature varies with age, time of day and level of physical activity. For screening purpose, temperature above the reference range quoted below will be considered as significant and one should consult a doctor for suspected fever.

| Measuring method | Celsius scale (°C) | Fahrenheit scale (°F) |
|-------------------------|-------------------------------|----------------------------------|
| Oral | 37.5 °C | 99.5 °F |
| Ear | 38.0 °C | 100.4 °F |
| Rectal | 38.0 °C | 100.4 °F |
| Armpit | 37.3 °C | 99.1 °F |

2.3.5 Types of thermometers

In general, there are mercury, digital, chemical LCD and infrared thermometers for taking oral, rectal, armpit, ear and forehead temperature. Before using a specific thermometer, read the instructions carefully for the proper procedures of using it as well as the reference range of the readings. Accuracy, suitability, convenience and acceptability by parents should all be taken into account when choosing the appropriate thermometer. Some schools/centres may use infrared forehead thermometers for screening fever in children. Such devices, however, are less accurate in reflecting the true core body temperature. Hence, another type of thermometer should be used for taking temperature to confirm fever.

2.3.6 Methods of taking body temperature

| Method | Steps for measuring | Points to note | Recommendations |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Oral | <ul style="list-style-type: none"> • Cover the thermometer with a plastic jacket • Place the thermometer under the tongue near the root • Tell the child to close the mouth tight but not to bite on the thermometer or talk • Wait for 1 to 3 minutes before taking it out to check the reading | <ul style="list-style-type: none"> • Avoid cold or hot food before taking temperature • Close the mouth when taking temperature. Do not speak • If the child carelessly bites off the mercury thermometer, he / she should be sent to the hospital immediately for further management | <ul style="list-style-type: none"> • Suitable for older children • Not applicable to children/students who are unconscious, confused or who cannot close their mouths tight |
| Ear | <ul style="list-style-type: none"> • Stabilise the head position of the child • Pull his / her ear backwards and upwards to make the ear canal straight • Fit the probe tip covered with a plastic jacket slightly into the depth of the ear canal • Follow the instructions to make suitable adjustments when using an ear thermometer | <ul style="list-style-type: none"> • Specify on the record that the measurement is the ear temperature as it is usually 0.5 °C higher than the oral one • Direction of the probe tip should be correct, otherwise it will give an inaccurate reading • The ear pressed against the pillow during sleep has a higher temperature, so the other ear should be used for taking temperature if one is just awake | <ul style="list-style-type: none"> • It is non-intrusive, and therefore has little limitations on its application. • It is particularly suitable for use in schools/centres • Not applicable to persons with obstruction of ear canal caused by ear wax or otitis |

| Method | Steps for measuring | Points to note | Recommendations |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Rectal | <ul style="list-style-type: none"> • Ensure the privacy of the child and protect him / her from catching cold • Help the child to lie down on one side with knees bent • Cover the probe of the thermometer with a plastic jacket and put some lubricant on the tip • Insert it gently down about 2.5 cm of the rectum • Wait for 1 to 3 minutes before taking it out to check the reading | <ul style="list-style-type: none"> • Specify on the record that the measurement is the rectal temperature as it is 0.5 °C higher than the oral one • The accuracy of the measurement will be affected if large amount of faeces is accumulated in the rectum | <ul style="list-style-type: none"> • Suitable for young children |
| Armpit | <ul style="list-style-type: none"> • Put the thermometer under the armpit • Place the forearm of the child horizontally across his / her chest to secure the thermometer under the armpit • Wait for 5 minutes before taking it out to check the reading | <ul style="list-style-type: none"> • Specify on the record that the measurement is an armpit temperature as it is usually lower than the oral one | <ul style="list-style-type: none"> • Suitable for conditions under which all the above are not applicable |

2.3.7 Cleaning and disinfection of thermometers after use

- Oral and rectal thermometers should be treated separately. Patients with communicable diseases should use separate personal thermometers to avoid cross-infection.
- Mercury thermometers - wash with cold water and detergent first; immerse in 70% alcohol for not less than 10 minutes; then air dry and store it in a dry place.
- Electronic thermometers must not be disinfected with high temperature because their electronic components will be damaged and their normal functioning affected. Electronic thermometers should be cleansed and disinfected according to the recommendations in the user manual.

3. General guidelines on prevention of communicable diseases

Building up the body immunity by having a balanced diet in accordance with the food pyramid, adequate rest and sleep, regular exercise and not smoking is vital to the prevention of communicable diseases. Moreover, good personal, food and environmental hygiene should be observed. Vaccination can provide extra protection against some communicable diseases.

3.1 Personal hygiene

Since many communicable diseases are transmitted through contact or droplet, performing hand hygiene properly and maintaining respiratory hygiene are two prerequisites for the prevention of such diseases. School/centre staff should not only observe their personal hygiene practices but also supervise and provide support for the children to develop the good practices.

3.1.1. Hand hygiene

- Hand hygiene is a basic infection control measure to prevent the spread of communicable diseases. The common hand hygiene practices include hand washing and proper use of alcohol-based handrub.*
- Researches show that washing hands properly is the most effective way of preventing transmission of communicable diseases. Staff members who have neglected the importance of proper handwashing when performing care often become carriers of different infective agents and lead to cross-infection in the schools/centres. Therefore, both hands should be washed with liquid soap before and after caring for each child.
- Staff should follow the advice and procedures in [Appendix 6](#) and supervise children to perform proper hand hygiene in schools/centres. They should pay particular attention to the following points:
 - When hands are visibly soiled, handwashing should be performed.
 - When hands are not visibly soiled, application of alcohol handrub is equally effective.
 - Instruct children to use alcohol handrub properly.
 - Keep alcohol handrub out of the reach of children to prevent unsupervised use.
 - Wearing gloves can never replace good hand hygiene. Always practise proper hand hygiene after taking off the gloves.

- 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. If towels are used, they should never be shared and should be hung up immediately after use and washed thoroughly at least once a day.
- Provide adequate hand hygiene facilities in the schools/centres.

** Schools/centres should refer to instructions on the container for proper usage and storage of alcohol handrub. According to the advice of Fire Services Department, each school /centre should not keep more than a total of 20 litres of alcohol-based liquid. To reduce fire risk, alcohol-based liquid (including alcohol handrub) in excess of 20 litres should be stored in an approved Cat. 5 Dangerous Goods Store.*

3.1.2 Respiratory hygiene

Staff should observe themselves and instruct the children to maintain respiratory hygiene practices in accordance to the following advice:

- Do not spit.
- Cover both the nose and mouth with a handkerchief or tissue paper when coughing or sneezing.
- Wrap up sputum with tissue paper and discard it into garbage bins with lids or flush them away in the toilet.
- Wash hands immediately after contacting respiratory secretions or touching objects contaminated with respiratory secretions.
- Put on a surgical mask for those with respiratory infection symptoms (Appendix 7).

