

## **Prevention of Influenza: Action Checklist for School Resumption (March 2008)**

### **Before school resumption**

School management should adopt the following measures to maximise protection of its students and staff.

#### **A) Ensure a clean and hygienic school environment**

- Disinfect the school premises including classrooms, kitchen, canteen, toilets and bathrooms, and school buses with 1 in 99 diluted household bleach (one part of 5.25% hypochlorite solution in 99 parts of water), wait until dry and then rinse with water. Use 70% alcohol for metallic surfaces.
- Ensure an adequate supply of surgical masks, gloves, alcohol-based handrubs, ear thermometers and ear probes, household bleach, and toilet utilities such as liquid soap, disposable towels or hand-dryers.
- Maintain good indoor ventilation, open windows wide and turn on exhaust fans. Make sure air conditioning systems allow an adequate amount of air exchange, have air filters cleaned and are well-maintained.

#### **B) Communicate well with staff/students**

- Provide information on influenza symptoms so that staff and students could recognize them early and report sickness in a timely manner. Remind staff and students about personal hygiene to prevent influenza transmission in the school. Remind students to stay home, put on a mask and seek medical care immediately if they develop flu symptoms such as fever, sore throat or cough.  
( *Please note Annex I for fact sheet on influenza*)
- Explain to staff and students the importance of personal hygiene including hand washing, and cough manners such as covering mouth and nose with tissue paper when coughing and sneezing, putting soiled tissue paper in a lidded bin and washing hands afterwards.
- Advise staff and students to avoid visiting crowded and poorly ventilated venues during influenza season.
- Require staff and students to notify the school if they should develop influenza symptoms such as fever, sore throat, cough, or be admitted to hospital, and require them to stay at home for rest until symptoms have improved and fever has subsided for at least 2 days.

### **C) Communicate well with parents**

- Encourage parents to familiarize themselves with symptoms of influenza in order to recognize them early and report children's sickness in a timely manner. Advise parents to teach and reinforce personal hygiene measures among children to prevent transmission of influenza in the school. Remind parents to keep children at home, let them put on a mask and seek medical care immediately if they develop flu symptoms such as fever, sore throat or cough. (*Please note Annex I for fact sheet on influenza*)
- Remind parents to check the child's body temperature every day before school, complete and sign the temperature record sheet to be presented for inspection by the school.
- Require parents to notify the school immediately if children should develop symptoms of influenza such as fever, sore throat, cough, or be admitted to hospital.
- Remind parents to keep sick children at home and not to bring them to school until symptoms have improved and fever has subsided for at least 2 days.
- Issue a letter to parents before or on the day of school resumption to appeal for their understanding and cooperation on the following matters. (*Please note Annex II for sample letter to parents*):
  - Provide children with handkerchiefs or tissue paper, which should not be shared with peers.
  - Check body temperature, record the reading and sign the temperature chart before sending children to school.
  - Do not send children to school if they have fever. (Different reference values for normal body temperature may be adopted for different measuring methods and instruments. Always refer to inserts and instructions that come with the thermometer. In general, if an oral thermometer is used, a reading above 37.2°C would be considered high. Children aged 0 to 6 years may have higher body temperatures and a reading not exceeding 37.5°C may be considered normal.)
  - Report to the school immediately if children are sick and provide details of the sickness including symptoms, diagnosis and whether hospitalization is required.
  - Keep sick children away from school until symptoms have improved and fever has subsided for at least 2 days.

- Cooperate with the school by picking up the sick child from the school to seek medical care immediately.

## **After school resumption**

School management should adopt the following measures to maximise protection of its students and staff.

### **A) Check Body Temperature**

- Remind parents to check the child's body temperature every day before school, complete and sign the temperature record sheet to be presented for inspection by the school.
- Remind parents not to send children to school if they have fever. (Different reference values for normal body temperature may be adopted for different measuring methods and instruments. Always refer to inserts and instructions that come with the thermometer. In general, if an oral thermometer is used, a reading above 37.2°C would be considered high. Children aged 0 to 6 years may have higher body temperatures and a reading not exceeding 37.5 °C may be considered normal.)
- Inspect students' temperature records and conduct spot temperature checks.

