

# Environmental Cleaning

# Environmental Cleaning

- ▶ The environment can harbour germs that can cause infections.
- ▶ Keeping a clean and safe environment is a key component of infection prevention and control (IPAC) and is important for the safety of clients, workers and volunteers.



# Cleaning

- ▶ **Cleaning** is the physical removal of germs, dirt, body fluids, and dust off of an environmental surface.
- ▶ Cleaning uses water and detergents and friction.
  - ▶ The key to cleaning is friction (e.g., scrubbing and rubbing).
- ▶ While cleaning removes germs, it does not kill them.



# Disinfection

- ▶ **Disinfection** is the process of using chemicals or heat to kill most germs on environmental surfaces.
- ▶ Disinfectants will not work if there is body fluids, dust, or dirt present, thus it is important to clean before disinfecting a surface.
- ▶ Disinfectants will only work if they are left on the surface for the appropriate contact time.
  - ▶ *Contact time* is the amount of time that a disinfectant needs to be wet on a surface for it to be effective against the type of germs listed on its label. Also includes giving the product time to dry.



Remember: cleaning and  
disinfection is a two step  
process!

**1**

Cleaning

**2**

Disinfection

# Overview of Terms

To clean	To sanitize	To disinfect
<ul style="list-style-type: none"><li>• Removes germs, dirt, dust and organic material (e.g., body fluids) off of an environmental surface.</li><li>• Doesn't kill germs but helps remove them.</li></ul>	<ul style="list-style-type: none"><li>• Lowers the number of germs on an environmental surface.</li><li>• Sanitizing usually has a shorter contact time than disinfecting.</li></ul>	<ul style="list-style-type: none"><li>• Kills most germs on an environmental surface.</li><li>• Usually has a longer contact time than sanitizing but kills more germs and more types of germs.</li></ul>

# Cleaning and Disinfection - Surface Types

- ▶ It is important to consider how frequently surfaces are touched when determining cleaning frequency.
- ▶ *High-touch surfaces* are surfaces that are frequently touched throughout the day by multiple people. These include doorknobs, elevator buttons, light switches and computer keyboards. High-touch surfaces require cleaning and disinfection at least daily, and more frequently where the risk of contamination with germs is higher than usual (e.g., if there is an increase of illness at your site).
- ▶ *Low-touch surfaces* are surfaces that are touched less frequently throughout the day. These include walls, floors and windowsills. Low-touch surfaces require cleaning on regularly, but not necessarily daily, basis. However, they should be cleaned immediately when visibly soiled.



# Cleaning and Disinfection - Surface Types

Think about your individual site when determining what a high-touch surface or low-touch surface is.

- ▶ For example, in a setting where client belongings are stored on the floor or if sleeping mats are placed on the floor at night, the floor may be considered a high-touch surface instead of a low-touch surface and may require more frequent cleaning and disinfection.





# Cleaning and Disinfection - Choosing Cleaning & Disinfectant Products

Cleaning and disinfectant products should:

- ▶ Be able to work on the site's finishes, furnishings, surfaces, and equipment without damaging them (e.g., some disinfectants may breakdown finishes on electronic equipment or vinyl finishes on mattresses).
- ▶ Be compatible with each other (i.e., the cleaner should be compatible with the disinfectant).
- ▶ Have instructions for use.
- ▶ Not pose occupational health issues.
- ▶ Have an expiration date listed on the bottle and not be used past that date.
- ▶ Be used according to the product's safety data sheet (SDS), which should be made available to those workers who will be using the products.

# Cleaning and Disinfection - Choosing a Disinfectant Product

Additionally, products that contain disinfectants should:

- ▶ Have a drug identification number (DIN) from Health Canada.
- ▶ Be pre-mixed or be mixed and discarded according to the manufacturer's instructions
  - ▶ Pre-mixed/ready-to-use disinfectants are preferable to mixing chemicals on site.
- ▶ Be effective against germs that may make people sick at your site (e.g., norovirus).
- ▶ Have a short contact time.

# Cleaning and Disinfection Tips

- ▶ Follow site policies and procedures for cleaning and disinfection.
- ▶ To prevent dirty areas from contaminating cleaner areas, clean and disinfect from:
  - ▶ low-touch to high-touch surfaces;
  - ▶ cleaner areas to dirtier areas; and
  - ▶ top to bottom.
- ▶ Do not 'double-dip' cloths; only put clean cloths into the cleaning or disinfectant solution. Consider using squirt bottles.
- ▶ Do not "top-up" cleaning and disinfectant solutions.



# Cleaning and Disinfection Tips

- ▶ Do not mix cleaning solution with disinfectant solution if they're not supposed to be mixed. This can cause the disinfectant to no longer be effective and can also cause hazardous chemical reactions.
- ▶ Use PPE appropriately when cleaning based on the risk of exposure to germs and instructions on the product's safety data sheet (SDS). Make sure to clean your hands before and after using PPE.
- ▶ Read and follow all manufacturer instructions and the SDS for cleaning and disinfectant products.
  - ▶ SDSs are used to protect workers from potentially hazardous chemicals. They contain product safety information (e.g., potential hazards associated with the product, precautions that can be taken to reduce those hazards, chemical interactions, first-aid instructions).
  - ▶ SDSs also contain information on compatibility with surfaces (e.g., metal).