3.2 Food hygiene

3.2.1 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 and drinks that are displayed with raw products.
- Do not buy food which looks, smells or tastes abnormal.
- Do not buy unpasteurised products like raw milk.
- Do not buy excessive food to avoid problems due to prolonged storage.

3.2.2 Preparation of food

- Wash hands properly before preparing food.
- Wear mask, washable or disposable apron and cap during handling cooked food.
- Cover wounds on hands with waterproof dressing to prevent passing infective agents from wounds to food.
- Wash food thoroughly, and scrub with a brush when appropriate.
- Handle and store raw food and cooked food separately. Use separate knives and chopping boards for each to avoid cross-contamination.
- Discard the outer leaves of vegetables and immerse the vegetables in water for 1 hour before washing to eliminate possible pesticide residues.
- Frozen meat or fish must be thawed completely before cooking.
- Reheat cooked food from the refrigerator thoroughly before consumption.
- Cook food thoroughly before consumption.
- Sample food with a clean spoon, not with fingers.
- Do not touch cooked food with bare hands.
- Consume food as soon as it is cooked.
- Do not prepare too much food at one time to avoid wastage or over-stocking.
- Do not handle food if suffering from illnesses such as fever, diarrhoea and vomiting.

3.2.3 Storage of food

- Store food in well-covered containers.
- Never leave perishable food in room temperature.
- Store perishable food in the refrigerator immediately after purchase.
- Before refrigeration, pack the food into smaller portions if it is not intended for use in one go.
- Store surplus food in the refrigerator if retention is needed.
- 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. Each refrigerator should have a temperature log book with temperature recorded regularly.

- Avoid overcrowding to maintain proper temperature inside the refrigerator.
- Do not wrap food with newspaper, unclean paper or coloured plastic bags.

Schools/centres should also follow the Five Keys to Food Safety developed by the Centre for Food Safety, Food and Environmental Hygiene Department in accordance with the recommendation given by the World Health Organization to handle food properly ([Appendix 8](#)).

3.2.4 School lunchboxes

To prevent food-borne diseases, schools and institutions are advised to:

- Choose and monitor food suppliers carefully; order lunchboxes from premises with a valid Food Factory Licence issued by the Food and Environmental Hygiene Department
- Hot foods should be kept at above 60 degrees Celsius while cold foods should be kept at 4 degrees Celsius or below.
- For details, please refer to the Centre for Food Safety website at
 - http://www.cfs.gov.hk/english/programme/programme_haccp/programme_haccp_lunchbox_school.html
 - http://www.cfs.gov.hk/english/multimedia/multimedia_pub/files/school_lunches_ordered_are_safe.pdf

3.3 Environmental hygiene

Since infective agents can survive in the environment for a period of time, it is essential to observe proper environmental hygiene.

3.3.1 Choice of disinfectants

- Different types of disinfectants can be used to clean the environment. Household bleach, which normally contains 5.25% hypochlorite solution, is the most convenient and effective disinfectant. The 1 in 99 diluted household bleach (5.25%) is sufficient for general cleaning

purpose and 1 in 49 diluted household bleach should be used for places contaminated with respiratory secretions, vomitus or excreta. Please refer to [Appendix 9](#) for procedures of preparing/using diluted bleaches.

- Besides, many detergents in the market are claimed to have a disinfectant composition. Purchasers should check the content and note the directions for use because the effectiveness of different disinfectants will be different.
- Since household bleach contains hypochlorite solution, care should be taken to avoid its use in metal surfaces as chlorine is corrosive to metal. The 70% alcohol can be used if disinfection of metal surfaces is required.

3.3.2 General cleansing

- Maintain good indoor ventilation, open windows wide and turn on fans or exhaust fans. Make sure air-conditioning systems are well-maintained. Clean air-filters regularly and keep them clean.
- Clean and disinfect the school premises including classrooms, kitchen canteen, toilets, bathrooms, and school buses with 1 in 99 diluted household bleach (mixing 1 part of 5.25% bleach with 99 parts of water), wait until the disinfectant dries up, then rinse with water and keep dry.
- Clean and disinfect frequently touched surfaces, such as furniture, toys and commonly shared items (such as computer keyboards) at least daily by using appropriate disinfectant (e.g. 1 in 99 diluted household bleach by mixing 1 part of 5.25% bleach with 99 parts of water for non-metallic surfaces; or 70% alcohol for metallic surfaces), leave for 15-30 minutes, and then rinse with water and keep dry.
- Use absorbent disposable towels to wipe away obvious contaminants such as respiratory secretions, vomitus or excreta, then disinfect the surface and neighbouring areas with appropriate disinfectant (e.g. 1 in 49 diluted household bleach by mixing 1 part of 5.25% bleach with 49 parts of water for non-metallic surfaces; or 70% alcohol for metallic surfaces), leave for 15-30 minutes and then rinse with water and keep dry.

3.3.3 Kitchen hygiene

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

3.3.4 Toilet and bathroom hygiene

- Keep toilets, changing rooms, and bathrooms clean and hygienic.
- Provide liquid soap and disposable tissue towels or hand dryers for hand washing.
- Ensure the flushing system of the toilet is in proper function.
- Make sure that the drain pipes are built with U-shaped water traps and 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 micro-organisms.
- 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.

3.3.5 Waste disposal

- Cover garbage bins with lids.
- Wrap up rubbish properly before discarding it into garbage bins with lids.
- Empty garbage bins at least once a day.
- Wash hands thoroughly after handling garbage.

3.3.6 Cleansing of utensils

- Rinse floor mop, wiper or other cleaning utensils with water to remove solid or bulky waste if any.
- Disinfect such utensils by immersing them in 1 in 49 diluted household bleach (5.25%) for 30 minutes.
- Then wash with detergents and clean water.
- Re-use after drying out.

3.3.7 Miscellaneous

- Maintain proper function of the drinking fountain and instruct children to use it properly according to the guidelines for using drinking fountain in schools/centres ([Appendix 10](#)).
- Clean and examine children's lockers regularly to avoid collecting food remnants and hence the breeding of pests and rodents.
- If beds are provided, keep appropriate distance between beds or groups of beds (not less than 1 metre) 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. Avoid stacking of unnecessary articles to prevent rodent infestation.
- Commence clean-up actions immediately if 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 the relevant departments for assistance.
- It is not advisable to keep pets like dogs, cats, poultry or birds in schools/centres.

