



Fire Stations and Coronavirus Precautions

A Hot Topic for Tennessee Municipalities

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Fire Stations and Coronavirus Precautions

Firefighters understand the concept of hot, warm, and cold zones in fire stations when it comes to keeping turnouts and fire contaminated gear out of the living areas of the station. But what about viruses and other pathogens? The practices used for fire contaminated gear do not work with pathogens. Therefore, firefighters need to practice more extensive contamination control to reduce the chance of spreading the coronavirus while at the fire station.

We are creatures of habit, and both at work and at home we use routines we rarely think about when we accomplish a task. Take for example going to get a cup of coffee, something we can do unconsciously while we carry on a conversation with someone else. What did you touch to get the cup of coffee? The cabinet handle to get the cup, the coffee pot, a drawer or container to get a spoon, the sugar or sweetener container, the creamer container, did you rest your hand, on or touch, the countertop? More importantly, what did you touch BEFORE you touched all those things?

Without being aware of it, we can spread pathogens throughout the fire station. When others then touch the things we touched, they become exposed. Because of this, it is essential that firefighters take a more aggressive stance towards keeping the fire station clean. Here are some recommendations to help reduce the risk of passing pathogens like the coronavirus on to others.

- Keep the bay doors down and the exterior doors locked to prevent people from just walking into the station. Restrict access to the fire station to on-duty fire department personnel only. Do not allow family members or friends to visit.
- For walk-in emergency calls, assess and treat the patient outside the station or in the apparatus bay, not inside any living space. For walk-in requests for non-emergency services, greet the person outside the station or in the bay if weather does not permit providing the service out-of-doors.
- Consider restricting donations from the public. People like to support firefighters and may bring food to the station. Unlike take-out food prepared in a commercial kitchen, the cleanliness of a home kitchen and the health of the person preparing the food is not regulated. If someone wants to donate food, recommend that they order take-out and have it delivered to the station.
- Clean and disinfect all surfaces in the station at least twice a day. These surfaces include door handles, doorknobs, sinks, faucets, all countertops, the refrigerator, the stove and oven, light switches, toilet areas, showers, exercise equipment, etc.
- If your station has an automatic dishwasher, use it to wash the dishes after a meal.

- In the bunkroom, clean and disinfect locker door handles, light switches, headboards, nightstands, table lamps, and other items in the bunkroom.
- Clean and disinfect surfaces in the apparatus bay, including hand railings, bay door control buttons, turnout gear storage racks, and vehicle exhaust system hoses, connectors, and controllers, etc.
- Clean and disinfect surfaces on the apparatus after a response, including door handles, control knobs and switches, the steering wheel, the radio controls and microphone, portable radios, latches and handles on cases, all tools and equipment used, etc.
- As much as possible, clean and disinfect on the scene before putting equipment back on the apparatus and before getting back in the cab. If it cannot be cleaned and disinfected on the scene, bag and tag potentially exposed tools, equipment, and gear at the scene for transport to the station. Clean and disinfect the exposed tools, equipment, and gear before returning it to service.
- For medical equipment, clean and disinfect items that touch the patient, including routinely used items such as the stethoscope and BP cuff.
- Pay attention to storage areas, and clean and disinfect racks and shelves that store supplies.
- Require that personnel do their uniform laundry and bedding at the fire station, and not at home (this assumes that your station has a clothes washer and dryer).
- Run a sanitizing cycle in the washing machine between sets of uniforms and other laundry.
- Run a sanitizing cycle in the gear washer-extractor between sets of turnouts.

Furniture presents a challenge when it comes to cleaning and disinfecting. Fire stations have chairs, tables, recliners, sofas, and beds. Chairs, recliners, and sofas are used constantly during a 24-hour shift. Some furniture may have hard surfaces that can be cleaned and disinfected easily, but other surfaces may be made of leather, synthetic leather, vinyl, or microfiber materials, and these items should be cleaned according to the manufacturer's recommendation. Microfiber is a breathable cloth, which means that pathogens can penetrate the fabric and get into the cushion material, and microfiber materials should be avoided for fire station furniture. Many disinfectants can damage chair, recliner, sofa, and mattress fabrics, so use soap and water to clean those surfaces. If you have microfiber furniture coverings, contact the manufacturer for advice on how to clean and disinfect the fabric. After cleaning, and before using a disinfectant on those surfaces, check the label to see if it is safe for use on the specific type of material.

For the bunkroom, make sure that every mattress has a protective mattress cover. Remove and wash the cover frequently. Firefighters may want to have their own mattress pad for added protection. Firefighters should remove their bedding at the end of the shift and store the bedding in a plastic container with a lid between

shifts. Wash the bedding often, including the mattress pad. To help keep the bedding clean, take a shower before going to sleep.

Pay attention to items you touch frequently without realizing it. Some examples include computer keyboards, the computer mouse, touchscreens, tablets, printers, telephones, cell phones, and the remote control for the TV. If your station has a wall map, is it covered in plexiglass, and how many times a day does someone touch it?

Encourage frequent handwashing for at least 30 seconds. Washing with soap and water is more effective than using hand sanitizer. Washing with soap and water removes dirt, oil, and pathogens from your skin, while hand sanitizer kills pathogens, but the dead pathogens remain on your skin. Use hand sanitizer only when soap and water is not available.

Look for gaps in your personal protection practices. For example, we are told to sneeze in our elbow (hopefully you have a long-sleeved shirt or jacket on when you do this), which prevents the spreading of droplets, but now your elbow has germs and viruses on it. What does your elbow touch after you sneezed in it? Other firefighters or people if you elbow bump instead of shaking hands or fist bumping? The kitchen table if you put your elbows on the table? The chairs in the lounge? The armrests on the chair in the watch desk area? The inside of a turnout coat or jacket if you put one on? As one can see, it is easy to spread contamination without taking precautions.

Cleaning versus Disinfecting

Removing the coronavirus requires both cleaning and disinfecting. Cleaning is the removal of dirt, germs, impurities, etc. Disinfecting is killing germs and viruses on surfaces. Cleaning is especially important before disinfection if the surface has blood or body fluids on it. Clean the surface first with soap and water and allow the surface to dry before disinfection.

A bleach solution of $\frac{1}{3}$ -cup of bleach to a gallon of water will kill the coronavirus. Commercial products are also available. When using commercial products, check the label to see if the product is an effective virucide for coronavirus. The official name for the virus that causes COVID-19 is the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), so a virucide labeled as effective against SARS should be effective against the coronavirus that causes COVID-19.

When soap and water cannot be used, sanitizing wipes and bleach wipes that have been approved by the Environmental Protection Agency (EPA) to use against a coronavirus can be used to clean and disinfect hard surfaces. If commercial wipes are not available, use a rag or cloth and a spray bottle.

Disinfectants effective against the coronavirus are registered under EPA Registration Number 1839-166 or 1839-169. Follow the manufacturer's directions when using commercial products.

The EPA has released a list of disinfectants for use against SARS-CoV-2. The list is available here: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>.

Be sure to allow enough contact time for the cleaning and disinfecting agents to work. Many commercial products will include directions on how long the product needs to remain on the surface before being removed. A "swipe and done" approach is not enough. Failure to provide enough contact time may result in incomplete cleaning or disinfection. A contact time of up to 10 minutes is not uncommon for some disinfectants.

With the COVID-19 pandemic, cleaning around the fire station must be a top priority for all personnel. Frequent cleaning and other precautions, such as covering coughs and sneezes, will prevent the spread of the virus, protect the crew so they can stay on-the-job serving their community safely, and can prevent someone from bringing the virus home to their family.



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