### **B) Maintain Environmental Hygiene**

- Clean and disinfect frequently touched surfaces, furniture, toys, commonly shared items and floor at least daily by using appropriate disinfectant (e.g. 1 part of 5.25% household bleach in 99 parts of water for non-metallic surface or 70% alcohol for metallic surface), wait until dry and then rinse with water. Cleaning utensils should be soaked in 1 in 49 diluted household bleach for 30 minutes and then rinsed thoroughly before reuse. *(Please note Annex III for procedures of preparing/ using diluted bleach)*
- Use absorbent disposable towels to wipe away obvious contaminants such as respiratory secretions, vomitus or excreta, then disinfect the surface and neighbouring areas with disinfectant (e.g. 1 part of 5.25% household bleach in 49 parts of water for non-metallic surface or 70% alcohol for metallic surface), leave for 15-30 minutes, and rinse with water. *(Please note Annex III for procedures of preparing/ using diluted bleach)*
- Ensure adequate ventilation and avoid overcrowding situations when planning mass activities in or outside school. Keep windows wide open and turn on exhaust fans under crowded conditions. Clean air filters of air-conditioning systems on a regular basis. Avoid mass gatherings during influenza peak season to prevent cross-infection.

- In the event of school outbreaks, raise the concentration of bleach (e.g. 1 part of 5.25% household bleach in 49 parts of water for non-metallic surface) for cleansing and disinfection, and follow steps as instructed above.

### **C) Maintain Personal Hygiene and Healthy Lifestyle**

- Remind staff and students about cough manners such as covering mouth and nose with tissue paper when coughing and sneezing, putting soiled tissue paper in a lidded bin and washing hands afterwards.
- Encourage staff and students to wash hands with liquid soap or cleanse with alcohol hand rub frequently, such as before school begins, prior to and after serving food. Advise against touching eyes, nose or mouth with hands, and sharing of towels and feeding utensils. (*Please note Annex IV for Guidelines for Hand Hygiene*)
- Remind children to bring their own handkerchiefs or tissue paper to school, which should not be shared with peers.
- Remind students not to share personal items, lunch boxes or drinks.
- Encourage students to practise healthy lifestyle such as eating a balanced diet, having regular exercise and taking adequate rest to enhance body resistance.

### **D) Observe health condition of students and staff recovering from influenza**

- Require staff and students who develop influenza-like symptoms and fever to stay at home and refrain from school until symptoms have improved and fever has subsided for at least 2 days.
- Watch for persistent symptoms in students recovering from a recent influenza infection. Invite parents to bring the sick child home and seek medical care.

### **E) Keep sick leave records of staff and students**

- On any school day, there could be occasional students suffering from influenza (for instance, no more than 2 students in the same class having similar symptoms).
- Ascertain the cause of absence by contacting parents/guardians of absentees if an increase or unusual sick leave pattern is noticed.
- Report to Central Notification Office (CENO) (Tel: 2477-2772; Fax: 2477-2770) for epidemiological investigation and outbreak control when an increase or unusual absenteeism pattern among students with the same infectious disease or similar symptoms is noticed (For example, where 3 or more students in the same class develop similar symptoms within the same

day, this may indicate a cross-infection in the school).

#### **F) Taking Care of Sick Students in School**

- Provide surgical masks to students who develop flu-like symptoms and keep them in an isolation room temporarily until parents pick them up to seek medical care.
- Staff taking care of the sick students should adopt protective measures, which include performing hand hygiene before and after contact with the student, wearing a surgical mask (*Please refer to Annex II: Use Mask Properly*) and putting on appropriate Personal Protective Equipment (PPE) if needed.
- Advise students to cover nose and mouth with tissue paper when coughing or sneezing, dispose soiled tissue paper in a lidded bin or flush into the toilet. Remind students and staff who come into contact with respiratory secretions or objects contaminated with respiratory secretions to observe hand hygiene immediately.
- Keep windows in the isolation room wide open and turn on exhaust fans for better ventilation. Fans or exhaust fans should be switched on to enhance air flow. Keep air-conditioners well-maintained and dust-filters frequently cleaned.
- After use, cleanse and disinfect the isolation room with 1 in 99 diluted household bleach (1 part of 5.25% household bleach in 99 parts water), wait until dry and rinse with water. If the room is dirtied with respiratory secretions, disinfect with 1 in 49 diluted household bleach (1 part of 5.25% household bleach in 49 parts water), leave for 15-30 minutes, and then rinse with water.
- Any staff who should develop respiratory symptoms after taking care of a sick student should consult a doctor promptly, wear a surgical mask and take rest at home.
- Keep a record of students' sick leave.