3.4 Vaccination

Remind parents to vaccinate their children according to the childhood immunisation programme ([Appendix 11](#)) recommended by CHP. Diseases which can be prevented by vaccination include measles, mumps, rubella, poliomyelitis, whooping cough, diphtheria, tetanus, tuberculosis and hepatitis B.

4. Preventive measures to be adopted by schools/centres against communicable diseases

Apart from general hygienic practice and vaccination, school/centre staff should adopt appropriate preventive measures against communicable diseases. These measures fall mainly into two major categories:

- Standard precautions
- Additional preventive measures according to different modes of transmissions

In addition, school/centre staff should maintain good communication with the parents/guardians and children to seek their support in preventing the diseases. They should advise parents/guardians to bring sick children to seek early medical advice and not to bring them to schools/centres, in order to minimise the chance of outbreak of communicable diseases in schools/centres.

4.1 Standard precautions

Standard precautions are designed to reduce the risk of transmission of infective agents from recognised or unrecognised sources of infection. They are applicable to all staff and children. When coming into contact or taking care of children, staff should regard all body fluids and excretions (including blood, saliva, sputum, vomitus, faeces, urine, and discharge from wounds and mucous membranes) as potentially infectious. They should adopt appropriate and relevant protective measures to reduce the risk of infection. They should pay particular attention to the following aspects:

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

4.2 Hand hygiene

(Please refer to Section 3.1.1 for details.)

4.3 Use of personal protective equipment (PPE)

To minimise the risk of infection 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 children so as to safeguard themselves and others. Appropriate PPE should be stocked up.

4.3.1 Gloves

- Wear gloves when handling blood, body tissues, excreta, body fluids, secretions or any other contaminated wastes.
- Wear gloves before making contact with mucosa and wounds.
- Change gloves immediately if they are contaminated with secretions even when the same child is being nursed.
- Take off used gloves and perform hand hygiene immediately before nursing the next child so as to avoid transmission of infective agents from one to another or contamination of the environment.
- Perform hand hygiene immediately and thoroughly after taking off gloves. Please note that wearing gloves cannot be a substitute for hand hygiene.

4.3.2 Surgical masks, goggles and face shields

- Wear surgical masks and goggles/face shields to protect the mouth, nose and eyes from contamination by droplets via sneezing or coughing, blood spill, body fluids, secretions and excreta like sputum, urine or faeces when caring for a sick child.

4.3.3 Protective gowns

- Put on clean protective gowns (sterilised gown is not necessary) to protect the skin and prevent clothes from contamination by respiratory droplets, blood spill, body fluids, secretions and excreta like sputum, urine or faeces when caring for a sick child.
- Take off contaminated protective gown carefully and perform hand hygiene immediately afterwards to avoid the spread of infective agents.

4.3.4 Other PPE

- Other PPE such as caps can protect the hair from contamination by secretions and hence minimise the risk of transmission of infective agents from the staff to others.

4.4 Handling of contaminated articles

Used articles may become indirect vectors for infective agents. Appropriate precautionary measures should be taken while handling them.

4.4.1 Contaminated linen and clothing

- Infective agents can be transmitted through contact with linen and clothing. Therefore, wash all linen and clothing thoroughly before re-use. Put on appropriate PPE (e.g. gloves, masks and if appropriate, disposable gowns / aprons) during the process of handling.
- Handle the contaminated linen and clothing separately. Remove the bulky waste cautiously from all soiled linens first. Immerse the soiled linens in 1 in 49 diluted household bleach (mixing 1 part of 5.25% bleach with 49 parts of water) for 30 minutes. After that, follow the procedures for contaminated materials, namely remove the stains with detergent, rinse with water, dry, iron and store in clean and dry cabinets.
- Do not wash children's personal items/clothes in schools/centres. Put them into plastic bags for parents to take away.

4.4.2 Shared articles

- Clean and disinfect all shared articles before re-use to avoid cross-infection.
- If stained with blood, wipe the article with thick paper towels that have been dipped in 1 in 4 diluted household bleach (mixing 1 part of 5.25% bleach with 4 parts of water) and leave it for 10 minutes before cleansing and disinfection.
- Please refer to [Appendix 12](#) for cleansing and disinfection of articles commonly used in schools/centres .

4.5 Additional preventive measures according to different modes of transmissions

In addition to general hygiene practices, vaccination and standard precautions, specific preventive measures should be adopted when dealing with diseases with various modes of transmission. In order to avoid the spread of infections, sick children should avoid going to schools/centres. 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](#)).

| Mode of transmission | Examples of diseases | Preventive measures |
|-------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Contact transmission | Hand, foot and mouth disease, Acute conjunctivitis, Head lice, Scabies, Chickenpox [#] | <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 for the sick |
| 2. Droplet transmission | Influenza, Common cold, <i>Streptococcus pneumoniae</i> infection | <ul style="list-style-type: none"> • Maintain good indoor ventilation • Keep both hands clean. In particular, perform hand hygiene properly and immediately after making contact with patients or handling respiratory secretions • Cover mouth and nose when sneezing or coughing, use tissue paper to contain respiratory secretions and dispose them in garbage bin with lid • People with respiratory infection symptoms and their close contact person should wear surgical masks • Keep a distance of at least one metre from the patient • Children and staff should seek medical advice immediately if they feel unwell • Adopt proper isolation for the sick • Use appropriate PPE when necessary |

| | | |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Air-borne transmission | Pulmonary tuberculosis, Measles, Chickenpox [#] | <ul style="list-style-type: none"> • Maintain good indoor ventilation • Children and staff should seek medical advice immediately if they feel unwell • Anyone with symptoms suggestive of air-borne transmissible diseases should not attend school. |
| 4. Food-borne/ water-borne transmission | Viral gastroenteritis, Food poisoning, Cholera, Bacillary dysentery, Hepatitis A, Hepatitis E | <ul style="list-style-type: none"> • Ensure all food is adequately cooked especially high risk food like shellfish • Perform hand hygiene before meals and after going to the toilet • Handle vomitus and excreta properly • Food handlers if falling sick should refrain from work and seek medical advice early |
| 5. Vector-borne transmission (usually insects) | Dengue fever, Malaria, Japanese encephalitis | <ul style="list-style-type: none"> • Maintain environmental hygiene to prevent breeding of insects / mosquitoes, e.g. prevent accumulation of stagnant water • Take personal protection to prevent insect / mosquito bites, e.g. wear light-coloured, long-sleeved clothes and trousers and use insect repellents |
| 6. Blood/body fluid-borne transmission | Hepatitis B, AIDS | <ul style="list-style-type: none"> • Never share toothbrushes, razors or other objects possibly contaminated with blood • Follow standard precautions strictly when touching wound or blood contaminated object • Practise safe sex with proper use of condoms • Receive hepatitis B vaccination |

[#]*Some diseases can be transmitted by more than one mode, e.g. chickenpox. To prevent the spread of such diseases, combined preventive measures should be adopted.*

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 (or had studied in the same setting in case of kindergarten or child care centres] 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."

