In days gone by we all have turned lights on and off, picked up our smartphones, touched door handles, vending machines, credit card readers, elevator buttons, and many other items without thinking twice about what bacteria or virus might reside on their surfaces. Today, given the current climate of COVID-19, although our awareness to “contamination” has been heightened through daily TV briefings and social media, the role each of us plays in breaking the chain of cross-contamination is of critical importance.

WHAT IS CROSS-CONTAMINATION?

The term “cross-contamination” is frequently used in reference to the healthcare and food industries, however cross-contamination can occur in the workplace, regardless of industry type. Basically, cross-contamination occurs when a bacteria or virus is unintentionally transferred from one person or surface to another. Research has shown some bacteria/viruses can remain alive on surfaces for hours to days. This ability to remain viable on commonly touched surfaces means that you are much more likely to get infected through cross-contamination than from a cough or sneeze.

COMMON AREAS OF CROSS-CONTAMINATION

<table>
<thead>
<tr>
<th>Hard Surfaces/Objects</th>
<th>Soft Surfaces</th>
<th>Hands</th>
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</thead>
<tbody>
<tr>
<td>Sink faucet handles, microwave doors, water fountain buttons, vending machines, office equipment, work tools, forklifts, counter-tops, personal protective equipment (PPE), drinking fountains, etc.</td>
<td>Bedding, cloth table coverings, towels, upholstered furniture, carpeting, privacy curtains, healthcare worker apparel, resident/patient apparel, PPE [e.g. lab coats, scrubs, face masks, gloves]</td>
<td>As the primary carriers of dirt, viruses, and bacteria, our hands contact many different surfaces throughout the day. Pathogens can stay alive on hands for up to three hours.</td>
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METHODS FOR PREVENTION OF CROSS-CONTAMINATION

- **Personal Hygiene/Soap and Hand Sanitizers.** Hand hygiene is the cornerstone for the prevention of cross-contamination.
  - **Soap and Water** – Wet your hands and apply enough soap to create a good lather. Scrub your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice. Focus on thumbs, between fingers, fingertips, wrists and back of hands. Once you’ve followed hand washing steps, you should then thoroughly rinse with warm running water and dry with a clean, disposable paper towel. Paper towels are the most hygienic way to dry your hands.
  - **Alcohol-Based Hand Sanitizer** – The CDC suggests that hand sanitizer should contain at least 60% alcohol. Apply enough of the product to the palm of your hand to wet your hands completely. Rub your hands together, covering all surfaces, for up to 25 seconds or until they're dry. If your hands are visibly dirty, however, wash with soap and water.

- **Remember:** GLOVES ARE NOT A SUBSTITUTE FOR HAND HYGIENE

- **Disinfectant Sprays & Wipes.** The EPA [Environmental Protection Agency] and National Pesticide Information Center have released lists of approved cleaning chemicals authorized to help clean and reduce the spread of the coronavirus. The agency advises consumers to follow directions for use on product labels and pay “close attention to the contact time for the product on the treated surface.” This means that chemicals and disinfectants used need to stay wet on a surface for specified period in order to ensure effectiveness.

www.memicsafety.com
• **Perform Routine Environmental Cleaning.** Both the physical action of cleaning surfaces and applying a disinfectant are critical in reducing pathogens. A wide variety of cleaning agents and disinfection technologies are commercially available. Other products for consideration include use of disposable cleaning products including mops, paper products and microfiber cloths.

• **Implement a Color-Code System for Cleaning.** The color coding system uses red for high-risk areas like toilets and urinals; yellow for lower-risk restroom cleaning such as mirrors and sinks; blue for any other general cleaning such as dusting and wiping in your facility; and finally, green for food-related surfaces. Make sure cleaning tools and equipment are color-coded and are used only in their designated areas and stored separately as well. This practice can dramatically reduce cross contamination and significantly lower risk of virus/bacteria transmission.

• **Personal Protective Equipment [PPE].** Preventing spread of infection and cross-contamination, particularly in healthcare, relies on effective use of PPE—gloves, face masks, air-purifying respirators, goggles, face shields, respirators, and gowns. Putting on PPE may seem like a basic part of your everyday procedure, but it is a skill that must be practiced to ensure PPE is not the source of cross-contamination in the workplace.

• **Education and Training.** Educate staff about cross-contamination given that many people are unaware that they are causing it. For example, have staff don disposable gloves, apply ketchup to the gloves, and see if they can get the gloves off without “cross-contaminating” themselves or other surfaces in the training area. This type training is “essential” and should be scheduled on a periodic basis.

• **Minimizing Contact among Workers and Clients.** Maintain a physical distance of at least six feet using soft barriers that can include use of tables, ropes, signs, and floor markings. Other measures may include modifying work procedures and/or work hours.

• **Work Equipment.** Discourage workers from using other workers’ phones, desks, or other work tools and equipment. BEFORE and AFTER use of items that may have been contacted or used by other workers, clean with Visual Display Unit [VDU] antibacterial and/or approved disinfection wipes.

• **Laundry of Soiled Linens.** Linen suspected to have come in contact with harmful bacteria or viruses must be washed separately from other items. Linen refers to anything that is made of cloth including bedding, towels, and clothing. Once linen has been decontaminated it must be stored separately from contaminated linen to prevent cross-contamination. Establish separate “Clean Linen” and “Soiled Linen” storage areas. Wear appropriate PPE when handling soiled linens.

RESOURCES:

CDC: *When and How to Wash Your Hands*

EPA List N: *Disinfectants for Use Against SARS-CoV-2*

**NURSE SHOWS HOW CROSS-CONTAMINATION HAPPENS**