



# **Environmental Cleaning Guidelines** for Infection Control

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## 1.0 Background

Respiratory infections are spread through droplets in the air or indirectly when we cough and sneeze onto horizontal surfaces. According to the <a href="Public Health Agency of Canada">Public Health Agency of Canada</a> the influenza virus can live outside the body:

on hard surfaces, such as stainless steel and plastic, for 24-48 hours;

on soft surfaces, such as cloth, paper, and tissues for less than 8-12 hours;

The virus however, can only infect a person for up to

2-8 hours after being deposited on hard surfaces,

And only a few minutes after being deposited on soft surfaces.

When you touch a contaminated surface, then touch your face, the influenza virus and other pathogens can be transmitted into the body through your nose, eyes and mouth.

During an increase in the number of staff/students/children with respiratory illnesses (such as influenza) it is important to give priority to cleaning more frequently the horizontal work surfaces where respiratory droplets may fall by gravity and reside. The purpose of cleaning is to reduce the number of microorganisms in the environment and decrease the risk of transmitting infection. It is, however, not possible to remove all microorganisms in a school or workplace nor cost-effective to increase cleaning frequency markedly.

Priority will continue to be thorough cleaning on a regular basis and increasing education for staff/students regarding the importance of hand hygiene and covering their cough and sneeze. If there is an increased incidence of infections in your school, principals will continue to promote hand hygiene, reinforce the "stay at home when ill" protocol and thirdly notify custodians to increase the cleaning frequency of high touch surfaces such as doorknobs, door handles, light switches, washrooms and hand rails.

During an influenza pandemic or localized disease outbreak, more stringent precautions may be necessary in order to protect the safety and health of staff, students and contractors. If absenteeism due to illness at a school or worksite reaches 10% or more schools and custodial contractors will be notified through the Foreman, Facilities Contracting Services of any needed changes to cleaning priorities and frequency.

Proper hand washing with soap and water is the most important and effective way of preventing the spread of germs. Wash your hands at the beginning and end of the work shift and when using the toilet, preparing or eating food, eating touching ones face



and after coughing or sneezing. Hand sanitizers may be used when soap and water are not readily available and the hands are not visibly soiled.

Coughing and sneezing into a tissue should be done and if not available into your upper sleeve, and not into your hands.

## 2.0 Routine Cleaning Guidelines for Custodial Services

Custodial contractors are required to provide basic cleaning services, garbage disposal and ensure a sufficient supply of soap, paper towels and cleaning supplies are available. During an illness outbreak, custodial contractors may be mobilized to assist with specialized cleaning of sick rooms and more frequent cleaning of high touch surfaces. Under these circumstances, administration and staff should be prepared to adjust their cleaning priorities and expectations in order to accommodate these needs.

Except during illness outbreaks (i.e. 10% or more absenteeism due to illness) custodial contractors are expected to follow cleaning schedules and cleaning best practices specified by contract agreements using the following general guidelines:

- Use only cleaning and disinfection products approved for use by Elk Island Public Schools (EIPS).
- Avoid the use of bleach<sup>1</sup> unless other more suitable disinfectants are unavailable.
- Antibacterial soaps and products should not be used.
- Follow the manufacturer's directions for product use and correct dilutions.
- Limit the use of disinfectants to use on high touch surfaces, clean up of blood and body fluids and specialized cleaning during an illness outbreak.
- Ensure there is sufficient fresh cleaning solution for daily cleaning, discarding remaining solution each day and drying out all containers to minimize growth of microorganisms in standing water.
- Clean using the following general principles:
  - Clean from top to bottom.
  - Routine cleaning should be performed according to a predetermined schedule and should be sufficient to keep surfaces clean and dust free.
  - Surfaces that are frequently touched by the hands require more frequent cleaning and disinfection (e.g. "high touch surfaces").
  - Each school should have a schedule for special project cleaning.
  - Hands should be washed after cleaning washrooms and removing housekeeping gloves.

<sup>&</sup>lt;sup>1</sup> Use bleach only as a last resort. To disinfect using household bleach mix at a concentration of 1:10 for example 1 cup bleach to 10 cups water. Bleach solutions must be mixed fresh daily in order to be effective. Allow for a minimum contact time of 5 minutes.



