

Cleaning Guidance for Student Housing in Response to Monkeypox

Revised August 4, 2022

PURPOSE

UCI is closely monitoring the Monkeypox situation and associated communications from the county, state and federal authorities. This guidance provides recommendations on cleaning and disinfecting Student Housing areas running under normal operations, consolidated spaces, and isolation spaces occupied by individuals with suspected/confirmed Monkeypox infection. It is aimed at limiting transmission of Monkeypox in key environments.

To view updates and obtain workplace information related to Monkeypox, visit the [UCI Forward](#) website for more details.

These recommendations will be updated as additional information becomes available.

DEFINITIONS:

- **Cleaning** refers to the removal of dirt and impurities, including viruses, from surfaces. Cleaning alone does not kill viruses. By physically removing the viruses, this action decreases their number and therefore any risk of spreading infection. Removing dirt and impurities allows disinfectant chemicals to work better.
- **Disinfecting** works by using chemicals, for example EPA-registered disinfectants, to kill viruses on surfaces. This process does not necessarily clean dirt off the surface but kills viruses that are present on the surface.
- **Contact Time** is the time a disinfectant must be on the surface or item to disinfect and to kill the virus. Different disinfectants have different contact times required to be effective.
- **Isolation Spaces** refers to areas in University Provided Housing identified as quarantine/isolation spaces (if available)
- **PUI** is the abbreviated term for Person Under Investigation and is yet to be confirmed via testing whether the person is positive for the disease or not.
- **Consolidated Spaces** refers to the areas in University Provided Housing that have consolidated UCI affiliated residents into contiguous buildings.
- **Isolation** refers to the separation of sick people with a contagious disease from people who are not sick. Individuals identified for isolation include those who have bumps or skin rash suspected of being Monkeypox or have received positive test results.

GENERAL RECOMMENDATIONS

The following recommendations apply to all spaces across all areas of Student Housing.

If Student Housing employees are ill or not feeling well, notice suspicious bumps or skin rash, they should not come into work

and notify their supervisor immediately.

Cleaning

EHS recommends that employees follow normal cleaning procedures **AND** follow the manufacturer's instructions for all cleaning and disinfection products to ensure safe and effective use of the product. The label will include safety information and application instructions. Many products recommend keeping the surface wet with a disinfectant for a certain period (see "contact time" on the product label).

- Check the product label to see what PPE (such as gloves, glasses, or goggles) is required based on potential hazards.
- Ensure adequate ventilation (for example, open windows).
- Use only the amount recommended on the label.
- If diluting with water is indicated for use, use water at room temperature (unless stated otherwise on the label).
- Label diluted cleaning or disinfectant solutions.

Frequently touched surfaces should be cleaned at least once a day and as needed. Frequently touched surfaces include:

- | | | |
|------------------|--------------------|---------------------------------|
| - Tables | - Cashier stations | - Refrigerators/freezer handles |
| - Doorknobs | - Phones | - Breakrooms |
| - Light switches | - Keyboards | - Drinking fountains |
| - Countertops | - Toilets | - Desks |
| - Handles | - Faucets/sinks | - Toilets |

Cleaning frequencies for all other low commonly used surfaces such as high windows, hard-to-reach places, etc. may stay the same/increase/decrease under the discretion of Student Housing supervisors and managers as long as these changes do not place employees at risk of potential exposure.

Disinfecting

Student Housing employees should follow normal disinfecting procedures and disinfect **frequently touched surfaces** at least once a day, and as needed. Commonly touched surfaces include those areas as listed above.

The use of disinfecting towels is preferred as well as cleaning equipment after each use using EPA-approved disinfectants for use against Emerging Viral Pathogens for Tier 1 viruses:

<https://www.epa.gov/pesticide-registration/disinfectants-emerging-viral-pathogens-evps-list-q>

Laundering

Student Housing uniforms should be laundered after every shift, under normal operations.

Trash Removal

Employees should follow normal trash disposal procedures.

Immediately after completing cleaning and disinfecting, employees should:

1. Sanitize and disinfect towels (or dispose of them) and equipment after use.
2. Remove PPE and place disposable PPE in trash bag after leaving space.
3. Trash bag can be disposed of in regular trash.
4. Immediately wash hands with soap and water for 20 seconds.

UCI EMPLOYEE REQUIREMENTS

Cleaning and disinfection guidance in this section applies when there is a suspected or confirmed case of Monkeypox.

