



# 衛生防護中心 Centre for Health Protection

## Infection Control Branch

### Health Advice on Using Water Dispensers

Water dispensers can generally be classified into two types by its water source: dispensers directly connected to the water mains and carboy water dispensers (with pre-packed water bins). Among those connected to water mains, they can either be drinking fountains (also known as “bubblers”) and/or bottle-filling dispensers (for users to refill their own containers).

#### I. Water dispensers directly connected to water mains

##### A. Design of water dispensers

- (a) The water dispensers should be composed of impervious material which is easily maintained and cleaned. The installation should be robust with resistance against vandalism, oxidation and corrosion.
- (b) Water dispensers should have efficient drains to avoid accumulation of water in the bowls.
- (c) Features of the nozzle for drinking fountains:
  - (i) A slanting jet and a protective guard to reduce contamination by users.
  - (ii) Properly shielded from fallen contaminants (e.g. bird’s droppings).
  - (iii) Flow rate and pressure of water jet should be steady and sufficient to avoid the users’ mouth and nose coming into close proximity with the nozzle.



- (iv) The position of the nozzle should be above the spillover level of the bowl to prevent it from being flooded in case the bowl outlet is obstructed.
- (d) For bottle-filling dispensers:
  - (i) Sufficient clearance of space to accommodate containers of different sizes so that contamination of the nozzle can be minimized.
  - (ii) There should be as little splashing as possible during operation
- (e) If necessary, a point-of-use conditioning device (e.g. UV disinfection unit or water filter) may be installed to maintain the quality of drinking water. Backflow prevention devices should also be installed to prevent contaminated water from entering the fresh water supply system.

## **B. Location of water dispensers**

- (a) The water dispensers should be located in areas where basic hygiene and ventilation can be ensured. It should not be located in areas where there is a high chance of contamination (e.g. inside toilets; near rubbish bins; near exhaust hood of air-conditioner; places easily accessible by birds or other animals).
- (b) The water dispenser's connection to water mains should be installed in accordance with the plumbing proposal approved by the Water Supplies Department (WSD).

## **C. Operation and Maintenance of water dispensers**

- (a) The water dispensers should be installed and maintained in accordance with the manufacturer's recommendations. The owners should keep record of the maintenance.

- (b) For regular maintenance and operation:
- (i) So far as practicable, daily check should be made to ensure:
    - The water dispensers are kept in a sanitary condition;
    - No corrosion, leakage, blockage of nozzle or clogging of drainage is present;
    - The water jet is in a steady stream. Water dispensers should be refrained from use if any irregularities (e.g. sign of vandalism, leakage/backflow/ blockage of water) are detected.
  - (ii) Regular cleaning and disinfection should be performed according to manufacturer's recommendations, especially for the protective guard of nozzle and buttons. A suggested method of disinfection is as follows:
    - If visibly soiled, the dispenser 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.
  - (iii) Regular descaling should be performed according to manufacturer's recommendations to remove mineral scales and deposits on metal surfaces, which encourage biofilm formation and are difficult to be properly disinfected.
  - (iv) Regular flushing should be performed on a daily basis or according to manufacturer's recommendations to minimise microbial growth and accumulation of contaminants inside piping and other areas not easily reachable by routine cleaning.
  - (v) If installed, regular maintenance of point-of-use devices (e.g. replacing filter cartridge and UV lamp) in accordance with manufacturer's recommendations should be ensured.
  - (vi) Signage of relevant health advice should be displayed at a conspicuous area near the water dispensers as far as practicable. A sample is shown in the Appendix.

## **D. Hygienic use of water dispensers**

- (a) Users are advised to follow hygienic practices below when using water dispensers:
- (i) In order to keep the nozzle free from contamination with respiratory secretions or germs from our hands, we should not let our body parts or water bottles come into contact with the nozzle and protective guard.
  - (ii) Individuals who:
    - Have difficulties to maintain hygienic measures (e.g. young children); or
    - Are suffering from an acute respiratory illness,are discouraged from drinking directly from drinking fountains. Instead, use a container (e.g. cup/bottle) for drinking.
  - (iii) Do not spit into the dispenser.
  - (iv) Do not use the dispenser if there is any sign of contamination, damage or vandalism.
  - (v) Do not use water dispensers to wash hands/ personal items.
  - (vi) Water dispensers should be regularly cleaned and properly maintained.

## **II. Carboy water dispensers**

- (a) The water dispensers should be located in areas where basic hygiene can be ensured.
- (b) In order to keep the nozzle free from contamination by germs from our hands, we should not let our body parts or water bottles come into contact with the nozzle.
- (c) Use the water dispenser only for drinking purpose.
- (d) Check regularly to ensure:
  - (i) The water dispensers are kept in a sanitary condition;
  - (ii) No leakage, blockage of nozzle or accumulation of water in the

bowls.

- (e) Regular cleaning and disinfection should be performed according to manufacturer's recommendations, especially for the nozzle and buttons. A suggested method of disinfection is as follows:
  - (i) If visibly soiled, the dispenser should be cleaned immediately with diluted bleach solution (1 to 99 household bleach solution), and rinsed with clean water afterwards.
  - (ii) For metal surface, 70% alcohol is an alternative to diluted bleach solution.
- (f) Signage of relevant health advice should be displayed at a conspicuous area near the water dispensers as far as practicable. A sample is shown in the Appendix.

### **III. Special considerations**

- (a) Immunocompromised patients should not consume water directly from dispensers. Instead, they should consume boiled water or sterile water.
- (b) Water obtained directly from dispensers is not suitable to prepare infant formula for infants. Use boiled water that has been cooled down to not lower than 70 degree Celsius instead for this purpose.

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## Appendix

Example of signage for display near a water dispenser:

### 使用飲水機的衛生建議

#### Hygienic Use of Water Dispensers



- 為免飲水機的出水口被呼吸道分泌物或手部的病菌所污染，使用時不應讓身體部位或水樽接觸出水口及防護裝置。  
In order to keep the nozzle free from contamination with respiratory secretions or germs from our hands, we should not let our body parts or water bottles come into contact with the nozzle and protective guard.
- 如使用者 (i) 未能保持飲水機的衛生 (如幼童)；或 (ii) 患有呼吸道感染，要避免直接於噴射式飲水機飲用食水。宜使用容器 (如水杯 / 水樽) 盛水飲用。  
Individuals who (i) have difficulties to maintain hygienic measures (e.g. young children); or (ii) are suffering from an acute respiratory illness, are discouraged from drinking directly from drinking fountain. Instead, use a container (e.g. cup / bottle) for drinking.
- 請勿於飲水機內吐痰、洗手或清洗個人物品。  
Do not spit into the dispenser or use it to wash hands and personal items.
- 如飲水機受到污染、損毀或被破壞，請勿使用飲水機。  
Do not use the dispenser if there is any sign of contamination, damage or vandalism.



English Version



中文版



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