The trigger for increasing cleaning frequency is when there is an increased frequency of illness from a communicable disease such as gastrointestinal or respiratory infections. If an illness outbreak such as gastrointestinal or respiratory infections occurs in a classroom or if 10 percent of the school population is away due to illness, additional cleaning support may be requested by the Facilities Services Contracting Foreman. At this point cleaning priorities may need to be adjusted. Increasing the frequency of cleaning of high touch surfaces will assist in the reduction of microorganisms that can make people ill. In addition to regular cleaning services, custodial providers must also ensure that:

- Kitchen areas and washrooms are adequately stocked to ensure an ongoing supply of liquid soap and paper towels, and
- Hand sanitizer dispensers are monitored and refilled daily to ensure ongoing supply of product.

## 2.1 Preparation and Use of Cleaners and Disinfectants

Use of EIPS approved products only is permitted. Approved disinfectants will have a Health Canada DIN number and/or be registered by the Environmental Protection Agency (EPA) for use for influenza A viruses. For safe and effective use of these products, always follow label instructions paying special attention to the product's dilution rate (if applicable) and the appropriate contact time.

### **Approved Disinfectants (for surfaces)**

Solutions containing the following types of disinfectants are currently approved by Alberta Health Services.

- Accelerated hydrogen peroxide (0.5%). These are the preferred type of cleaner disinfectants by the district as they are fragrance free and tolerated by most persons.
- 2. Quaternary ammonium compound ("quats")
- 3. Diluted household bleach. Add 15 ml (one tablespoon) of bleach to 4 litres (one gallon) of water. Note. Bleach is not recommended in school environments due to its instability and corrosive nature. It should only be used when the above types of disinfectants are unavailable.

As the *Canadian Centre for Disease Control* stresses, the first line of defense to prevent illness is to wash hands frequently with soap and water or use an approved hand



sanitizer.\_Registered disinfectants are for use on hard, non-porous surfaces, such as door knobs, handles, tables, floors, etc. The EPA emphasizes that these products are not to be used on the skin or to be taken orally. Follow these general guidelines for use of disinfectants:

- Never mix different disinfectants and cleaners together.
- Always follow the label instructions exactly for correct dilutions and proper use of the product.
- Use disinfectants on high touch surfaces such as desks door knobs, handrails, etc.
- Pay attention to the product's shelf life once they are opened. Some products such as those that contain accelerated hydrogen peroxide should be used up in 30 days once opened to maintain their effectiveness.
- Clean surfaces with a commercial product that depending on the dilution is both a detergent (cleans) and sanitizer/disinfectant (kills germs).
- Disinfectants will not work on surfaces that are visibly dirty or soiled. For visibly
  dirty surfaces wash the surface first with a general neutral cleaner and then
  follow with a disinfectant.
- Place mixed solutions in either a properly labeled flip top 1 litre bottle or a small hand bucket. Apply the solution to either surface or cloth. Avoid spraying as this puts the product into the air and increases chemical exposure to the user.
- Use a "wipe twice" two step process.
  - Step 1- Clean: Wipe the surface firmly (creating friction) and thoroughly once with a cloth wet (not dripping) with an appropriate disinfectant.
  - Step 2- Disinfect: Turn the cloth wet with the disinfectant over and wipe the surface again. Allow the product to sit for the required contact time indicated on the label instructions.
- Although air drying of disinfected surfaces is preferable, should surfaces still be wet after the appropriate contact time, the surface may be wiped dry if necessary.



 Disinfectant wipes or ready to use disinfectant solutions can be used to disinfect electronic items that are shared or touched often such as computer equipment and telephones.

## 2.2 Clean up of blood and body fluids

Follow these procedures to clean up and disinfect after a blood or body fluid spill:

- Put on a pair of disposable gloves, protective eye goggles and N95 disposable respirator.
- If cleaning up vomit use a commercially available absorbent powder to assist with clean up.
- Clean up the material using paper towels, and then wash the area with detergent and water.
- Wipe the surface with a fresh solution of an approved disinfectant mixed to the proper dilution. Leave the solution in contact with the surface for at least 10 minutes or as indicated on the product label. This will kill any germs left on the surface.
- Dispose of used paper towels and gloves in a plastic bag. Tie up the bag and dispose in the outside garbage bin.
- Remove gloves and protective equipment and wash hands.