6. Roles of school/centre staff and related support

6.1 Responsibility of persons-in-charge/ the designated staff of schools/centres

Persons-in-charge of schools/centres and/or the designated staff should take up the responsibility of coordinating and monitoring the implementation of preventive and control measures for communicable diseases (Please refer to [Appendix 14](#)).

They should also pay attention to the following points:

- Report suspected/confirmed cases or outbreaks of communicable diseases among children/staff to the CHP and the respective offices for SWD or EDB. (Appendices 2, 3 and 4)
- Keep personal health record for every child properly. Check and record their body temperature regularly. This helps early detection of possible infections and reduces the risk of the spread of communicable diseases.
- Keep sick leave records of staff properly.
- Support staff to familiarise themselves and comply with the guidelines on prevention of communicable diseases.
- Ensure adequate hand washing facilities and personal protective gear in the schools/centres.
- Communicate closely with the parents/guardians to get their support to implement infection control measures.

6.2 Supporting telephone lines and websites

Telephone lines

| | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------|
| Department of Health 24-Hour Health Education Hotline | 2833 0111 |
| Food and Environmental Hygiene Department Hotline | 2868 0000 |
| Social Welfare Department Child Care Centres Advisory Inspectorate | 2835 2016 |
| Education Bureau School Development Sections | Hong Kong Kowloon New Territories East New Territories West |
| Joint Office for Kindergartens and Child Care Centres | 2863 4646 2782 8383 2639 4876 2437 7272 |
| Hospital Authority Hotline | 3107 2197 2300 6555 |

Websites

| | |
|-----------------------------------------------------------------|-------------------------------------------------------------|
| Department of Health | http://www.dh.gov.hk |
| Centre for Health Protection | http://www.chp.gov.hk |
| Central Health Education Unit | http://www.cheu.gov.hk |
| Social Welfare Department | http://www.swd.gov.hk |
| Education Bureau | http://www.edb.gov.hk |
| Food and Environmental Hygiene Department | http://www.fehd.gov.hk |
| Hospital Authority | http://www.ha.org.hk |
| Centers for Disease Control and Prevention (English version) | http://www.cdc.gov |
| World Health Organization (English version) | http://www.who.int |

6.3 Notification of outbreaks of communicable diseases in schools/centres

(Appendix 2)

| |
|------------------------------------------------------------------------------------------------------------------------------------|
| Central Notification Office (CENO) Centre for Health Protection Department of Health Tel: 2477 2772 Fax: 2477 2770 |
|------------------------------------------------------------------------------------------------------------------------------------|

Appendix 1

Statutory notifiable communicable diseases

| | | |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Acute poliomyelitis | Influenza A (H2), Variant Influenza A (H3N2) Influenza A (H5), Influenza A (H7), Influenza A (H9) | Q fever |
| Amoebic dysentery | Japanese encephalitis | Rubella and congenital rubella syndrome |
| Anthrax | Legionnaires' disease | Scarlet fever |
| Bacillary dysentery | Leprosy | Severe acute respiratory syndrome |
| Botulism | Leptospirosis | Shiga toxin-producing <i>Escherichia coli</i> infection |
| Chickenpox | Listeriosis | Smallpox |
| Chikungunya fever | Malaria | <i>Streptococcus suis</i> infection |
| Cholera | Measles | Tetanus |
| Community-associated methicillin-resistant <i>Staphylococcus aureus</i> infection | Meningococcal infection (invasive) | Tuberculosis |
| Creutzfeldt-Jakob disease | Middle East Respiratory Syndrome | Typhoid fever |
| Dengue fever | Mumps | Typhus and other rickettsial diseases |
| Diphtheria | Paratyphoid fever | Viral haemorrhagic fever |
| Enterovirus 71 infection | Plague | Viral hepatitis |
| Food poisoning | Psittacosis | West Nile virus infection |
| <i>Haemophilus influenzae</i> type b infection (invasive) | Rabies | Whooping cough |
| Hantavirus infection | Relapsing fever | Yellow fever |

Please refer to the following link for the most updated list of statutory notifiable diseases: <http://www.chp.gov.hk/ceno>

Appendix 2

Suspected Infectious Disease Outbreak in School / Kindergarten /KG-cum CCC /Child Care Centre NOTIFICATION FORM

To: Central Notification Office (CENO), Centre for Health Protection (Fax: 2477 2770)

NOTE: To enable prompt investigation and control of outbreak, please call CENO by phone (2477 2772) before sending fax notification.

| | | |
|---------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Type of organization: | <input type="checkbox"/> School* | <input type="checkbox"/> Kindergarten* |
| (Please tick one) | <input type="checkbox"/> Kindergarten-cum-child care centre [†] | <input type="checkbox"/> Child care centre [‡] |
| Name of organization | _____ (Code o.: _____) | |
| Address: | _____ _____ | |
| Contact person: | _____ (Post: _____) | Fax: _____ |
| Tel (office hours): | _____ | Tel (outside office hours): _____ |
| Total no. of students/children: | _____ | Total no. of staff: _____ |
| No. of sick students/children: | _____ (No. admitted into hospital : _____) | |
| No. of sick staff: | _____ (No. admitted into hospital : _____) | |
| Common symptoms: | <input type="checkbox"/> Fever | <input type="checkbox"/> Sore throat |
| (May tick multiple) | <input type="checkbox"/> Cough | <input type="checkbox"/> Runny nose |
| | <input type="checkbox"/> Diarrhoea | <input type="checkbox"/> Vomiting |
| | <input type="checkbox"/> Skin rash | <input type="checkbox"/> Blisters on hand/foot <input type="checkbox"/> Oral ulcers |
| | <input type="checkbox"/> Others (Please specify: _____) | |
| Suspected disease: | _____ | |
| Reported by: | _____ | Contact tel.: _____ |
| Signature: | _____ | Date of fax: _____ (dd/mm/yyyy) |

* School / KG – fax copy to School Development Section of Education Bureau in their respective districts (Fax: _____)