Employees working in these spaces should have relevant experience in performing the job. Supervisors should provide experienced employees to assist new employees or work with the supervisor prior to starting job duties.

The following safety training is required for these employees. Contact EHS for assistance, if necessary.

- Safety Fundamentals training – available online at UC Learning Center
- Hazard Communication training – available online at UC Learning Center

Areas Visited by Person(s) with Suspected/Confirmed Monkeypox

The following procedures apply to:

- Isolation rooms
- Common areas in isolation spaces, including:
 - Elevators, lobbies, corridors, and stair ways, primarily those with high foot-traffic
 - Laundry rooms, kitchens, and bathrooms
 - Other areas with frequently contacted surfaces (i.e. doorknobs, windows, etc.)

EH&S strongly discourages employees from entering any isolation rooms if/when it is occupied.

Staff who enter isolation areas should wear a gown, gloves, eye protection, and a NIOSH-approved particulate respirator equipped with N95 filters or higher. Staff may be required to comply with the Cal OSHA Respiratory Protection program.

If there has been a sick person or individual, who tested positive for Monkeypox in Student Housing, facilities should be cleaned and disinfected as soon as possible after the person vacates the space.

Individuals with Monkeypox who are isolating alone at home should regularly clean and disinfect the spaces they occupy, including commonly touched surfaces and items, to limit contamination. Perform hand hygiene with soap and water.

Individuals who have recovered from Monkeypox and whose isolation period has ended should conduct a thorough disinfection of all the spaces within the space that they had been in contact with. Follow the steps below to minimize risk of infection to others after recovery.

Prior and immediately before entering all spaces, employees should:

Put on the following minimum PPE prior to entering:

- Face coverings (avoid touching face)
- Slip resistant shoes and/or safety glasses or goggles (if applicable)
- Disposable gloves

If cleaning and disinfection is performed by someone other than the person with Monkeypox, that person should wear, at a minimum, disposable gloves and a respirator, such as an N-95, or a well-fitting mask.

- Standard clothing that fully covers the skin should be worn, and then immediately laundered according to recommendations below.
- Hand hygiene should be performed using an alcohol-based hand rub (ABHR), or soap and water if ABHR is unavailable.

Before cleaning and disinfecting

- Close off areas used by the person who is sick and do not use those areas until after cleaning and disinfecting.

Clean and disinfect in the following order:

1. General waste containment
 - a. Collect and contain in a sealed bag any soiled waste such as bandages, paper towels, food packaging, and other general trash items.
2. Laundry
 - a. Gather contaminated clothing and linens before anything else in the room is cleaned. Do not shake the linens as this could spread infectious particles.
3. Hard surfaces and household items
4. Upholstered furniture and other soft furnishing
5. Carpet and flooring
6. Waste disposal

While cleaning and disinfecting

- Use products from EPA List Q for Tier 1 viruses according to the instructions on the product label.
- At a minimum, wear disposable gloves and a respirator or well-fitting mask.
- Standard clothing that fully covers the skin should be worn, and then immediately laundered. Separate from other laundry. Wash with hot water and detergent.
- Focus on disinfecting items and surfaces that were in direct contact with the skin of the person with Monkeypox, or often in the presence of the person with Monkeypox, during isolation. If unsure, disinfect.
- Do not dry dust or sweep as this may spread infectious particles.
- Wet cleaning methods are preferred such as disinfectant wipes, sprays, and mopping.
- Vacuuming is acceptable using a vacuum with a high-efficiency air filter. If not available, ensure the person vacuuming wears a well-fitting mask or respirator.
- Ensure safe and correct use and storage of cleaning and disinfectant products, including storing such products securely and using PPE needed for the cleaning and disinfection products.

In addition to the procedures listed above, employees should follow the Centers for Disease Control (CDC) guidelines for disinfecting surfaces:

When disinfecting **hard (non-porous)** surfaces, employees should:

1. Allow proper ventilation during and after application of disinfectant.
2. Check if surfaces are dirty. If dirt is present, clean with a mix of soap and water. Wipe the surface then proceed cleaning with disinfectant for the required contact time. Follow manufacturer's instructions.
3. The surface should be visibly wet for the duration of the contact time. Wiping the product prematurely from the treated surface will reduce the product's effectiveness.
4. If the surface is not dirty, proceed with disinfectant for the required contact time. Follow manufacturer's instructions.
5. Wipe down surfaces.
 - This includes surfaces like tables, countertops, door handles, toilet flush handles, faucets, light switches, and floors.
 - Include interior surfaces of refrigerator, freezer, other appliances, interior cabinet spaces, or drawers if they have been accessed by the person with Monkeypox.
6. If wiping down surfaces such as toilets, bathroom stalls, or sinks, employees may use a disposable mop to wipe surfaces and increase the distance between themselves and surfaces.

