Cleaning Housekeeping Surfaces

In 2010, an E.coli O157:H7 outbreak at an Oregon Daycare Center was linked poor sanitation practice and resulted in the hospitalization of 4 children.

Public Health Reasons

Housekeeping surfaces, including floors, walls, counters, and furniture, are considered low-touch surfaces that require low-level disinfection. After the floors are cleaned, there is a gradual increase in microbial numbers throughout the day until a point is reached where the number of microorganisms present on the floor remains fairly constant. Cleaning these surfaces every day using water and a detergent or a low-level disinfectant designed for general housekeeping procedures can decrease the level of contamination.

Removing the soil from housekeeping surfaces is almost as important as the germicidal activity of the disinfectant used because dust and dirt can harbor microorganisms and support their growth. A one-step cleaner and disinfectant can be useful; the "cleaner" part of the product penetrates soil loads and allows the "disinfectant" part of the product to reach and then kill the microorganisms (See "Choosing a Sanitizer/Disinfectant" fact sheet).

When cleaning housekeeping surfaces, it is important to understand the differences between sanitizers and disinfectants. Both sanitizers and disinfectants are products regulated by the U.S. Environmental Protection Agency (EPA). Disinfectants are used on hard, inanimate surfaces and objects to destroy or irreversibly inactivate infectious viruses, fungi, and bacteria but not necessarily their spores. On the other hand, sanitizers are used to reduce, but not necessarily eliminate, microorganisms from the inanimate environment to levels considered safe as determined by public health codes or regulations. Sanitizers must eliminate at least 99.9% of bacteria. Generally, sanitizers are used on food-contact surfaces and disinfectants on all other surfaces. Disinfectants also require a longer contact time than sanitizers and must be able to destroy all microorganisms listed on their label in ten minutes.

Practices

There are three levels of cleaning and sanitizing/disinfecting surfaces. In increasing rigor, they are routine cleaning, vomit/fecal episode cleaning, and outbreak cleaning. This section covers routine cleaning. Additional measures are required when cleaning up after a vomit or fecal episode and during an outbreak.

Floors

- Dust surfaces prior to cleaning to remove dirt and dust that may affect the disinfecting capability of the detergent and/or disinfectant.
- There are multiple tools that can be used to remove dust:
    - a wet/dry vacuum or a vacuum with a filtration system
    - a disposable mop head treated with a chemical dust remover
    - a freshly laundered dry dust mop

Sweeping floors with a dry broom is not recommended because microorganisms attached to dust particles could become airborne and spread throughout the facility.

- Dust-removal tools should be properly cleaned and maintained in order to eliminate cross-contamination.
    - wet/dry vacuums should be cleaned inside and out with a disinfectant daily
    - disposable dust mops should be discarded after each use
    - reusable dust mops should be machine laundered daily
- Prepare a disinfecting solution as needed since disinfecting properties may decline over time.
    - use detergent and warm water, a low-level disinfectant, or a one-step detergent/disinfectant
    - follow the manufacturer's instructions for use and dilution when preparing the solution
    - the soiled disinfecting solution should be changed regularly, usually every two to three rooms
- Wet mopping or scrubbing is more effective after dust removal.
    - use sterile wet mops or freshly cleaned reusable wet mops
    - thoroughly mop the floor moving from room to room while changing mop-heads and disinfecting solution every two to three rooms

Dirty mops immersed in a bucket of disinfectant can become a vehicle for the growth of microorganisms, so mops and cleaning solution should be changed regularly.

- Follow the manufacturer instructions on safety precautions and contact time for disinfectants.

Other Housekeeping Surfaces

- Wash walls, shelves, and other non-critical items daily with a clean, reusable cloth or disposable towels dipped in detergent and warm water.
- Rinse surfaces with warm to hot water to remove cleaning products and debris.
- Disinfect surfaces with a low- or intermediate-level disinfectant on a weekly basis.
- Apply enough disinfecting solution to cover the surfaces thoroughly using a clean reusable cloth or a disposable towel.
- Let the solution stand for the contact time given on the label. Make sure there is enough disinfecting solution on the surface that it does not dry up before the recommended contact time.
- Let the surfaces air dry.

Recommended Disinfectants

See U.S. EPA list of registered products effective against noroviruses.

Follow product labels for use and dilution:

- Ethyl or isopropyl alcohol (70-90%)
- Sodium hypochlorite (5.25-6.15% household bleach diluted 1:10)
- Phenolic germicidal detergent solution
- Iodophor germicidal detergent solution

References

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