

TAKING A STANCE ON DISINFECTION

Three Positions on Antimicrobial
Coatings, UV Lighting, and
Electrostatic Spraying as
Disinfection Solutions

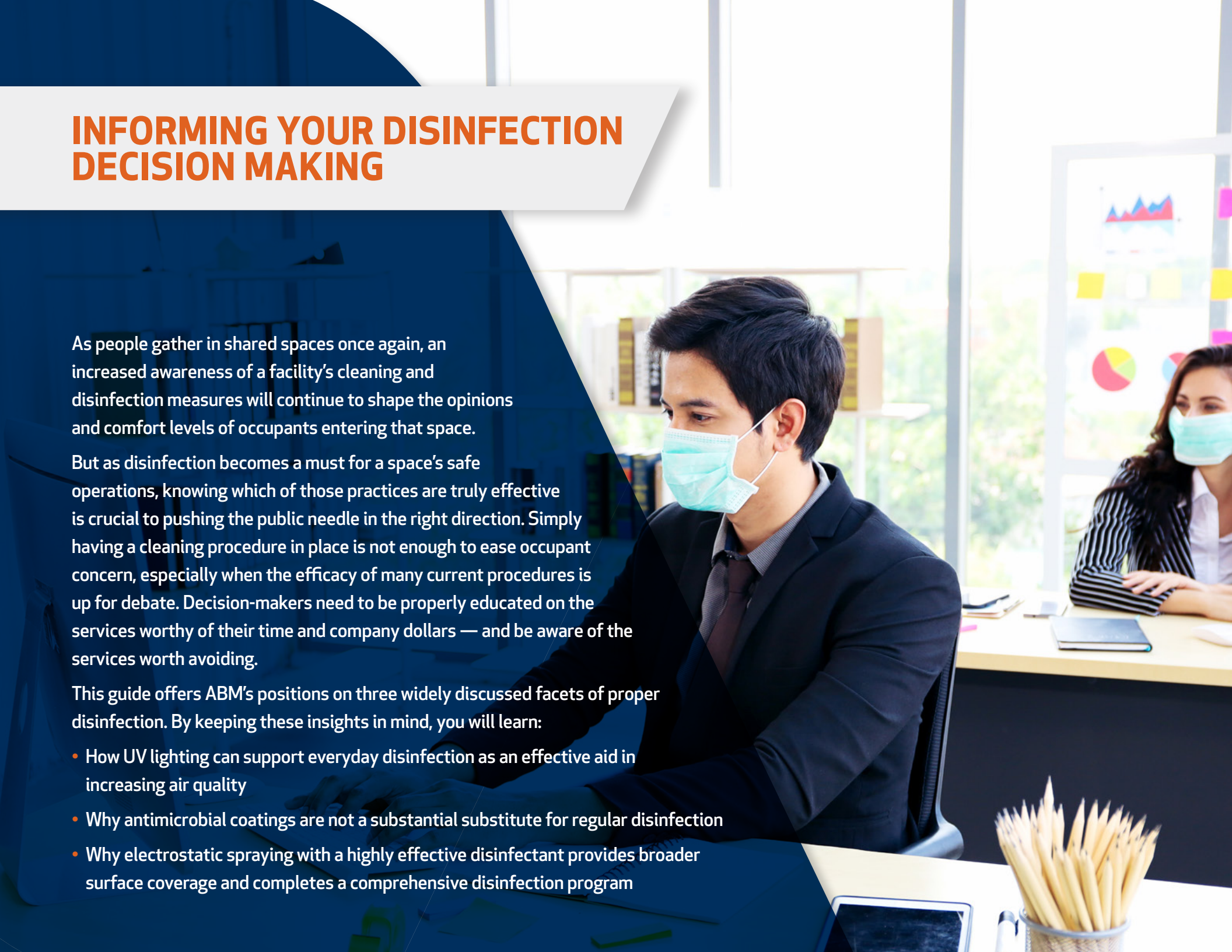
INFORMING YOUR DISINFECTION DECISION MAKING

As people gather in shared spaces once again, an increased awareness of a facility's cleaning and disinfection measures will continue to shape the opinions and comfort levels of occupants entering that space.

But as disinfection becomes a must for a space's safe operations, knowing which of those practices are truly effective is crucial to pushing the public needle in the right direction. Simply having a cleaning procedure in place is not enough to ease occupant concern, especially when the efficacy of many current procedures is up for debate. Decision-makers need to be properly educated on the services worthy of their time and company dollars — and be aware of the services worth avoiding.

This guide offers ABM's positions on three widely discussed facets of proper disinfection. By keeping these insights in mind, you will learn:

- How UV lighting can support everyday disinfection as an effective aid in increasing air quality
- Why antimicrobial coatings are not a substantial substitute for regular disinfection
- Why electrostatic spraying with a highly effective disinfectant provides broader surface coverage and completes a comprehensive disinfection program





Shedding Light on UV Disinfection Technology

More than a century ago, the first research findings were released demonstrating how quickly fatal direct sunlight is to most bacteria. Since that time, extensive research has confirmed that UV light is beneficial in reducing environmental pathogens and protecting healthcare patients and building occupants from contaminated air, surfaces, and water.