## 2.3 Waste Disposal Practices

- Toss tissues into waste baskets after they have been used for coughs, sneezes and blowing your nose.
- Place waste baskets where they are easy to find and use. Line with a plastic liner.
- Avoid touching used tissues and other waste when emptying waste baskets.
- Empty once daily (twice daily during a pandemic outbreak).
- Clean and disinfect waste baskets regularly and wash hands after emptying waste baskets and removing gloves.



## 3.0 Specialized Cleaning During Illness Outbreaks

The <u>Public Health Agency of Canada</u> recommends that during a pandemic or outbreak of illness high touch surfaces in schools should be cleaned and sanitized at least **twice** daily. If additional cleaning services are needed by a school or department the site administrator shall contact the Facilities Contracting Foreman for assistance in coordinating these services.

If a case of a pandemic or other illness outbreaks cleaning priority checklists for custodial and bus contractors are provided in Appendix B and C.

## 3.1 Sick Room Cleaning

In the event that a sick room or other area is used for someone suspected of having a highly contagious illness the following procedures should be used for preparing and cleaning the room. (*Note: These procedures are subject to change*).

- Gather all equipment, cleaning solutions and materials required to clean the room.
- WASH hands and put on gloves and protective eyewear prior to entering room.
   Disposable respirators (N95 or higher) should be worn when cleaning contaminated areas (see Appendix A). Personal protective equipment should be changed if torn or soiled and should always be changed between rooms.
- Remove all unnecessary equipment and materials from the area and place wet floor sign at the door entrance.
- Pick up garbage in room, secure and place in the outdoor garbage bin.
- Clean with a regular EIPS approved neutral cleaner all furniture, bathroom
  fixtures and all high touch areas. This includes knobs, switches, call bells etc.
  and everything that is touched by the patient in the bathroom. Ensure that clean
  disposable cloths and solutions do not become contaminated (NO DOUBLE
  DIPPING).
- Disinfect all furniture, bed, basin and all bathroom fixtures and all high touch areas, knobs, switches, call bells etc. and everything that is touched by the patient in the bathroom ensuring that clean disposable cloths and solutions do not become contaminated with the disinfectant solution (NO DOUBLE DIPPING).



- After applying the disinfectant solution leave on for the appropriate contact time and allow surfaces to air dry when possible.
- Restock paper towel, soap and hand sanitizer dispensers.
- Spot wipe all walls, high to low with the disinfectant solution.
- Used dispensable cloths and disposable gloves should be double bagged and taken to the outdoor garbage bin.
- Discard remaining used cleaning and disinfectant solutions.
- Remove and protective equipment and WASH hands prior to leaving the room.

At any time, **Alberta Health Services** can direct a school to implement a number of additional cleaning and infection control measures. Additional custodial services may need to be coordinated through the Facility Services Contract Foreman. Examples of these directives may include:

- Turning off all water fountains. If so directed, water fountains should be isolated by placing a garbage bag over the fountain and a "do not use sign."
- After hours use of schools may be curtailed or cancelled. This can include extracurricular activities, community rentals and meetings or any other public gathering.
- Possible school closures.

## 4.0 Cleaning Guidelines for School and Central Staff

Employees are responsible for cleaning and disinfecting personal areas and equipment not covered by the custodial contract. Hospital grade ready to use products including disinfectant wipes are available to schools for equipment such as keyboards, computer mice and telephones. Use of institutional products containing accelerated hydrogen peroxide are preferable over household or retail products. The Custodial Contract Foreman will advise schools of approved products.

During illness outbreaks staff is encouraged to minimize shared learning tools, books, magazines, and gym equipment. Magazines, papers and other items such as toys or other learning aids are to be removed from reception/waiting areas, and from common areas such as kitchens, common rooms and breakout areas.