† KG-cum-CCC – fax copy to Joint Office for Kindergartens and Child Care Centres of Education Bureau (Fax: 3107 2180)

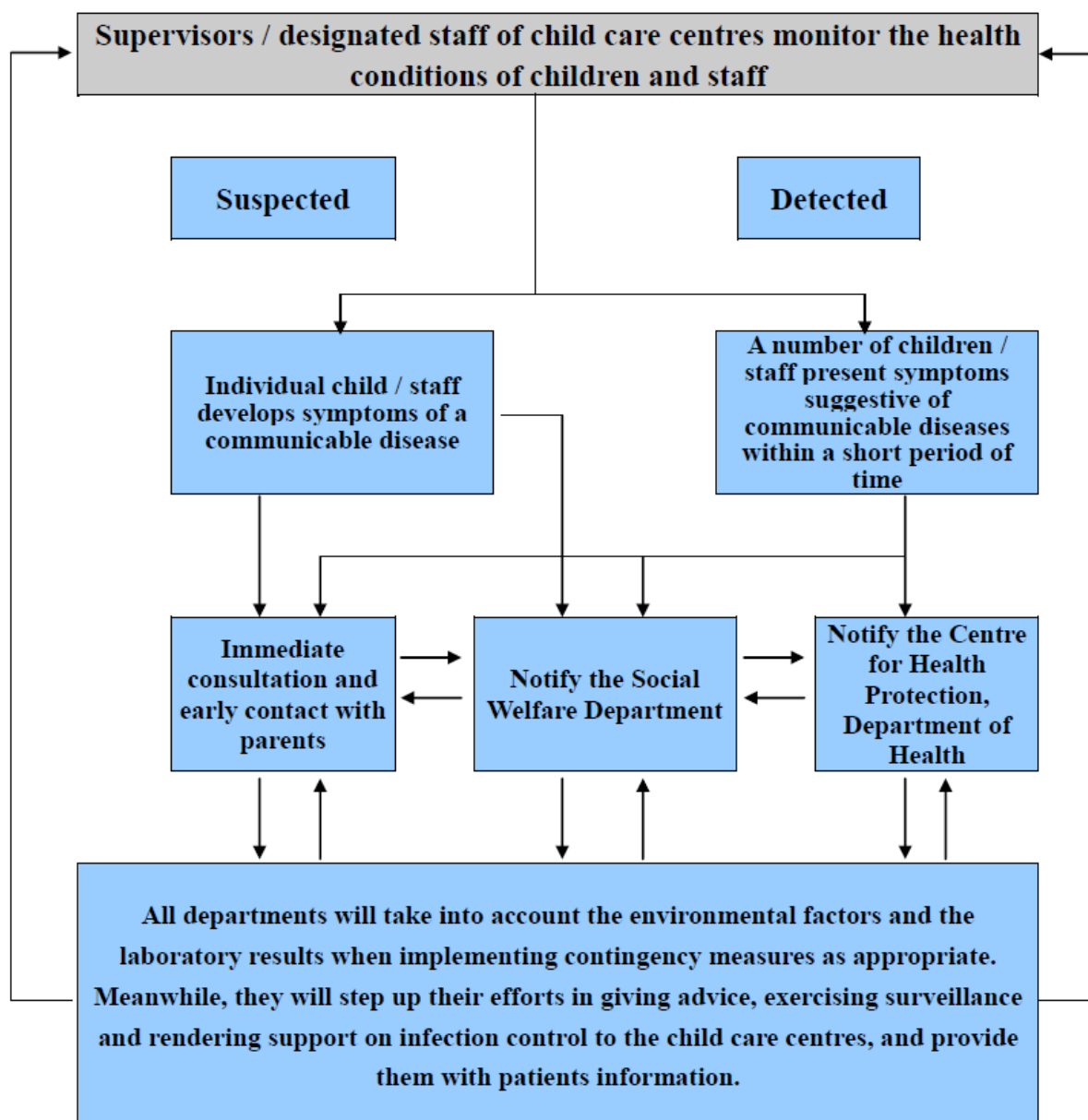
‡ CCC – fax copy to Child Care Centres Advisory Inspectorate of Social Welfare Department (Fax: 2591 9113)

F-S-20080616e

Appendix 3

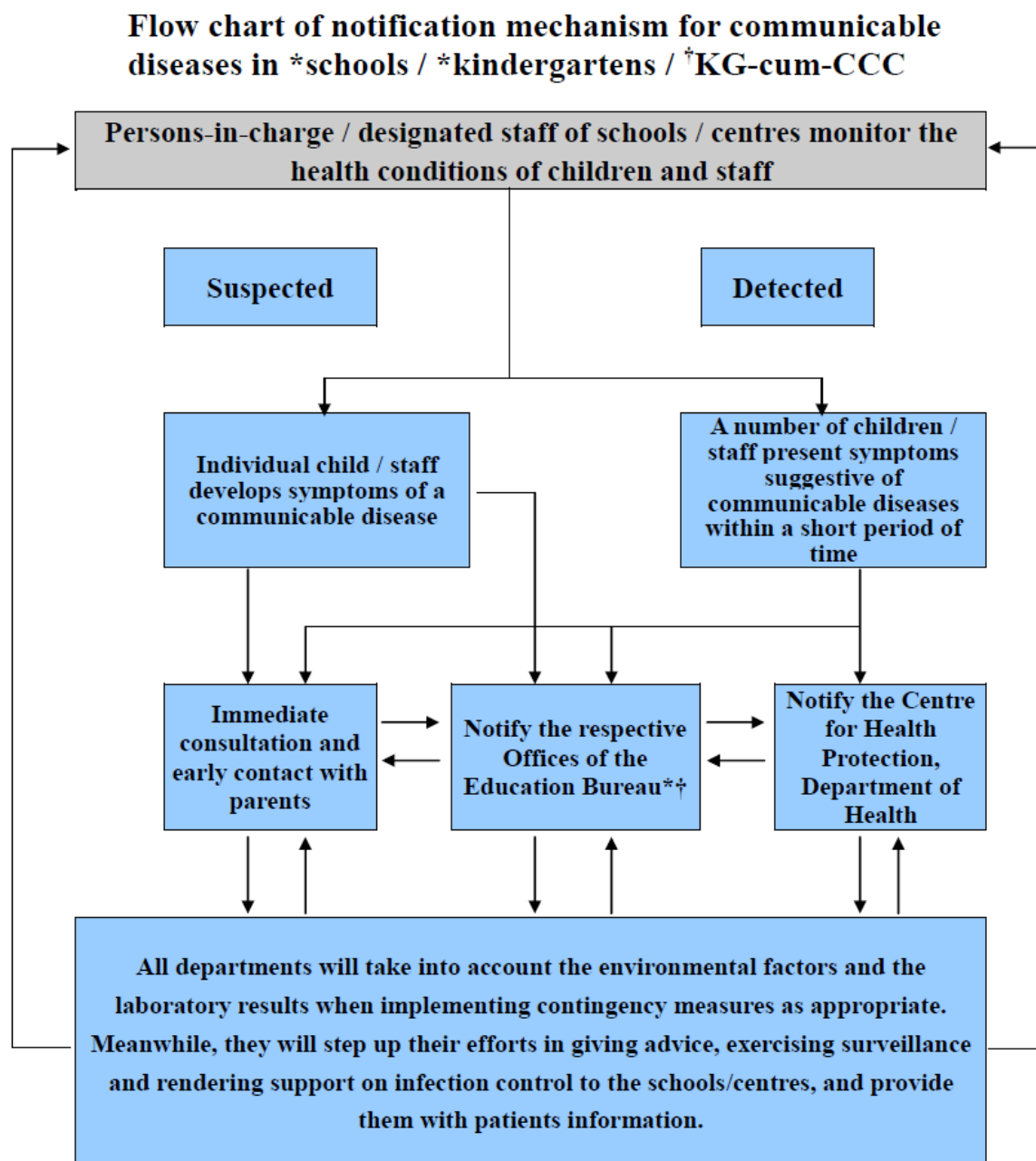
Flow chart of notification mechanism for communicable diseases in child care centres

