Dubai Municipality

Health and Safety Department

Technical Guidelines for Cleaning and Disinfecting Childcare & Nurseries Premises

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1. Introduction

Childcare environments are notorious for spreading infections. Keeping the childcare environment clean is one of the best ways to help ensure that children stay healthy. Dirty toys, bedding, linens, eating utensils, and surfaces can carry and spread germs.

Cleaning and disinfecting are part of a broad approach to preventing infectious diseases in nurseries and childcare premises.

2. The difference between cleaning, disinfecting, and sanitizing

- **Cleaning:** removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove germs from surfaces. This process does not necessarily kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.
- **Disinfecting**: kills germs on surfaces or objects. Disinfecting works by using chemicals to kill germs on surfaces or objects. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.
- **Sanitizing:** lowers the number of germs on surfaces or objects to a safe level, as judged by public health standards or requirements. This process works by either cleaning or disinfecting surfaces or objects to lower the risk of spreading infection.

3. Purpose of disinfection in childcare environment:

- Cleaning benches, floors, irrigation systems, fan blades, cooling towers, pots, plugs, nursery production structures (plastic, wood, metal, glass and concrete) with disinfectant between crops.
- Foot baths/mats with disinfectant at each entry point.
- Washing hands with regular or antimicrobial hand soaps before work and at intervals throughout the day. But hand-sanitizing products are a reasonable substitute for hand washing as long as hands are free of soil or dirt. Convenient hand washing facilities near entrances and throughout production and propagation units needs to be provided.
- Disinfecting knives, scissors, or cutting tools after taking cuttings during production or propagation. Pruners, cutting and grafting tools that automatically dispense a disinfectant solution are available in market.
- Disinfecting the vehicles (utility carts in the facility and also transportation vehicles), tanks and equipment.
- Disinfecting irrigation water.
- Disinfecting seeds and asexually propagated planting materials.

4. Clean and disinfect surfaces and objects that are touched often

Follow standard procedures for routine cleaning and disinfecting. Typically, this means daily sanitizing surfaces and objects that are touched often, such as desks, countertops, doorknobs, computer keyboards, hands-on learning items, faucet handles, phones, and toys.

Some schools may also require daily disinfecting these items. Standard procedures often call for disinfecting specific areas of the school, like bathrooms. Immediately clean surfaces and objects that are visibly soiled.

5. Clean and disinfect correctly

Always follow label directions on cleaning products and disinfectants. Wash surfaces with a general household cleaner to remove germs. Rinse with water, and follow with registered disinfectant to kill germs. Read the label to make sure it states that the product claimed for effectiveness against germs/bacteria/viruses

If a surface is not visibly dirty, you can clean it with registered product that both cleans (removes germs) and disinfects (kills germs) instead. Be sure to read the label directions carefully, as there may be a separate procedure for using the product as a cleaner or as a disinfectant. Disinfection usually requires the product to remain on the surface for a certain period of time (e.g., letting it stand for 3 to 5 minutes).

Use disinfecting wipes on electronic items that are touched often, such as phones and computers. Pay close attention to the directions for using disinfecting wipes. It may be necessary to use more than one wipe to keep the surface wet for the stated length of contact time. Make sure that the electronics can withstand the use of liquids for cleaning and disinfecting.

Keep in mind that all items and surfaces in childcare environments need to be cleaned, sanitized or disinfected, below table shows the recommended frequency for cleaning and disinfecting

Item/Surface	Method	Frequency
Machine washable cloth toys and dress-up clothes	Cleaned (Laundered) Sanitized	Cleaned (Laundered) Weekly Sanitized after each use
Tables and highchair trays	Cleaned and then Sanitized	Before and after each use
Changing tables	Cleaned and then Disinfected	After each use
Diaper pails	Cleaned and then Disinfected	Daily, at the end of the day

- **Method**

1. Clean all articles first with soap and warm water, apply friction.
2. Rinse with clear water.
3. Use a disinfectant according to manufacturer's recommendations. The solution can be mixed and placed in spray bottles to apply to surfaces.
4. To be effective, disinfectants must remain in contact with the surface for at least 10 minutes or as directed by manufacturer.
5. Most disinfectants do not need to be rinsed off the surface/equipment – they can be left to air dry.
6. Damp, rather than dry dusting or sweeping should be done whenever possible.
7. Cleaning and disinfecting should be carried out from the least soiled areas to the heaviest soiled areas.

