



Episode 10: Stepping Up Your Disinfection

OUTBREAK PREVENTION

How Pathogens are transmitted

Pathogens can be transmitted a few ways depending on the type. They can be spread through skin contact, bodily fluids, airborne particles, contact with feces, and touching a surface touched by an infected person.

What has come to light in recent years is the role of the environment in the spread of infection. People can be exposed to these pathogens through contaminated surfaces or equipment, or more likely, by the contaminated hands of another person. Hand hygiene and environmental hygiene play a key role in preventing transmission, but as you can see, the risk is a reality because a person has a higher risk of acquiring certain pathogens if the area they are in was previously occupied by an infected person.

Pathogens are frequently shed in the environment and can survive on surfaces for a long time. The common cold, for example, can live on a surface for up to a week. This is the same for Norovirus, that you may find on a cruise ship. E. coli, a type of bacteria that normally lives in your intestines, and the cause of food poisoning, can live on surfaces up to 16 months. Cleaning is important!

Challenges to Proper Cleaning and Disinfection

There are many challenges faced in cleaning and disinfection. Budgets are constantly cut, with little time to clean. Disinfectant contact times, the time that the surface needs to remain wet, to kill the pathogens, may be too long. There are also limitations with the actual cleaning ability of the disinfectants due to the ingredients, the poor laundering practices or in disinfection due to incompatibility of the cleaning tools (mops and cloths) that may cause a reduction in the active ingredients that are on the surface to kill the pathogens. Another issue of disinfectants is the damage they may cause to surfaces with their harshness to people, assets and toxicity.



STEPPING UP YOUR DISINFECTION

Ensure Best Practices and Standardized Process

Assessing your facility is really critical. It is important to understand optimizing performance throughout. There may be certain procedures that are deemed a daily part of cleaning and disinfection and others that are move of an event, or response to a particular situation. For example, if there were a known outbreak or case of the flu in the organization, you may want to clean the person's work area, and common touch areas where that person may visit. There also are standard areas that are deemed higher touch areas, and having a clear protocol for cleaning and disinfecting them is key. Knowing best practices and what should be done, by whom and how often are really key, as there is a higher assurance that something won't be missed.

Shorten The Contact Time Required

Another way to step up disinfection is to evaluate the time to do the job and the tools and products. In order for a disinfectant to be effective, surfaces must remain wet for the contact time on the label. What this means is that when the surface is wiped, it cannot dry before the pathogens die. Per the EPA it must be visibly wet or the product should be reapplied. Shorter is better, and many of the prior 10 minute products have been replaced over time with products that can achieve the dwell time more reasonably, given the time to do the job and the product's shorter contact time. Reasonably, ten minute products would need to be applied more than once, and either the staff may not do this, or they will not be as productive if they do. There are many products out there, and having the staff ability to step up disinfection with a shorter contact time is key.

Enhance The Cleaning Ability of Products

Cleaning and the actual removal of pathogens is really key. Having a clean surface with little soil load is part of an effective disinfection process. Many products may be good cleaners, and have longer contact times as a disinfectant. Conversely, many disinfectants may have shorter contact times, and not be a good cleaner. It is important to assess both, as visible cleanliness is a key component of the perception and effective disinfection is critical to a hygienic environment. There are many options, and tradeoffs, and understanding both are very key to success.

Also, knowing the tools used may also contribute to enhanced success. Studies have shown that some tools, such as cotton rags, may bind with certain chemicals and the active ingredients may become ineffective as they attract to the cleaning cloth and are not imparted on the surface. It is important to step up knowledge and application of these tools as well, and understand their characteristics.

Another perspective of the cleaning ability is the cleanliness of the tools / cloths and mops. There have been studies demonstrating that 'clean' product from the laundry may not actually be clean and one study demonstrated that 93% of reusable towels, fresh from the laundry contained pathogens. This may inhibit



cleaning and disinfection success and moving pathogens versus removing them from surfaces could be the result.

EASE OF USE / CONVENIENCE

People will use if accessible

This is a part of safety and location. Having the product in the proximity will help users be able to access on demand when needed. Having the product in a more convenient, ready-to-use format is also helpful.

People will use if pleasant

There have been situations where people did not like odor of a product, the way it made them feel, and they were less likely to clean thoroughly or use the product in the right manner.

People will use if safe

Having a product that the user feels is safe and does not cause them harm is a key factor to the user confidence in the product. They are more likely to use a product more often, if they don't feel the product will cause them harm. There are also considerations of the assets on which a product is

Ready-to-use, on demand is best

Convenience is a key factor in

Best Disinfectant Characteristics for Users

- Non-toxic
- Non-corrosive to skin
- Non-irritating to eyes
- Low / no odor
- No added dyes or fragrances
- Best possible safety rating
- Safe for use on commonly-touched surfaces

In addition, these should be pleasant and easy-to-use, access, and understand.

Consider Ease of Use / Convenience

If people feel safe using a product, and it is accessible, they are more likely to use. Consider the products, the safety features and the ability to get product.

Other factors – overall experience

There are many other factors to consider as you look at this and having a great experience with user tools, and support for them. Having an effective solution with the enablers to make it successful for use is key to optimizing the performance.