7. Items and surfaces that have likely not been in contact with the person while sick with Monkeypox do not need to be disinfected.
 - This includes clothing and items in drawers or boxes that have not been in contact with, or in the direct presence of the person with Monkeypox.
8. Wash soiled dishes and eating utensils in a dishwasher with detergent and hot water or by hand with hot water and dish soap.

When disinfecting **soft (porous) surfaces** such as carpeted floor and drapes, employees should:

1. If the person with Monkeypox had direct skin contact and/or excessive drainage of fluids from rashes onto soft furnishings, such as upholstered furniture, carpets, rugs, and mattresses, steam cleaning can be considered.
2. If the person with Monkeypox had minimal contact with soft furnishings, disinfect the surface with a surface-appropriate disinfectant.
3. **Remove visible contamination** if present and clean with appropriate cleaners indicated for use on these surfaces.
4. Otherwise, use products EPA-approved disinfectants that are suitable for porous surfaces. After application, follow manufacturer's instructions and contact times.

When disinfecting **electronics** such as tablets and remote controls, employees should:

1. Remove visible contamination if present.
2. Follow the manufacturer's instructions for all cleaning and disinfection products.
3. If no manufacturer guidance is available, use alcohol-based wipes with at least 70% alcohol. When not available spray disinfectant on paper towel and wipe down surface.
4. Dry surfaces thoroughly to avoid pooling of liquids.

EHS recommends that only employees **who are experienced and have taken the required safety training to clean these spaces** be allowed to proceed with the listed requirements and procedures.

Laundering

Used or contaminated clothing, linens and bedding materials, towels, and other fabric items should be contained until laundering. When at all possible, people with Monkeypox should handle and launder their own soiled laundry. Laundry should not be mixed with that of other non-infected individuals.

Follow these laundering procedures:

- Handle soiled laundry according to standard practices, avoiding contact with spots or stains from the rash that may be present on the laundry.
- Soiled laundry should never be shaken or handled in a manner that may spread infectious particles.
- Transfer soiled laundry items to be laundered in an impermeable container or bag that can be disinfected afterwards. Alternatively, a fabric bag may be used that can also be laundered along with the soiled items.
- **Wash laundry in a standard washing machine with detergent, following label instructions. Laundry sanitizers may be used but are not necessary.**

Trash Removal

For employees removing household waste from residences with suspected or confirmed (isolation)

Monkeypox infection, EHS recommends the following:

For waste/trash located **inside** Residences:

- Student residents to review instructions listed under Appendix B and Appendix C for cleaning and waste management guidance.
- Trash bags may be removed for disposal if they are outside the room/residence. When removing waste/trash located **outside** residences, employees should:
- Dispose of the sealed trash bag as regular trash in a dumpster.

For cleaning and disinfecting for all Residents, please review instructions listed under Appendix B.

Note: If the residence of an individual who has been confirmed to have Monkeypox, per Student Housing instructions, Resident(s) with positive/suspected Monkeypox are responsible for cleaning and disinfecting their assigned area(s). Please refer to Appendix B and Appendix C for cleaning and waste management considerations for Resident(s).

EHS strongly discourages employees from entering any isolation rooms if/when it is occupied.

Staff who enter isolation areas should wear a gown, gloves, eye protection, and a NIOSH-approved particulate respirator equipped with N95 filters or higher. Staff may be required to comply with the Cal OSHA Respiratory Protection program.

Appendix A | Personal Protective Equipment (PPE) and Safety Training

The following table summarizes the required Personal Protective Equipment (PPE) and safety trainings that Student Housing employees should take before starting the job tasks listed in this guidance document.