6. Use products safely

Make sure that all used cleaning and disinfectants products are registered by Dubai Municipality (Montaji)

Pay close attention to hazard warnings and directions on product labels. Cleaning products and disinfectants often call for the use of gloves or eye protection. For example, gloves should always be worn to protect your hands when working with bleach solutions.

Do not use cleaning products OR disinfectants that carry a DANGER or a CORROSIVE label warning in your childcare program.

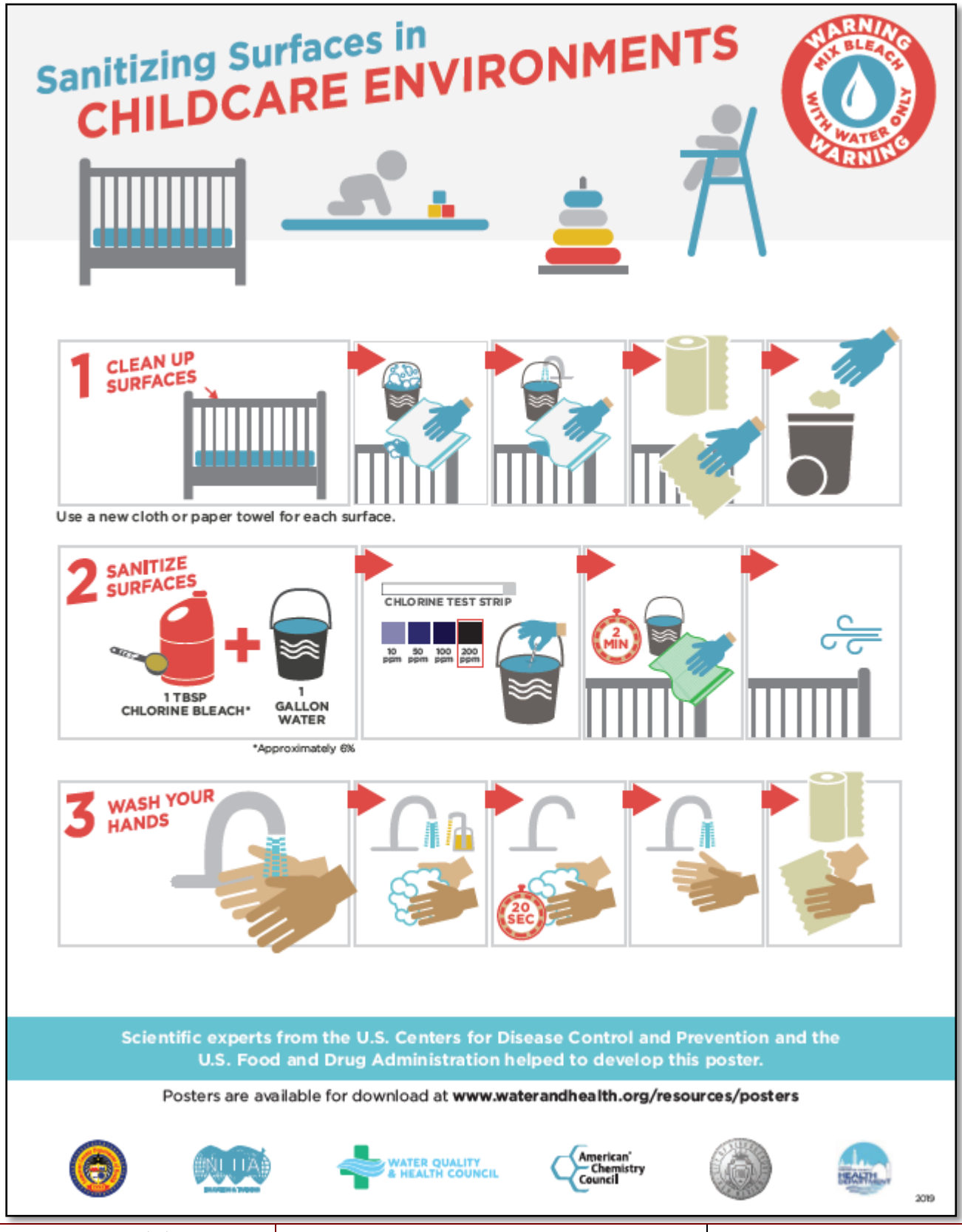
Do not mix cleaners and disinfectants unless the labels indicate it is safe to do so. Combining certain products (such as chlorine bleach and ammonia cleaners) can result in serious injury or death.