## 4.1 Keyboards, telephones and other stationary supplies

Where possible keyboards, telephones, mice, headphones and stationary supplies should not be shared. In situations where they are, they should be cleaned between users, by the users themselves, with disinfectant wipes or a clean cloth wetted with a ready to use general virucidal disinfectant. In areas like computer labs where shared equipment is unavoidable the use of hand sanitizing stations may also be of benefit. Avoid sharing of headsets or headphones. Staff and students should have their own headsets and these should be cleaned by the user at the beginning and end of each shift, and stored in a labeled plastic bag when not in use. Disposable covers are also available for some types of headphones and telephone headsets.

#### 4.2 Smart Boards

Whenever feasible use devices such as smart board pen or other pointing devices to avoid touching smart boards with hands. Pointing devices should be cleaned with available wipes between users.

Before you clean and/or disinfect your SMART Board, shut down or disconnect the computer. Otherwise, you may scramble the desktop icons or inadvertently activate applications when you wipe the screen.

Disinfectant wipes or general ready to use virucidal disinfectants containing accelerated hydrogen peroxide are preferable over the use of bleach. Pour solution onto a clean cloth or disposable towel for application verses spraying of the product into the air. Information on available products and vendors is available from the OHS Specialist.

## 4.3 Toys and sports equipment (or other multi-use equipment)

Shared items such as toys that cannot be cleaned between users should follow a regular schedule for cleaning and disinfection. While daily cleaning and sanitizing of toys and other shared items is good practice, as long as these items are cleaned and disinfected at least once weekly this would be acceptable to Alberta Health Services. If there is an illness outbreak then the cleaning frequency may need to be increased to as frequently as twice daily. Clean toys whenever they become visibly soiled.

Use of stuffed toys should avoided. If used launder at least once weekly. In order to properly disinfect surfaces articles must be cleaned first removing any visible soil as disinfectants do not work effectively on dirty items. If possible soak the items in the cleaning solution and rather than spraying since spraying aerosolizes the product into the air and is not good for air quality. Dishwashers are generally not effective for cleaning and sanitizing toys.



While bleach is a cheap and readily available sanitizer it is corrosive and less effective than some other disinfectants. As an alternative to bleach use of a hospital grade low level general virucide disinfectant that contains accelerated hydrogen peroxide (AHP) is recommended. These products are not available at the retail level. These products are fragrance free and easier on the skin. When used as a sanitizer they usually require no rinsing unless specified by the product directions. Contact the Facility Services Custodial Contract Foreman to order these products.

Steps for cleaning and disinfecting toys and sports equipment:

- 1. Clean to remove visible soil by presoaking with soap and water first.
- 2. Rinse with clean, clear water.
- **3.** Apply a sanitizer/disinfectant following the manufacturer's recommendations for contact time. Wiping or soaking verses spraying is preferred.
- **4.** Let air dry.

#### 4.4 Water Tables

- Water play centres should be emptied, washed and sanitized after each use.
   Only potable water from an approved source should be employed within these centres. Do not add bleach or vinegar to the water.
- Avoid using sponge toys as they can trap bacteria and are difficult to clean.
- Have all students wash their hands before and after playing in the water table.
- All staff must wash their hands prior to and after using the water table.
- Carefully supervise the students to ensure they do not drink the water.
- Do not allow children with open sores or wounds to play in the water table.
- Exclude children with a cold, cough, gastrointestinal illness or skin infection from play.
- During an outbreak of illness, STOP use of water tables.



#### 4.5 Sand Tables

- Sand tables should be kept covered when not in use. Discard all sand when visibly soiled with vomit.
- Once sand becomes moist or wet, it may be capable of sustaining microbiological growth and, as a precaution it is recommended that the wet or moist sand be replaced.
- Do not attempt to sterilize sand; replace only.
- As a health precaution, play sand should be completely replaced on an annual basis (or whenever the sand becomes wet or moist).
- Do not allow children with open sores or wounds to play in the sand table.
   Exclude children with a cold, cough, gastrointestinal illness or skin infection from play
- During an outbreak of illness, STOP use of sand play tables and replace sand on a more regular basis.