PPE and Training Requirements for Regular Cleaning and Disinfecting Activities

		Disposable Glove	Slip Resistant Shoes/ Cover	Safety Glasses		Splash Resistant Goggles	Safety Fundamentals	Hazardous Communication	Bloodborne Pathogens (BBP)
Procedure		PPE				Relevant Training			
Cleaning* with the Following Products:									
Germicidal Ultra Bleach (contact time: 5 minute)		X	X			X	X	X	X
Swish Disinfectant Cleaner Aerosol (contact time: 10 minutes)		X	X			X	X	X	X
Cleaning and Disinfecting with the Following Products:									
730 HP Disinfectant Cleaner (contact time: 5 minutes)		X	X			X	X	X	X
764 Lemon Quat Disinfectant Cleaner (contact time: 10 minutes)		X	X			X	X	X	X
910 Finale FS No Rinse Sanitizer (contact time: 10 minutes)		X	X			X	X	X	X
Buckeye Terminator (contact time: 10 minutes)		X	X			X	X	X	X
Cell Block 64 (contact time: 10 minutes)		X	X			X	X	X	X
DBBC Disinfectant Bathroom and Bowl Cleaner (contact time: 10 minutes)		X	X			X	X	X	X
Morning Mist (contact time: 10)		X	X			X	X	X	X
Oxivir Tb (contact time: 1 minute)		X	X			X	X	X	X
Oxivir Wipes (contact time: 1 minute)		X	X			X	X	X	X
TB-Cide Quat (contact time: 10 minutes)		X	X			X	X	X	X
Virex TB (contact time: 3 minutes)		X	X			X	X	X	X
Other Custodial Duties (vacuuming, sweeping, dusting, etc.)		X	X	X			X	X	X
Trash Disposal		X	X	X			X	X	X

*Cleaning products are not disinfectants.

Additional PPE and Training Requirements for Cleaning and Disinfecting Areas Visited by a Suspected/Positive Monkeypox Case

	Disposable Nitrile Glove	Slip Resistant Shoes/Cover	Safety Glasses	Splash Resistant Goggles	Safety Fundamentals	Hazardous Communication	Bloodborne Pathogens (BBP)
Procedure	PPE				Relevant Training		
Cleaning* with the Following Products:							
Germicidal Ultra Bleach (contact time: 5 minute)	X	X		X	X	X	X
Cleaning and Disinfecting with the Following Products:							
730 HP Disinfectant Cleaner (contact time: 5 minutes)	X	X		X	X	X	X
764 Lemon Quat Disinfectant Cleaner (contact time: 10 minutes)	X	X		X	X	X	X
910 Finale FS No Rinse Sanitizer (contact time: 10 minutes)	X	X		X	X	X	X
Buckeye Terminator (contact time: 10 minutes)	X	X		X	X	X	X
Cell Block 64 (contact time: 10 minutes)	X	X		X	X	X	X
Morning Mist (contact time: 10)	X	X		X	X	X	X
Oxivir Tb (contact time: 1 minute)	X	X		X	X	X	X
Oxivir Wipes (contact time: 1 minute)	X	X		X	X	X	X
TB-Cide Quat (contact time: 10 minutes)	X	X		X	X	X	X
Other Custodial Duties (vacuuming, sweeping, dusting, etc.)	X	X	X		X	X	X
Laundry Duties	X	X			X	X	X
Trash Disposal	X	X	X		X	X	X

Please Note: Chemical products listed are EPA-approved disinfectants for use against [Emerging Viral Pathogens](#). To find a product on List Q, enter the first two sets of the chemical's EPA registration number found on the SDS or specification sheet into the search bar above the first column of List Q. The number will generate the product and/or its equivalent if it is an EPA approved disinfectants for use against Tier 1 virus.

For example, if EPA Reg. No. 12345-12 is on List Q, you can buy EPA Reg. No. 12345-12-2567 and know you're getting an equivalent product. You can find this number by looking for the EPA Reg. No. on the product label.

If you are unable to find a product on the list, look at a different product's label to confirm it has an EPA registration number and that it is effective against Tier 1 viral pathogens or vaccinia is listed as a target pathogen.

Appendix A | Personal Protective Equipment (Continued)