Ensure that custodial staff, teachers, and others who use cleaners and disinfectants read and understand all instruction labels and understand safe and appropriate use. This might require that instructional materials and training be provided in other languages.

- **The below are examples for types of disinfectants could be used in childcare premises with taking all precautionary requirements:**
  - Quaternary Ammonium Compounds
  - Alcohol based products
  - Chlorine based products such as : hypochlorous acid - sodium hypochlorite – chlorine dioxide
  - Organic acids (citric/lactic/caprylic acid)
  - Electrolyzed water
  - Sodium carbonate peroxyhydrate
  - Acid-anionic sanitizers
  - Natural plant extracts / Natural salts

One of the most popular and effective products used for sanitizing and disinfecting surfaces in childcare environments is chlorine bleach. Regular strength chlorine bleach (approximately 6% strength) can be mixed with water in specific ratios to provide all the sanitizing and disinfecting power needed to help destroy pathogens on surfaces in childcare environments. The below poster addresses surfaces that should be sanitized (e.g., crib rails, toys and high chair trays), and the other addresses surfaces that should be disinfected (e.g., diaper-changing tables, toilets, bathroom sinks and diaper pails). Each poster provides specific directions on mixing an appropriate solution of chlorine bleach in water. The posters can be laminated and displayed in childcare settings to remind staff of proper procedures.

Routine Disinfection of Surfaces in
CHILDCARE ENVIRONMENTS
WARNING
MIX BLEACH
WITH WATER ONLY
WARNING
1 WIPE UP SURFACES
Only use hot water & bleach if fabric laundering directions permit
Use a new cloth or paper towel for each surface.
2 CLEAN UP SURFACES
3 DISINFECT SURFACES
2 ½ TBSP CHLORINE BLEACH*
1 GALLON WATER
*Approximately 6%
CHLORINE TEST STRIP
500 ppm
600 ppm
700 ppm
800 ppm
2 MIN
4 WASH YOUR HANDS
20 SEC
Scientific experts from the U.S. Centers for Disease Control and Prevention and the U.S. Food and Drug Administration helped to develop this poster.
Posters are available for download at www.waterandhealth.org/resources/posters
WATER QUALITY & HEALTH COUNCIL
American Chemistry Council
2019


Sanitizing Surfaces in
CHILDCARE ENVIRONMENTS
WARNING
MIX BLEACH
WITH WATER ONLY
WARNING
1 CLEAN UP SURFACES
Use a new cloth or paper towel for each surface.
2 SANITIZE SURFACES
1 TBSP CHLORINE BLEACH*
1 GALLON WATER
*Approximately 6%
CHLORINE TEST STRIP
10 ppm
50 ppm
100 ppm
200 ppm
2 MIN
3 WASH YOUR HANDS
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Scientific experts from the U.S. Centers for Disease Control and Prevention and the U.S. Food and Drug Administration helped to develop this poster.
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7. Factors affecting the effectiveness of a disinfectant:

- Degree of contamination. This determines the quality of disinfectant required and time of exposure.
- Presence of organic matter and other composites such as soaps or detergents may neutralize some disinfectants.
- Concentration and quantity of disinfectant. It is important to choose the appropriate concentration and quantity of disinfectant that is best suited to different conditions.
- Contact time (the length of time it is exposed to the area to be disinfected) and temperature. Adequate time and appropriate temperature must be allowed for action of the disinfectant and may depend on the degree of contamination and organic matter load.
- Shelf life of the disinfectant solution. Many chemicals reduce in effectiveness with the passage of time and their exposure to air and the other chemicals in the solution.
- Application method.
- Storage and stability

8. Handle waste properly

Since consumer safety is the primary principle of Detergents registration, its process allows the Registration and Permits Section to gather adequate information to assess the safety of Detergent products. It is necessary to emphasize that no detergent product shall be manufactured, imported, exported, advertised, sold or distributed in Dubai unless it has been registered in Montaji system in accordance with Dubai Municipality regulation.

9. . References:

- Centers for Disease Control and Prevention “CDC”
- World Health Organization “WHO”
- Posters are available for download at www.waterandhealth.org/resources/posters

For any further information

Please visit Dubai Municipality website/ Health & Safety Information

www.dm.gov.ae

or contact Dubai Municipality

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