Flow chart of notification mechanism for communicable diseases in child care centres



Appendix 4

Flow chart of notification mechanism for communicable diseases in *schools / *kindergartens / †KG-cum-CCC



* Kindergarten/Primary and Secondary Schools – fax copy to School Development Section of Education Bureau in their respective districts

† KG-cum-CCC – fax copy to Joint Office for Kindergartens and Child Care Centres of Education Bureau (Fax: 3107 2180)

Appendix 5

List of signs and symptoms of some communicable diseases

| Diseases | Signs/symptoms |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute conjunctivitis | Redness of eyes, itching eyes, excessive tears, abnormal secretion |
| Avian influenza | Similar symptoms as influenza viruses but more likely to result in high fever, pneumonia, respiratory failure, multi-organ failure and eventual death |
| Chickenpox | Fever, fatigue, vesicles on head and body |
| Dengue fever | Fever, headache, muscle pain, impaired mental state |
| Gastroenteritis | Abdominal pain, vomiting, diarrhoea, poor appetite, fatigue, fever |
| Hand, foot and mouth disease | Fever, poor appetite, malaise, sore throat, painful sores in the mouth, rash (red spots) on palms of the hands and soles of the feet |
| Hepatitis B | Fever, jaundice, fatigue, poor appetite |
| Human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) | Weight loss, fever, profuse night sweating, swollen lymph nodes, pink to purplish blotches on or under the skin, inside the mouth, nose, or eyelids. Patients with HIV infection can be without symptoms for years |
| Influenza | Fever, cough, sneeze, runny nose, sore throat, muscle ache, fatigue |
| Pneumonia | Fever, fatigue, cough, thick sputum, sputum with blood, shortness of breath |
| Severe Acute Respiratory Syndrome (SARS) | Fever, fatigue, headache, chills, cough, shortness of breath, difficulty in breathing, diarrhoea |
| Scabies | Itchiness, localised rash, desquamation, swelling, scales, etc. |
| Tuberculosis | Persistent fever, cough, sputum with blood, fatigue, weight loss, night sweating |

Appendix 6

Guidelines for hand hygiene

Many infectious diseases can be transmitted through direct contact. If hands are contaminated with pathogens, especially when they are soiled with respiratory discharge or faecal matters, diseases include dysentery, cholera, hepatitis, influenza, and hand, foot and mouth disease can spread easily. Observance of hand hygiene is the prerequisite of the prevention of the spread of communicable diseases. There are two ways to achieve hand hygiene including good handwashing and proper use of alcohol-based handrub.

When do we perform hand hygiene?

1. Before touching the eyes, nose and mouth
2. Before eating or handling food
3. After using the toilet
4. When hands are contaminated by respiratory secretions, e.g. after coughing or sneezing
5. After touching public installations or equipment, such as escalator handrail, elevator control panels or door knobs
6. After changing diapers or handling soiled articles when looking after young children or the sick
7. Before and after visiting hospitals or residential care homes.
8. After making contact with animals or poultry

As a matter of good practice, all are reminded to clean their hands frequently. In general, we should wash hands with soap and water when hands are visibly soiled or likely contaminated with body fluid, for example, after using the toilet or changing the diapers, after coughing or sneezing. When hands are not visibly soiled, 70-80% alcohol-based handrub is also effective for disinfection.

Steps for hand hygiene

a) Handwashing with soap and water:

1. Wet hands under running water.
2. Apply liquid soap and rub hands together to make a soapy lather.
3. Away from the running water, rub the palms, back of hands, between fingers, back of fingers, thumbs, finger tips and wrists. Do this for at least 20 seconds.
4. Rinse hands thoroughly under running water.
5. Dry hands thoroughly with a clean cotton towel, a paper towel, or a hand dryer.
6. Cleaned hands should not touch the water tap directly again. The tap may be turned off:
 - by using the towel wrapping the faucet; or
 - after splashing water to clean the faucet.

Please note:

- Towels should never be shared.
- Used paper towel should be properly disposed of.
- Personal towels must be stored properly and washed at least once daily. It is even better to have more than one towel for frequent replacement.

b) Use of alcohol-based handrub

Apply a palmful 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 for at least 20 seconds until the hands are dry.

The picture below demonstrates the 7 steps for hand hygiene technique.



Appendix 7

Use mask properly

Wearing a mask is a way to prevent the spread of respiratory tract infections. People with respiratory infection symptoms, caregivers of patients with respiratory infection symptoms and visitors to clinics or hospitals should wear a mask to lower the chance of spreading the illness. Surgical masks, if properly worn, are effective in preventing the spread of droplet infections.

Points to note about wearing a surgical mask :

Wash hands before putting on a mask, and before and after taking one off.