# Cleaning and Disinfection Tips

- ▶ Clean and disinfect high-touch electronic equipment (e.g., shared computer keyboards) daily.
  - ▶ Disinfectant wipes can be used for items that cannot be soaked.
- ▶ Use a caddy or cart to store cleaning and disinfecting supplies, PPE, and alcohol-based hand rub (ABHR).
- ▶ Clean cleaning equipment (e.g., mop heads) after use to avoid cross-contamination and the growth of germs.
- ▶ Create and post cleaning schedules for common areas and bathrooms (this could also include ensuring that the bathroom is adequately stocked with supplies like soap, paper towels, and toilet paper).
  - ▶ Have staff document the time that cleaning is completed on a posted tracking sheet.
- ▶ Ensure cleaning and disinfection solutions are labelled.



# Safe handling of linens/laundry

## Do:

- ▶ Wear gloves when handling dirty linen/laundry.
  - ▶ If there is a possibility of your clothes getting dirty, wear a gown.
- ▶ Wrap wet laundry in a dry sheet or towel before placing it in a laundry bag.
- ▶ Be careful of sharps when collecting dirty linen/laundry. Handle items from the corners so you can see what you are touching.
- ▶ Ensure that clients have a dedicated space (e.g., garbage bag) to store dirty laundry.
- ▶ Remove feces from linen/laundry with a gloved hand and place the feces into a toilet or garbage bag. Bag items immediately.

## Do not:

- ▶ Sort or pre-rinse soiled laundry in non-laundry facilities (e.g., in a bathroom).
- ▶ Walk around with soiled linens as this can spread germs. Soiled linen should be bagged immediately and placed in the nearest soiled linen container.
- ▶ Wash client laundry and environmental cleaning items (e.g., mop heads) in the same cycle. These should be laundered separately.



# Toys

- ▶ Kids can contaminate toys with their hands, saliva, or body fluids.
  - ▶ Some germs (e.g., norovirus) can live on toys for a long time if they are not cleaned and disinfected properly.
- ▶ Encourage children to practice hand hygiene before and after playing with toys.
- ▶ Ensure that toys are non-absorbent and fully cleanable.
  - ▶ If a client brings their own toy that cannot be cleaned, the toy should not be shared with other clients.
- ▶ Inspect toys for damage and remove damaged toys from the play area.





# Cleaning and Disinfecting Toys

- ▶ Clean toys according to a regular cleaning and disinfection schedule.
- ▶ Clean high-touch play surfaces on a daily basis.
- ▶ If you have plush toys on site, ensure that they are laundered regularly and when soiled.
- ▶ Empty and clean toy bins and cupboards regularly and inspect them for pests.
- ▶ Ensure that disinfectants used are safe for the surface of the toy and also for the children.
  - ▶ Don't use a disinfectant that contains a phenolic, as they can cause skin and respiratory issues.
- ▶ Use a three-compartment sink/bin method to clean and disinfect toys

## Toy Cleaning and Disinfecting

### Three-Compartment Sink / Bin Method



1<sup>st</sup> Sink: Wash with detergent



2<sup>nd</sup> Sink: Rinse with clean water



3<sup>rd</sup> Sink: Disinfect\*



Air dry

### Notes

- If using a two-compartment sink: washing and rinsing must be done in 1<sup>st</sup> sink
- A dishwasher may also be used to wash and disinfect toys\*\*
- Wear personal protective equipment (PPE)
- Clean hands after removing PPE

\* Disinfect according to manufacturer's instructions

\*\* Refer to Guidance Document, Procedure for Toy Cleaning and Disinfection

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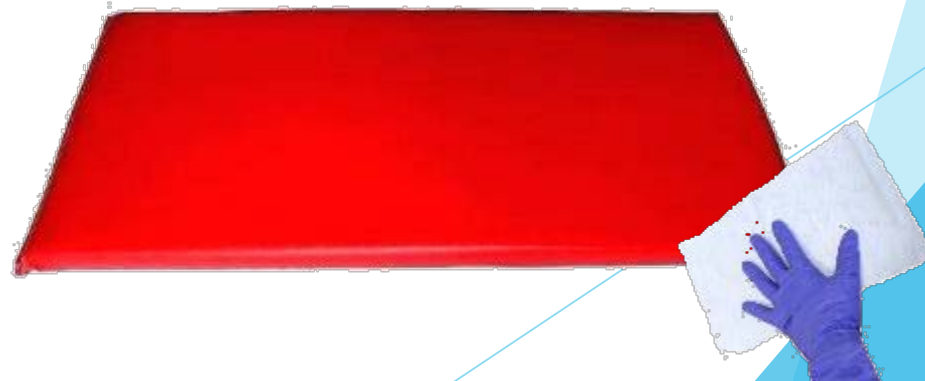
# Cleaning/Disinfecting – Mattresses and Cots

- ▶ Germs can potentially survive on sleeping equipment and spread to others.
- ▶ Stuffing and foam of sleeping equipment can't be cleaned if there are breaks in the fabric
- ▶ Fluid resistant covers can help to ensure that germs do not reach pillows, mattresses, cots, etc.
- ▶ Inspect mattresses for pests (e.g., bed bugs) regularly and when changing linens
- ▶ Notify a supervisor if tears, pests, or body fluids are found on mattresses or cots
- ▶ Sleeping equipment should be cleaned and disinfected between clients.



