March 7, 2020

CDPHE Environmental Cleaning Guidance for COVID-19
Households AND Regulated Facilities

Households, workplaces, vehicles

The Colorado Department of Public Health and Environment is providing the following recommendations to routinely clean and disinfect commonly touched surfaces to control the spread of the virus that causes COVID-19. The following guidance is based on Interim Recommendations for US Households with Suspected/Confirmed Coronavirus Disease 2019.

According to CDC, the transmission of COVID-19 to persons from surfaces contaminated with the virus has not been documented. Transmission of coronavirus occurs much more commonly through respiratory droplets. Current evidence suggests that COVID-19 may remain viable for hours to days on surfaces made from a variety of materials. Cleaning of visibly dirty surfaces followed by disinfection is a best practice measure for prevention of COVID-19 and other viral respiratory illnesses in households and community settings.

- **Cleaning** refers to the removal of germs, dirt, and impurities from surfaces. Cleaning does not kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.
- **Disinfecting** refers to using chemicals to kill germs on surfaces. 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.

How to clean and disinfect surfaces

- Wear disposable gloves when cleaning and disinfecting surfaces. Gloves should be discarded after each cleaning. If reusable gloves are used, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other purposes. Clean hands immediately after gloves are removed.
- If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.
- For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered household disinfectants should be effective. Consult the manufacturer’s instructions for cleaning and disinfection products used.
- Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer’s instructions for mixing, application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.
  - Prepare a bleach solution by mixing:
- 5 tablespoons (1/3rd cup) bleach per gallon of water. This a "standard recipe," be sure to check the label as bleach comes in different concentrations.
- 4 teaspoons bleach per quart of water
  - Products with EPA-approved emerging viral pathogens are expected to be effective against COVID-19 based on data for harder to kill viruses. Follow the manufacturer’s instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.).
- For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces. After cleaning:
  - Launder items as appropriate in accordance with the manufacturer’s instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely, or
- Use products with the EPA-approved emerging viral pathogens claims (examples at this link) that are suitable for porous surfaces.

**How to clean and disinfect clothing, towels, and linens**

- Wear disposable gloves when handling dirty laundry from an ill person and then discard after each use. If using reusable gloves, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other household purposes. Clean hands immediately after gloves are removed.
  - If no gloves are used when handling dirty laundry, wash hands afterwards.
  - If possible, do not shake dirty laundry. This will minimize the possibility of dispersing virus through the air.
  - Launder items as appropriate in accordance with the manufacturer’s instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely. Dirty laundry from an ill person can be washed with other people’s items.
  - Clean and disinfect clothes hampers according to guidance above for surfaces. If possible, consider placing a bag liner that is either disposable (can be thrown away) or can be laundered.

**Regulated facilities: schools, child care facilities, retail food establishments and public accommodations**

The following guidance is designed to clarify proper cleaning, sanitizing and disinfecting of surfaces within regulated facilities such as schools, child care facilities, retail food establishments and public accommodations.

- **Clean** means to be free of dust and debris or to remove dirt and debris by vacuuming or scrubbing and washing with soap and water.
- **Disinfect** means to eliminate most or all pathogens. This is generally accomplished in these settings by the use of liquid chemical solutions such as a mixture of household bleach and water.
- **Sanitization** is not as strong as disinfecting, but still removes many pathogens, but is safe to use on surfaces used for food preparation.

**Specific guidance for schools**

Schools should clean and disinfect commonly touched surfaces as they normally would in the event of increased rates of influenza and other respiratory infections. However, in kitchens and food preparation
areas, schools should sanitize food contact surfaces as usual and of course, follow guidance on exclusion of ill workers, proper and frequent handwashing and respiratory hygiene, which is true for all settings.

**Specific guidance for child care facilities**
In child care facilities, we are recommending routine cleaning and sanitizing of kitchens and areas used primarily for food and bottle preparation. We recommend cleaning and disinfecting commonly touched surfaces. If toys children may mouth or table tops used for the service of food are disinfected, they should be rinsed and allowed to air-dry before being used or returned to use by children.

**Specific guidance for restaurants**
Restaurants and other retail food establishments should continue routine cleaning and sanitizing of food preparation surfaces in the kitchen and other food storage areas. We are recommending routine cleaning and disinfecting commonly touched surfaces in the dining and customer areas.

**Specific guidance for hotels**
Hotels and other public accommodations cleaning rooms used by a known case or a quarantined or isolated individual should follow recommended CDC guidance for environmental controls (see Care of the Environment below) in health care settings, including disinfecting all commonly touched surfaces and laundering all linens as they normally would.

**Care of the Environment**
The information below has been modified for relevance. The complete guidance can be accessed at this link:[https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html](https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html)

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<tr>
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<th>Recommendation</th>
<th>Category</th>
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<td>IV.F.1.</td>
<td>Establish policies and procedures for routine and targeted cleaning of environmental surfaces as indicated by the level of patient contact and degree of soiling.</td>
<td>II</td>
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<td>IV.F.2.</td>
<td>Clean and disinfect surfaces that are likely to be contaminated with pathogens, including those that are in close proximity to the patient (e.g., bed rails, over bed tables) and frequently-touched surfaces in the patient care environment (e.g., door knobs, surfaces in and surrounding toilets in patients’ rooms) on a more frequent schedule compared to that for other surfaces (e.g., horizontal surfaces in waiting rooms)</td>
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<td>IV.F.3.</td>
<td>Use EPA-registered disinfectants that have microbiocidal (i.e., killing) activity against the pathogens most likely to contaminate the patient-care environment. Use in accordance with manufacturer’s instructions</td>
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<td>IV.F.5.</td>
<td>Include multi-use electronic equipment in policies and procedures for preventing contamination and for cleaning and disinfection, especially those items that are used by patients, those used during delivery of patient care, and mobile devices that are moved in and out of patient rooms frequently (e.g., daily)</td>
<td>IB</td>
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IV.F.5.a. No recommendation for use of removable protective covers or washable keyboards. Unresolved issue

These recommendations provide supplemental information to the general cleaning and disinfecting recommendations already provided by the Department and are consistent with US FDA. It is important to note that labeled instructions must be followed on all sanitizing and disinfecting products, sanitizers must be EPA registered and disinfectants must be EPA registered and hospital-grade (effective against *Salmonella choleraesuis* (enteric), *Staphylococcus aureus*, and *Pseudomonas aeruginosa*)