- The mask should fit snugly over the face:
 - The coloured side of the mask faces outwards, with the metallic strip uppermost.
 - The strings or elastic bands are positioned properly to keep the mask firmly in place.
 - The mask should fully cover the nose, mouth and chin.
 - The metallic strip moulds to the bridge of the nose and the mask should fit snugly over the face.
- Try not to touch the mask once it is secured on your face as frequent handling may reduce its protection. If you must do so, wash your hands before and after touching the mask.
- When taking off the mask, avoid touching the outside of the mask as this part may be covered with germs.
- After taking off the mask, put the mask into a plastic or paper bag before putting it into a rubbish bin with a lid.
- A surgical mask should be changed at least daily. Replace the mask immediately if it is damaged or soiled.



Appendix 8

Five Keys to Food Safety

1. Choose
 - Buy food from hygienic and reliable shops
2. Clean
 - Wash hands and utensils properly before and during food preparation
3. Separate
 - Use separate knives and cutting boards to handle raw and cooked food
4. Cook
 - Cook or reheat food until it is steaming hot throughout
5. Temperature
 - Put leftovers promptly in the refrigerator at or below 4 °C

Reference:

Centre for Food Safety, Food and Environmental Hygiene Department

http://www.cfs.gov.hk/english/multimedia/multimedia_pub/files/5keys_pos-Overall.pdf

World Health Organization

http://www.who.int/entity/foodsafety/publications/consumer/en/5keys_en.pdf

食物安全

5 Keys to Food Safety

五 要點



遵從五大要點
確保食物安全
Follow five keys
to ensure food safety

1 精明選擇 Choose



向衛生和可靠的店鋪選購食物
Buy food from hygienic
and reliable shops

2 保持清潔 Clean



處理食物前及過程中，
要正確清洗雙手及用具
Wash hands and utensils properly
before and during food preparation

3 生熟分開 Separate



用不同的刀及砧板分開處理生熟食物
Use separate knives and cutting boards to
handle raw and cooked food

4 煮熟食物 Cook



將食物徹底煮熟或
翻熱至滾熱
Cook or reheat food until it is
steaming hot throughout

5 安全溫度 Safe temperature



盡快把吃剩的食物放入
攝氏四度或以下的雪櫃
Put leftovers promptly in the
refrigerator at or below 4°C



食物環境衛生署
Food and Environmental
Hygiene Department

食物安全中心
Centre for Food Safety
www.cfs.gov.hk

Appendix 9

Procedures of preparing/using diluted bleach

1. Keep windows open when diluting or using bleach to ensure good ventilation.
2. Use protective gear (e.g. gloves and goggles) when diluting or using bleach as it irritates mucous membranes, skin or airway.
3. Use cold water for dilution as hot water decomposes the active ingredient of bleach and renders it ineffective.
4. Use measuring jug to measure proper volume of bleach for dilution.
5. After cleansing, soak cleaning tools in diluted bleach for 30 minutes and then rinse them thoroughly before reuse.

Precaution:

- Avoid using bleach on metals, wool, nylon, silk, dyed fabric and painted surfaces.
- Avoid bleach from getting into the eyes. If bleach splashes into the eyes, immediately rinse with water for at least 15 minutes and consult a doctor.
- Bleach must not be used together or mixed with other household detergents as this reduces its effectiveness in disinfection and causes chemical reaction.
- As undiluted bleach liberates a toxic gas when exposed to sunlight, it should be stored in a cool and shaded place out of reach of children.
- Sodium hypochlorite decomposes with time. To ensure its effectiveness, it is advisable to purchase recently produced bleach and avoid over-stocking.
- For effective disinfection, diluted bleach should be used within 24 hours after preparation as decomposition increase with time if left unused.

Recommended Use of Household Bleach (5.25% hypochlorite solution)

| Dilution ratio | Concentration | Preparation | Usage |
|-----------------------|----------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 1 in 4 | 10,000 ppm (1%) | One part of household bleach (5.25% hypochlorite solution) in 4 parts of water | For facilities contaminated with blood spillage |
| 1 in 49 | 1,000 ppm (0.1%) | One part of household bleach (5.25% hypochlorite solution) in 49 parts of water | For surfaces or articles contaminated with vomitus, excreta or secretions |
| 1 in 99 | 500 ppm (0.05%) | One part of household bleach (5.25% hypochlorite solution) in 99 parts of water | For general environmental cleaning |

Appendix 10

Health advice on using drinking fountains

1. Precautions for Users:

- Children using the fountain should not come in direct contact with the orifice guard.
- Young children are discouraged from drinking directly from the drinking fountain. Individual drinking cups should be used.
- When individual disposable cups are supplied by schools, there shall be a suitable container for the unused cups and also a receptacle with cover for disposing of the used cups.
- Expectorating upon the drinking fountain is prohibited.

2. Routine Maintenance:

- All drinking fountains shall be kept in sanitary condition. It should be cleaned regularly with detergent and water during normal cleaning procedure, especially the orifice guard and the pressing button.
- If visibly soiled, the fountain should be cleaned immediately with diluted bleach solution (1 to 99 household bleach solution), and rinsed with clean water afterwards. For metal surface, 70% alcohol is an alternative to diluted bleach solution.
- It is important to maintain the fountain in a functioning condition with an angle jet and a lip guard to ensure the water stream is in sufficient volume and height to be directed and projected so that users cannot contaminate it.
- Drinking fountain should be refrained from use if any leakage, backflow of water or blockage is present.
- School should ensure that the filter inside the drinking fountain should be changed according to the manufacturer's instruction.

Appendix 11

Childhood immunisation programme

The following table summarises the recommended childhood immunization schedule:

| Age | Immunisation |
|-----------|-------------------------------------|
| Newborn | B.C.G. Vaccine |
| | Hepatitis B Vaccine – First Dose |
| 1 month | Hepatitis B Vaccine – Second Dose |
| 2 months | DTaP-IPV Vaccine – First Dose |
| | Pneumococcal Vaccine – First Dose |
| 4 months | DTaP-IPV Vaccine – Second Dose |
| | Pneumococcal Vaccine – Second Dose |
| 6 months | DTaP-IPV Vaccine – Third Dose |
| | Pneumococcal Vaccine – Third Dose |
| | Hepatitis B Vaccine - Third Dose |
| 1 year | MMR Vaccine - First Dose |
| | Pneumococcal Vaccine – Booster Dose |
| 1½ years | DTaP-IPV Vaccine – Booster Dose |
| Primary 1 | MMR Vaccine - Second Dose |
| | DTaP-IPV Vaccine – Booster Dose |
| Primary 6 | dTap-IPV Vaccine – Booster Dose |

Remarks:

- DTaP-IPV Vaccine: Diphtheria, Tetanus, acellular Pertussis & Inactivated Poliovirus Vaccine
- dTap-IPV Vaccine: Diphtheria, Tetanus, acellular Pertussis (reduced dose) & Inactivated Poliovirus Vaccine
- MMR Vaccine: Measles, Mumps & Rubella Vaccine

Other vaccines not included in the above Programme are available in private clinics. These vaccines include influenza vaccine, chickenpox vaccine, *Haemophilus influenzae* b vaccine, meningococcal vaccine, hepatitis A vaccine, Japanese encephalitis vaccine and combined vaccines which contain a combination of various vaccine components. Parents should seek advice from doctors before getting their children immunised.