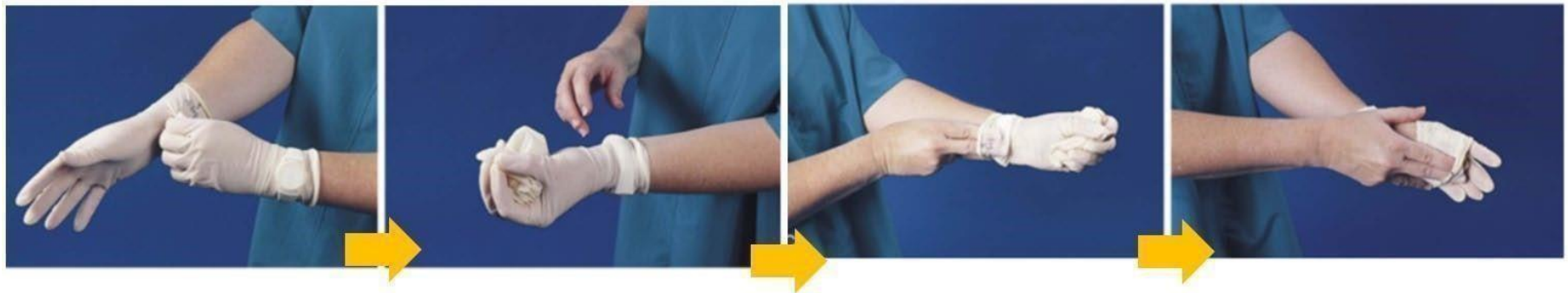
Putting on and Removing Disposable Gloves:

When **putting on** gloves, employees should:

1. Check for holes
2. Put on gloves
3. Make sure the glove fits and is not too tight or too loose.

When **removing** gloves, employees should:

1. Pinch glove and roll it down until the glove is completely off in a ball in the palm of the other hand.
2. Then slide a finger(s) down and inside the glove on the other hand and pull it off until it is balled around the first glove.
3. Throw gloves away immediately and wash hands with soap and water for 20 seconds.



Appendix B | Cleaning and Waste Management Guidance for Suspected/Positive Residents

Per Student Housing procedures, Resident(s) with positive/suspected Monkeypox are responsible for cleaning and disinfecting their assigned area(s). Resident(s) should review the following instructions regarding the cleaning of residences and disposal of waste.

General Recommendations

Resident(s) will be provided with cleaning supplies for their assigned area before entering quarantine/isolation units.

These include but are not limited to:

- Trash bags
- Linen
- Disinfectant(s)
- Paper towel
- Gloves

When cleaning and disinfecting, Resident(s) should:

- Wear disposable gloves
- Avoid touching face;

After cleaning and disinfecting, Resident(s) should:

- Remove gloves and place them in trash bag;
- Trash bag can be disposed of in regular trash;
- Immediately wash hands with soap and water for 20 seconds, as soon as possible.

Individuals with Monkeypox who are isolating alone should regularly clean and disinfect the spaces they occupy, including commonly touched surfaces and items, to limit contamination. Perform hand hygiene with soap and water.

Individuals who have recovered from Monkeypox and whose isolation period has ended should conduct a thorough disinfection of all the spaces within the space in which they had been in contact. Follow the steps below to minimize risk of infection to others after recovery.

If cleaning and disinfection is performed by someone other than the person with Monkeypox, that person should wear, at a minimum, disposable gloves and a respirator, such as a N95, or a well-fitting mask.

- Standard clothing that fully covers the skin should be worn, and then immediately laundered according to recommendations below.
- Hand hygiene should be performed using an alcohol-based hand rub (ABHR), or soap and water if ABHR is unavailable.

Before cleaning and disinfecting

- Close off areas used by the person who is sick and do not use those areas until after cleaning and disinfecting.

Clean and disinfect in the following order:

1. General waste containment
 - a. Collect and contain in a sealed bag any soiled waste such as bandages, paper towels, food packaging, and other general trash items.
2. Laundry
 - a. Gather contaminated clothing and linens before anything else in the room is cleaned. Do not shake the linens as this could spread infectious particles.
3. Hard surfaces and household items
4. Upholstered furniture and other soft furnishing

5. Carpet and flooring
6. Waste disposal

While cleaning and disinfecting:

- Use products from EPA List Q according to the instructions on the product label.
- At a minimum, wear disposable gloves and an N95 respirator or a well-fitting mask.
- Standard clothing that fully covers the skin should be worn, and then immediately laundered. Separate from other laundry. Wash with hot water and detergent.
- Focus on disinfecting items and surfaces that were in direct contact with the skin of the person with Monkeypox, or often in the presence of the person with Monkeypox, during isolation. If unsure, disinfect.
- Do not dry dust or sweep as this may spread infectious particles.
- Wet cleaning methods are preferred such as disinfectant wipes, sprays, and mopping.
- Vacuuming is acceptable using a vacuum with a high-efficiency air filter. If not available, ensure the person vacuuming wears a well-fitting mask or respirator.
- Ensure safe and correct use and storage of cleaning and disinfectant products, including storing such products securely and using PPE needed for the cleaning and disinfection products.