## 4.6 Kitchen hygiene/meeting Rooms

Where possible, use disposable cups, plates and utensils. In locations where this may not be feasible then students and staff should be reminded not to share cups, dishes, and cutlery. All dishes, cups and utensils are to be thoroughly washed with soap and hot water after use, or preferably, washed in a dishwasher. Paper towels are preferable to cloth towels for drying hands and dishes. Where dishwashers are supplied, these are preferable to hand washing dishes.

## 4.7 Mouthpieces and Musical Instruments

Use a commercially available sterisol germicide designed for the sanitizing of instrument mouthpieces and recorders Compounds that can be used on mouthpieces and instruments include:

Combination Phenolice (Synthetic), a non-corrosive, a nonirritating, odorless compound that won't hurt most metals and plastics. Some brand names include "Pathex", "Omni II" and "Multicide".



Buffered chlorine products, such as "Presept" will disinfect without corroding metals.

Both of these products can be found at medical and dental supply companies. Alcohol, boiling water and bleach are **NOT** recommended for disinfecting mouthpieces or instruments because of their effect on skin and/or plastics and metals.

Store the diluted solution in a non-metal container that has a lid. Once mixed the solution is to be covered when not in use and replaced every week.

#### Steps for disinfecting mouthpieces/musical instruments

- 1. Soak in warm water for twenty minutes.
- 2. Wash with soap and water.
- 3. Rinse thoroughly with water.
- 4. Immerse in the disinfectant solution. When using the disinfectant, follow the manufacturer instructions on dilution levels and immersion times to ensure effectiveness. Mixed solution must be deep enough to allow for total immersion.
- 5. Rinse thoroughly with water and let dry.
- 6. In schools where dishwashers are available, mouthpieces can go into the dishwasher on a regular wash cycle.

Do not allow children with visibly active cold sores, severely chapped lips or upper respiratory infections to use mouthpieces or instruments.

Clean brass instruments with a cleaning snake and warm water before passing to other children or after a child has had a communicable disease, such as a cold or flu. Flute head joints should to be wiped at the blow hole with a sponge containing some rubbing alcohol at the end of each instrumental period.

Wipe dry woodwind instruments after every use.

Disinfect mouthpieces after use by a child who has had a communicable disease and throw out used reeds.

#### Whistles:

The best way to prevent the spread of disease is to make sure that everyone who uses a whistle has his or her own whistle. When whistles must be shared, they should be cleaned and disinfected regularly to prevent the spread of disease.



#### To clean whistles:

- Prepare a light bleach solution with approximately one capful of bleach to one gallon of water.
- Immerse whistles in bleach solution. If whistles have a wooden ball, limit the time to ten minutes they are in bleach solution.
- Rinse well with water.

## 4.8 Safety Glasses

The sharing of protective eyewear should be avoided. Consider issuing students their own personal set to care and be responsible for. When this is not feasible, safety glasses and goggles should be cleaned between users. In addition to regular cleaning shared protective eyewear should also be disinfected at least once weekly. If a UV sanitizing cabinet is unavailable use the following procedures:

#### To clean:

- Fill a sink or tote bin halfway with warm water.
- Make a sudsy solution with soap and water (i.e. dishwashing liquid is fine) in the sink or tote bin for students to drop off their glasses after the lab is finished. Swish the goggles in the soapy water then rinse.
- Air dry or pat dry with a soft cloth or tissue.

#### To Disinfect:

- To disinfect, clean as above then soak eyewear for 10 minutes in a second solution of disinfectant in another tote or sink using an accelerated hydrogen peroxide solution or other suitable disinfectant mixed according to the manufacturer's instructions (fill halfway).
- If required by the product directions rinse thoroughly in clean water.

If large numbers of glasses need cleaning and disinfection in a short amount of time consider purchasing a commercially available germicidal cabinet designed for protective eyewear. Alternatively have students clean and wipe their own eyewear after use at the end of each class.