The use of UV has resulted in a non-chemical, no-touch step following cleaning in environmental disinfection programs. But only the correct usage and application of UV disinfection technology will yield the best results.

- There are multiple systems and methods for implementing UV disinfection, including: installed lighting, HVAC systems, upper room UV systems, and mobile UV systems.
- The CDC has recognized UV-C (Ultraviolet Germicidal Irradiation) as effective for water, air, and surface disinfection treatments (in combination with proper cleaning, as heavy surface soil can block UV light).
- While the technology seems straightforward, multiple major factors determine UV's efficacy against bacteria, including the wavelength of the UV, the length of time the microorganism is exposed to UV, and the intensity of the UV.

- To balance the critical need for air and surface disinfection utilizing UV technologies, products should be vetted for safety and efficacy.
- While multiple methods of UV disinfection are effective when used correctly, ABM does not recommend wand devices. A major challenge for these devices is the inability of the light source to emit the UV intensity and dosage required for disinfection.

UV light technology is an effective tool to complement a comprehensive cleaning and disinfection program. However, the right method of deployment and proper training is essential to ensure efficacy and safety. Additionally, UV light alone is not enough to achieve thorough disinfection and must be paired with manual cleaning in order to provide safer, healthier environments.

UV light is only one of several disinfection methods with an established history. Yet despite the public recognition of these methods, some offerings such as antimicrobial coatings claim results that have not been independently verified, despite their typically high price points.



Evolving Information Regarding Antimicrobial Coatings

As businesses, schools, airports, and other facilities reopen or return closer to previous occupancy levels, facility managers are doing their best to provide safer, healthier environments. With so many new products hitting the market, it is difficult to discern truth from speculation. In partnership with ABM's Expert Advisory Council, below is our position and findings regarding antimicrobial coatings and other "self-cleaning" products.

- Antimicrobial coatings and films have been around for more than 30 years. This is not new technology.
- Companies claim or imply that these products provide an extended barrier against the COVID-19 virus — in some cases up to 90 days — after the initial application. There are no products on the market that have been independently verified for this claim.
- The Centers for Disease Control and Prevention have not provided a recommendation that suggests antimicrobial coatings offer any enhanced protection from the spread of bacteria and germs.
- The EPA and CDC have stated that application of these residual antimicrobials does not lessen the frequencies required for proper cleaning and disinfection.

- It is also not clear if the antimicrobial claims would hold up if a given facility continues to employ a disinfection program that requires damp wipe disinfection of the same surfaces multiple times per day.
- The cost for these products or their application is often many times higher than our most expensive disinfectant.

ABM can install coatings, films, and "self-cleaning" products in your facility if you find value in these products even after considering the talking points above. These solutions should not replace disinfection programs since there is currently no science confirming the effectiveness of the products.

Coating surfaces with a protective solution is a well-intentioned approach in the defense against pathogens. However, broader coverage of surfaces with higher quality disinfectants proven to be effective against common bacteria and viruses is the best path for applying this solution. When applied at the recommended intervals, the use of an electrostatic sprayer can better position surfaces for long-term coverage and protection.



How Electrostatic Spraying Takes Disinfection Farther

Periodic, broader coverage electrostatic spraying with EPA-approved disinfectants is an important component of any effective disinfection program. But how does it work, and why is it different than frequent, high-touch point manual disinfection?

- Electrostatic spraying uses charged particles to coat surfaces and provide for easy, large-scale dispersal of EPA-registered disinfectants.
- This disinfectant dispersal method increases pathogen droplet attraction, which may be helpful to slow the spread of COVID-19.
- Electrostatic spraying of disinfectants can afford cleaning professionals the ability to disinfect larger spaces and hard-to-reach surfaces.
- ABM has selected certain EPA-registered disinfectants from the EPA's List N to be used with electrostatic and other sprayers.
- Disinfectants that are found on List N are deemed effective against SARS-CoV-2 and are appropriate to be used to disinfect environmental surfaces that may be contaminated with this novel virus.
- Although the EPA continues to study electrostatic spraying of disinfectants, there is evidence that electrostatic spraying is an effective method of disinfection, especially for hard-to-reach areas or remote surfaces that may not have been disinfected through manual processes.
- This technology, as part of an overall cleaning and disinfection program, can help create a safer, healthier environment while decreasing the risk of cross-contamination.

Summary

Just like the people, spaces, and surfaces they aim to protect, not all cleaning and disinfection services are created equally. By exploring the options best suited for your facilities and occupants' disinfection needs, you are providing the groundwork for a more informed decision-making process.

To learn more about effective disinfection for your whole facility, please visit [EnhancedClean.com](https://www.enhancedclean.com) and [EnhancedFacility.com](https://www.enhancedfacility.com) or call **866.624.1520** and press 3.

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