Centre for Health Protection  
Department of Health

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**Influenza****Causative agent**

Influenza is a highly infectious viral disease. It is caused by various types of influenza viral strains. Three types of influenza viruses are recognized: A, B and C. Type A is more common. In Hong Kong, the two subtypes of influenza A (H1N1 and H3N2) are most commonly seen. Emergence of new subtypes occurs from time to time at irregular intervals. They are responsible for widespread outbreaks and necessitate periodic reformulation of influenza vaccine. In Hong Kong, the disease is more prevalent in January-March and July-August.

**Clinical features**

Influenza is an acute illness of the respiratory tract, characterized by fever, headache, muscle ache, runny nose, cough and sore throat. It is generally a mild illness.

**Mode of transmission**

Airborne spread predominates among crowded populations in enclosed spaces. The infection may also be spread from person to person by direct contact with infected secretions.

**Incubation period**

The incubation period is short, usually around 1-3 days.

**Management**

The disease is usually self-limiting with recovery in 2-7 days. Anti-fever medicine and cough syrup are useful in relieving symptoms. Aspirin should not be used in children because it may cause Reye's Syndrome which is a rare complication involving the central nervous system and the liver. Antibiotics need not be used unless the illness is complicated by bacterial infection. Patients should also observe personal hygiene to prevent spreading the virus.

For patients with lower resistance or when there are signs of deterioration e.g. persistent fever or shortness of breath, they should seek early medical advice. Antiviral agents like Tamiflu is effective for strains of influenza A, but it must be used under doctor's prescription.

### **Prevention**

1. Maintain good personal and environmental hygiene.
2. Keep hands clean and wash hands properly.
3. Wash hands when they are dirtied by respiratory secretions e.g. after sneezing.
4. Cover nose and mouth with tissue paper while sneezing or coughing and dispose of nasal and mouth discharge properly.
5. Good body resistance helps to prevent influenza infection. This can be achieved through a balanced diet, regular exercise, adequate rest, avoid too much stress and smoking.
6. During the "flu" season, it is better to avoid crowded public places where the ventilation is not good.
7. Influenza vaccine is prepared according to the prevalence of strains in the community each year, as recommended by the World Health Organization.

According to the announcement of the Centre for Health Protection of the Department of Health, Hong Kong has entered its peak season for influenza. It is expected that the influenza situation will persist for a period of time. To provide maximum protection for students and prevent spread of influenza in the school, parents are advised to co-operate with the school by reminding students to observe personal hygiene and keep schools clean and hygienic.

We appeal to your understanding and cooperation on the following matters to prevent spread of infection during the Influenza season:

- Provide children with handkerchiefs or tissue paper, which should not be shared with peers.
- Check body temperature, record the reading and sign the temperature chart before sending children to school.
- Do not send children to school if they have fever. (Different reference values for normal body temperature may be adopted for different measuring methods and instruments. Always refer to inserts and instructions that come with the thermometer. In general, if an oral thermometer is used, a reading above 37.2°C would be considered high. Children aged 0 to 6 years may have higher body temperatures and a reading not exceeding 37.5°C may be considered normal.)
- Report to the school immediately if children are sick and provide details of the sickness including symptoms, diagnosis and whether hospitalization is required.
- Keep sick children away from school until symptoms have improved and fever has subsided for at least 2 days.
- Cooperate with schools by picking up a sick child from the school to seek medical care immediately.

For more information on Influenza, please visit the Centre for Health Protection website [www.chp.gov.hk](http://www.chp.gov.hk)

- Keep windows open when diluting or using bleach to ensure good ventilation.
- Use protect gear (e.g. mask and gloves) when diluting or using bleach as it irritates mucous membranes, the skin or the airway.
- Cold water should be used for dilution as hot water decomposes the active ingredient of bleach and renders it ineffective.
- Use measuring jug to measure proper volume of bleach for dilution.
- Cleaning tools should be soaked in diluted bleach for 30 minutes and then rinsed thoroughly before reuse.

### **Precaution:**

- Avoid using bleach on metals, wool, nylon, silk, dyed fabric and painted surfaces.
- Avoid touching the eyes. If bleach gets into the eyes, immediately rinse with water for at least 15 minutes and consult a doctor.
- Bleach should 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 advised 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.

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 be 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 handrails, 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, students are reminded to clean their hands. 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 either a clean cotton towel, a paper towel, or a hand dryer.
6. The 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 to be reused 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 in the use of alcohol-based handrub.



March 2008 (revised)

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.