In addition to the procedures listed above, follow the Centers for Disease Control guidelines for disinfecting surfaces:

When disinfecting **hard (non-porous)** surfaces:

1. Allow proper ventilation during and after application of disinfectant.
2. Check if surfaces are dirty. If dirt is present, clean with a mix of soap and water. Wipe the surface then proceed cleaning with disinfectant for the required contact time. Follow manufacturer's instructions.
3. The surface should be visibly wet for the duration of the contact time. Wiping the product prematurely from the treated surface will reduce the product's effectiveness.
4. If the surface is not dirty, proceed with disinfectant for the required contact time. Follow manufacturer's instructions.
5. Wipe down surfaces.
 - This includes surfaces like tables, countertops, door handles, toilet flush handles, faucets, light switches, and floors.
 - Include interior surfaces of refrigerator, freezer, other appliances, interior cabinet spaces, or drawers if they have been accessed by the person with Monkeypox.
6. Items and surfaces that have likely not been in contact with the person while sick with Monkeypox do not need to be disinfected.
 - This includes clothing and items in drawers or boxes that have not been in contact with, or in the direct presence of the person with Monkeypox.
7. Wash soiled dishes and eating utensils in a dishwasher with detergent and hot water or by hand with hot water and dish soap.

When disinfecting **soft (porous) surfaces** such as carpeted floor and drapes, employees should:

1. If the person with Monkeypox had direct skin contact and/or excessive drainage of fluids from rashes onto soft furnishings, such as upholstered furniture, carpets, rugs, and mattresses, steam cleaning can be considered. Discuss with state or local health authorities for further guidance.
2. If the person with Monkeypox had minimal contact with soft furnishings, disinfect the surface with a surface-appropriate disinfectant.

3. **Remove visible contamination** if present and clean with appropriate cleaners indicated for use on these surfaces.
4. Otherwise, use products EPA-approved disinfectants that are suitable for porous surfaces. After application, follow manufacturer's instructions and contact times.

When disinfecting **electronics** such as tablets and remote controls, employees should:

1. Remove visible contamination if present.
2. Follow the manufacturer's instructions for all cleaning and disinfection products.
3. If no manufacturer guidance is available, use alcohol-based wipes with at least 70% alcohol. When not available, spray disinfectant on paper towel and wipe down surface.
4. Dry surfaces thoroughly to avoid pooling of liquids.

Laundering

Used or contaminated clothing, linens and bedding materials, towels, and other fabric items should be contained until laundering. When at all possible, individuals with Monkeypox should handle and launder their own soiled laundry. Laundry should not be mixed with that of other non-infected individuals.

Follow these laundering procedures:

- Handle soiled laundry according to standard practices, avoiding contact with spots or stains from the rash that may be present on the laundry.
- Soiled laundry should never be shaken or handled in a manner that may spread infectious particles.
- Transfer soiled laundry items to be laundered in an impermeable container or bag that can be disinfected afterwards. Alternatively, a fabric bag may be used that can also be laundered along with the soiled items.
- Wash laundry in a standard washing machine with detergent, following label instructions. Laundry sanitizers may be used but are not necessary.

Trash Removal

1. Collect and double bag the waste in a trash bag.
2. Seal the bag with an overhand knot.
3. Spray the exterior of the bag with a disinfectant.
4. Place bag **outside** the room/residence.
5. Trash bag can be disposed of as regular trash in a dumpster.

Appendix C | Cleaning and Disinfecting Guidance for all Student Residents

Based on information from the Centers for Disease Control (CDC) and California Department of Public Health (CDPH), student residents should follow these recommendations for cleaning and disinfecting their residence:

- Clean all "high-touch" surfaces every day, such as counters, tabletops, doorknobs, fixtures, toilets, phones, etc. Also, clean any surfaces that may have blood, stool, or body fluids on them. Use an EPA- approved disinfectant, as provided by Student Housing, and use according to the instructions on the label, including wearing gloves and having good ventilation during use of the product.
- After cleaning and disinfecting, remove and dispose of gloves.
- Immediately clean your hands with soap and water.
- Place all used gloves and other contaminated items in a lined container before disposing of them with other household waste.
- Resident(s) should perform hand hygiene frequently. Wash hands with soap and water for at least 20 seconds.
- Resident(s) should avoid sharing personal household items, dishes, drinking glasses, cups, eating utensils, towels or bedding with other people or pets in your home. After using these items, wash hands thoroughly with soap and water.