# Cleaning/Disinfecting Sleeping Mats

- ▶ Germs can potentially survive on sleeping mats and spread to others.
- ▶ Stuffing and foam of sleeping equipment such as sleeping mats can't be cleaned if there are breaks in the fabric.
- ▶ Clean and disinfect sleeping mats daily and between client use.
- ▶ Throw away mats with rips or tears



# Cleaning/Disinfecting Sleeping Mats

1

- ✔ Gather cleaning and disinfection supplies.
  - ✔ Choose/prepare appropriate cleaning and disinfectant product(s) for where you are going to clean.
  - ✔ Clean hands and put on gloves.
  - ✔ If linens have been used, remove and place into a linen bag for dirty laundry.
    - Remove gloves, clean hands, and put on new gloves.
- 

2

- ✔ Clean the top and sides of the mat from the foot to the head using a cleaning product.
    - Make sure to clean the edges.
    - Turn the mat and clean the other side.
  - ✔ Repeat the above step using a disinfectant.
  - ✔ While cleaning, inspect the mat for:
    - Cracks or holes and replace as required.
    - Pests.
  - ✔ Allow mat to dry completely.
- 

3

- ✔ Throw out any used paper towels or cleaning/disinfecting wipes in the garbage.
  - If cleaning cloths were used, place them in a bag for dirty laundry.
- ✔ Take off gloves and throw them into the garbage.
- ✔ Clean hands.

Be sure to clean and disinfect sleeping mats daily and between client use.

# Cleaning up Body Substances

- ▶ Germs can be spread through body substances (e.g., blood, vomit, feces).
- ▶ All body substances must be considered potentially infectious and the area must be restricted, and cleaned and disinfected immediately.





# Cleaning up Body Substances

- ▶ Inspect the area thoroughly for splashes or splatters.
- ▶ Restrict the area until it has been cleaned/disinfected and is completely dry.
- ▶ Gather all necessary supplies (e.g., paper towels, garbage bag).
- ▶ Choose an appropriate disinfectant (e.g., 1:10 bleach solution)
- ▶ Clean hands and put on gloves (Do a risk assessment -consider a gown and/or facial protection if there is a risk of splashing)
- ▶ Using paper towels, wipe up/remove the body substance. Throw out the used paper towels into a garbage bag. Use this same garbage bag throughout the clean-up.
- ▶ Clean the entire area using a cleaning product. Throw out any paper towels used in the garbage bag.
- ▶ Disinfect the entire area. Allow the disinfectant to stand for the amount of time recommended by the product manufacturer (i.e., contact time).
- ▶ Wipe up the area again using paper towels. Throw out the used paper towels into the garbage bag.
- ▶ Remove gloves (and any other PPE) and throw them out into the garbage bag.
- ▶ Clean hands.

# Case Study #3 - Environmental Cleaning

- A client at your site passes out and hits his head on the sharp edge of a table. Before the ambulance arrives, he bleeds profusely onto the hardwood floor.
- The cleaner has left for the night so Michelle, a staff member, needs to clean up the spill.
- Michelle poured a disinfectant directly onto the blood spill and, as a result, some of the blood splashed onto her pants. She immediately wiped up the spill using paper towels.
- After she finished cleaning the spill, she threw the blood soaked paper towels into the kitchen garbage bin and went to call her supervisor to report the incident.

Thinking about proper environmental cleaning, what could Michelle have done differently when cleaning up the blood spill?

## Case Study #3a - Environmental Cleaning - Family Shelter

- A child at your site is falls and hits his head on the sharp edge of a table. Before the ambulance arrives, he bleeds profusely onto the hardwood floor.
- The cleaner has left for the night so Michelle, a staff member, needs to clean up the spill.
- Michelle poured a disinfectant directly onto the blood spill and, as a result, some of the blood splashed onto her pants. She immediately wiped up the spill using paper towels.
- After she finished cleaning the spill, she threw the blood soaked paper towels into the kitchen garbage bin and went to call her supervisor to report the incident.

Thinking about proper environmental cleaning, what could Michelle have done differently when cleaning up the blood spill?

# Case Study #3 and #3a Answers - Environmental Cleaning

- Michelle should have:
  - Performed hand hygiene and put on gloves before cleaning the spill.
  - Soaked up the blood with paper towels before using a disinfectant.
  - Prevented splashing by not pouring the disinfectant directly onto the blood spill. Further, had Michelle been wearing a gown, the blood would not have splashed onto her clothes.
  - Let the disinfectant sit for the recommended *contact time* to ensure that all germs were killed.
  - Thrown out the garbage bag with the blood soaked paper towels. Ideally, she should have used a separate garbage bag for the items used to clean up the spill.
  - Performed hand hygiene after she was done cleaning the spill.



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