## 4.9 Laundry Practices

Whenever possible use disposable pillow covers, sheets and blankets. If not, soiled linens should be laundered as follows:

- Gently gather soiled bedding and linens without creating allot of motion or fluffing- Do not shake
- Wash hands after handling soiled laundry items.
- Wash on hot cycle (if possible) following label instructions for detergents and additives.
- Dry the cleaned items as you normally do selecting the appropriate dryer temperature for the items.
- Clean hands before removing clean laundry especially if you have coughed or sneezed into your hands.

#### 4.10 Fitness Centres

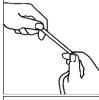
For guidelines on cleaning fitness centres refer to the district guideline *Cleaning and Disinfection of Fitness Centre Equipment* available from the division OHS Specialist.

#### 5.0 References

Alberta Health Services —Child Care Facility Information Manual Alberta Health
Alberta Education
Public Health Agency of Canada



## **Appendix A- N95-Respirator Use and Seal Check Procedures**



1. Check the straps before placing the respirator on the face.



2. Cup the respirator in your hand, with the nosepiece at your fingertips, allowing the headbands to hang freely below your hand.



3. Position the respirator under your chin with the nosepiece up. Pull the top strap over your head resting it high at the top back of your head. Pull the bottom strap over your head and position it around the neck below the ears.



4. Place your fingertips from both hands at the top of the metal nosepiece. Using two hands mold the nose area to the shape of your nose by pushing inward while moving your fingertips down both sides of the

nosepiece. Pinching the nosepiece using one hand may result in improper fit and less effective respirator performance. Use two hands.





#### USER SEAL CHECKS FOR DISPOSABLE RESPIRATORS (N95)

For disposable respirators, the user seal checks are done somewhat differently. For disposable respirators with no valve, both hands must be placed completely over the respirator while the wearer exhales. Be careful not to disturb the position of the respirator. The respirator should bulge slightly. For disposable respirators that have a valve, both hands should be placed over the respirator and the user inhales sharply. The respirator should collapse slightly. If air leaks at the edges of the respirator, it should be re-positioned and adjusted for a more secure fit and the test repeated. If the seal check cannot be successfully completed, another type/style/size of respirator should be tried.

# Appendix B

# **Custodial Priority Cleaning Checklist**

Except during outbreaks or under special directives no special cleaning techniques are required. An outbreak is considered when 10 % or more of the staff/student population is absent due to illness.

Cleaning and sanitizing should be done to all hard surfaces in common areas twice daily. Priority should be given to common areas such as lunch rooms, reception, and library and computer rooms. Modification to the existing custodial work schedule and duties may be necessary to accommodate these needs. Further directives may be provided by the Facilities Contracting Services Foreman.

Task		ial	Took	Initial	
Task	AM PM		Task		PM
Water fountain handles and spout			Telephones in classrooms/offices		
Door handles, hand railings and push plates			Light switches		
Taps, counters and paper towel dispensers			Staff room counters and taps		
Telephones in public places( hallways, entrances)			Handles on microwaves, stoves and fridges		
Elevator buttons			Washbasins, toilet bowls, urinals and fixtures, handles		
Empty Garbage Containers			Other high touch surfaces		

# **Appendix C**

# **Bus Drivers Priority Cleaning Checklist**

Except during outbreaks no special cleaning techniques are required. An outbreak is considered when 10 % or more of the staff/student population is absent due to illness. Bus drivers will be notified by their employer through the Director of Transportation when additional cleaning is necessary.

Cleaning and sanitizing should be done to all hard surfaces in common areas twice daily. Priority should be given to high touch areas such as railings, steering wheel and shift levers. Standard cleaning solutions or products are adequate – no specialized solutions are indicated.

Dispose of waste materials in safe and efficient manner. Liners should be used in all waste cans that are collecting potentially contaminated materials.

Where operationally possible, promote frequent air exchanges and increase ventilation in the bus. Following each school day, thoroughly ventilate the bus by opening bus doors and windows. Report any potential areas of contamination or concern to your supervisor.

Task	Initial		Took	Initial	
IdSK	AM	PM	- Task		PM
Railings			Door opener		
Steering Wheel			Bus seats		
Shift levers			Empty garbage containers		
Empty Garbage Containers					