For more updated information on the childhood immunisation programme, please visit the Family Health Service website at www.fhs.gov.hk and the Centre for Health Protection website at www.chp.gov.hk.

Appendix 12

Cleansing and disinfection of articles commonly used in schools/centres

| Cleansing and disinfection of articles commonly used | | |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Articles | Recommended method | Alternative method |
| Thermometer (mercury) | Wash with detergent and cold water. Then immerse in 70% alcohol for not less than 10 minutes. Store dry | Follow manufacturer's instruction |
| Protective gown | Using disposable equipment is most desirable | For contaminated/soiled reusable textile items, soak in 1 in 49 diluted household bleach (5.25%) for 30 minutes before general handling |
| Face-shield or Goggles | Clean with detergent and water first. Then immerse in 1 in 49 diluted household bleach (5.25%) for 10 minutes. Rinse and store dry | |
| Gloves (disposable latex gloves or household gloves) <i>Note: Wearing gloves cannot replace hand hygiene</i> | Using disposable latex gloves is most desirable | <p>For reusable household gloves:</p> <ol style="list-style-type: none"> 1. Clean with detergent and water 2. Disinfect by immersing in 1 in 49 diluted household bleach (5.25%) for at least 10 minutes 3. Rinse with water 4. Check if there are any small holes (by filling with air first and immersing in water to see if there are any air bubbles leaking out) 5. If there is no hole, air dry before reuse 6. Recheck for holes before reuse <p>Please note that finishing the above procedure does not guarantee that these reused gloves can safely protect the users</p> |

Appendix 13

Recommendation on sick leave duration for common childhood infections

| Disease | Sick leave duration |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute conjunctivitis | Until no abnormal secretion from the eyes |
| Bacillary dysentery * | Until diarrhoea ceases and at least 2 consecutive stool samples collected no less than 24 hours apart are tested negative for such bacteria (1 st stool sample has to be collected 48 hours after the completion of the antibiotic course) |
| Chickenpox * | About one week or until all vesicles have dried up |
| Cholera * | Until non-infection is confirmed (test is to be done on three stool samples collected at least 1 day apart following 48 hours after the completion of the antibiotic course) |
| Diphtheria * | Until non-infection is confirmed by negative result on sample culture test (test is to be done on two nasopharyngeal swabs collected at least 24 hours apart following 24 hours after the completion of the antibiotic course) |
| Hand, foot and mouth disease | Until all vesicles dry up or as advised by the doctor. If enterovirus 71 is confirmed to be the pathogen, take 2 more weeks of sick leave after all vesicles have dried up |
| Hepatitis A * | Until at least 1 week from the appearance of jaundice or as advised by the doctor |
| Measles * | 4 days after the day of appearance of rash |
| Mumps * | 5 days after the day of appearance of gland swelling |
| Rubella * | 7 days after the day of appearance of rash |
| Scarlet fever * | Until fever down and 24 hours after starting of appropriate antibiotic |
| Tuberculosis * | As advised by the doctor |
| Typhoid fever * | Until at least three consecutive stool samples collected no less than 24 hours apart are tested negative for such bacteria (the first stool sample has to be collected 48 hours after the completion of the antibiotic course) |
| Viral gastroenteritis | Until 48 hours after the last episode of diarrhoea or vomiting |
| Whooping cough * | 5 days from starting the antibiotic course or as advised by the doctor |

Note

1. The recommendation made above is based on the general infection period only. Other factors, such as the clinical conditions of the sick child, have to be considered as well. The attending doctor should exercise his / her professional judgment when making the final decision on the length of sick leave.
2. Diseases marked with asterisk (*) should be reported to the Centre for Health Protection as required by the law.

Appendix 14

Duties of staff in schools/centres

Persons-in-charge of schools/centres and/or the designated staff should take the responsibility of coordinating and monitoring the implementation of preventive and control measures for communicable diseases to:

- promulgate to staff the latest information and guidelines on prevention of communicable diseases and in reminding children and parents of such information and guidelines. Be responsible for assisting new recruits to become familiarised with control measures for communicable diseases.
- arrange infection control training for staff.
- implement and monitor measures as suggested in the guidelines for preventing communicable diseases in schools/centres. They include measures on personal, environmental and food hygiene.
- monitor the disinfection of items used and the proper disposal of contaminated clothing and other wastes.
- provide essential personal protective gear as well as in supervising and monitoring staff's proper use and disposal of such gear after use.
- watch for symptoms of communicable diseases among children and staff in the schools/centres. If an outbreak of communicable disease is suspected, assist the person-in-charge in reporting and providing information to DH's Centre for Health Protection, SWD's Child Care Centres Advisory Inspectorate, EDB's Joint Office for Kindergartens and Child Care Centres and relevant School Development Sections under Regional Education Offices. Assist DH's investigation and take effective infection control measures to prevent the spread of such disease.
- evaluate the risk of communicable disease outbreak in schools/centres. Consult the person-in-charge, staff and the DH on a regular basis and develop preventive measures for communicable diseases so as to reduce the chance of spreading such diseases in schools/centres.

Appendix 15

Information to be furnished to the Centre for Health Protection, Department of Health

Preliminary information

- (1) Name of the child care centre / KG-cum- CCC / kindergarten / school
- (2) Address of the child care centre / KG-cum- CCC / kindergarten / school
- (3) Name, position and telephone number of the contact person
- (4) Number of sick children and number of children admitted to the hospital
- (5) Number of sick staff
- (6) Total number of children
- (7) Total number of staff

Further information in details (if necessary)

- (1) Detailed information of the sick
 - Name
 - Age
 - Sex
 - Birth certificate / ID number
 - Telephone number of parents/guardians
 - Class and floor to which the child belongs
 - Symptoms
 - Onset date
 - Medical consultation record
- (2) Children list
- (3) Staff list (stating the floor or area where staff work)
- (4) Children sick leave record
- (5) Staff sick leave record
- (6) Floor plan of the child care centre / KG-cum-CCC / kindergarten / school (stating floor and room number)
- (7) Timetable for the child care centre / KG-cum-CCC / kindergarten / school
- (8) Menu