LATEST TECHNOLOGY TO PROPERLY DISINFECT A FACILITY FOR RE-ENTRY & ONGOING OPERATIONS DURING A PANDEMIC

Hosted by:
John Pieske
President / CEO of ABBCO Service Corporation

www.abbcoserv.com
800-246-3221
COMPANY EXPERIENCE

• ABBCO Service Corporation was founded in St. Louis, MO in 1955 and still headquartered here.

• We operate in 12 states specializing in the cleaning and maintenance of commercial office, industrial and educational facilities.

• ABBCO is a charter member of the Building Service Contractor’s Association International (BSCAI) since 1965.

• We are also members of IFMA, BOMA, ISSA, ISNetworld, MOASBO & ILASBO.

• ABBCO is certified with Honors from the International Sanitary Supply Association as a CIMS & CIMS-Green Building company. This is the Cleaning Industry Management Standard.

• ABBCO provides service to over 30 million sq/ft each day and employs 700 workers.

• ABBCO has been providing Electrostatic Disinfection Spraying since 2017 when it was invented and during this pandemic we are spraying over 1 million sq/ft every week.
THE CLEANING INDUSTRY PRE-COVID-19

A trend that started in our industry after the Great Recession was to reduce cleaning frequencies to save money. It was called (Skip Cleaning or Healthy High Performance Cleaning). It was successful from a cost savings point of view but in some cases it had long term effects on the wear and tear of a facility and ultimately the health of the facility.

IS YOUR FACILITY AFFECTED BY THIS?

-A review of your current SOW is a priority
-What is the frequency of cleaning in common areas & restrooms?
-Do you have a day porter or matron on-site to supplement night cleaning?
-Does the current SOW address disinfection?
-What is your liability & cost for not providing a safe & healthy work environment?
THE COST OF INFECTIOUS DISEASE BEFORE COVID-19

What are infectious diseases costing?

- In the U.S., infectious diseases are associated with an economic burden of over $120 billion.
- The projected loss of earnings due to the illness was approximately $16.3 billion annually.
- Last year, Americans missed more than 70 million workdays because of the flu.
- Antibiotic resistant infections cost Americans $20 billion in direct medical costs and $35 billion in lost productivity.
- Reports estimate that employers lost $10.4 billion in direct costs during each flu season.
- 60 million school days are lost each year to colds and flu in the U.S.
VIRUSES ARE INVISIBLE BUT HOW DO THEY SPREAD ON SURFACES?

• The CDC tested the Diamond Princess Cruise that docked in Japan and found that COVID-19 was still on non-porous surfaces 17 days later.
• Tests have shown that viruses on one door handle that is used in the common space of a facility can be spread to over 60% of the facility in the first 24 hours.
HOW DOES ELECTROSTATIC DISINFECTION WORK?

• **Opposites Attract!** These sprayers atomize the water molecule to a very fine mist/droplet. The positive charge given to each molecule makes them lay in a thin layer on the sprayed surface. The droplets are attracted to the negatively charged surfaces which eliminates pooling of the disinfectant.

• **360° COVERAGE CLEANS AROUND CURVED & HARD TO REACH SURFACES.** Electrostatic charged droplets create a field in the spray plume that is magnetically drawn to any surface within 6 feet. With an attraction coefficient 15 times greater than gravity, the electrostatic force field is so powerful the plume reverses direction to coat hidden and hard to reach surfaces that would typically be missed by conventional spraying or misting equipment.
BENEFITS OF ELECTROSTATIC DISINFECTION VS. TRADITIONAL METHODS

- Disinfectant can be delivered to a service 80% faster than trigger bottle sprayers.
- It will dry 60% faster than traditional methods.
- EDS uses 70% less chemical and produces less solution to be airborne.
- Allows chemical to wrap around surfaces for even coverage and no overspray.
- There is no cross-contamination between surfaces because wiping is eliminated.
- Under traditional cleaning methods with a spray bottle and rag, it would take 5 cleaners to do the same amount of disinfection as 1 cleaner using an Electrostatic Disinfection Sprayer.
- It is an excellent way to disinfect a facility as a preventative measure.
ELECTROSTATIC DISINFECTION SPRAYING FOR OFFICIAL COVID-19 CASES

• EDS is a perfect solution to quickly disinfect a facility after a confirmed COVID-19 case.
• Facilities can reopen immediately after a job is finished because of the fast drying time.
• Our Team of sprayers recently performed an official COVID-19 case for a 500,000sq/ft industrial plant and we had them back up and operational within 4 hours. It would have taken an army of cleaners using traditional methods.
ELECTROSTATIC DISINFECTANT SPRAYERS CAN BE USED IN ALL TYPES OF ENVIRONMENTS.

- Industrial
- Commercial office
- Educational
- Medical
ELECTROSTATIC DISINFECTION SPRAYER IN ACTION

• Quick easy coverage.
• No overspray due to the positive charge of the molecule.
• Water molecules are extremely small and will dry without residue.
HOW DO ELECTROSTATIC DISINFECTION SPRAYERS PERFORM?

• There is even coverage and controlled spray because of the positive charge of the water molecule. There will not be overspray.
• The water molecule is atomized to such a small size there are no gaps and it almost does not appear wet. This allows for no film or residue after drying.
HOW DO PUMP SPRAYERS WORK FOR SPRAYING DISINFECTANT?

- When the tip is open for heavy spraying it leaves large puddles of disinfectant and there are gaps between water molecules.
- When the tip is closed for a fine mist it leaves large gabs between water molecules.
HOW DO FOGGERS WORK FOR DISINFECTING?

• Foggers are using air to move the disinfectant causing overspray and in an office format papers flying. Overspray in the air is not healthy.
• The CDC recommends a building remain empty for 24 hours before doing a COVID-19 disinfection. This allows the virus molecules in the air to settle down to the ground. What does blowing air and stirring it back up solve?
ABBCO’s RECOMMENDED LIST FOR ELECTROSTATIC DISINFECTION SPRAYERS

• If you are wanting to contract for the EDS service it is important to ask your contractor what type of equipment they will use. This will guarantee that you are truly receiving the correct service for your facility. Some facilities are wanting to buy their own equipment but unfortunately everything is sold out.
• ABBCO recommends the following EDS lines: Clorox 360, Victory Sprayers and Protexus Sprayers.
• These three companies build sprayers that perform equally but the advantage of Victory and Protexus is that they offer battery powered units. This will increase productivity. These units can also be used with a variety of disinfectants. Our favorite disinfectant for EDS is PurTab by EarthSafe.
• The Clorox 360 uses an electrical cord and you must use their proprietary chemicals.
• All units have a flow rate of 3-4 oz per minute which is perfect for the proper misting coverage.
HOW TO EVALUATE A NON-ELECTROSTATIC SPRAYER?

• There is a huge waiting line for Electrostatic Disinfection Sprayers and unfortunately many of the brands are made in China. There is world-wide demand. Since there is not inventory we have seen crazy prices online and on EBAY for used units. Handheld battery units have been sold for $6,500 and Backpack battery units have sold for $17,000.

• In the next 6 months we will see US companies that will start producing their own line of sprayers but because of the technology most of them will not be Electrostatic.

• When evaluating these sprayers, one should compare the materials they are built with, plastic vs. metal, availability of parts, can they use multiple types of disinfectant and what is the flow rate.

• If your environment can handle some overspray, then make sure the flow rate is between 3-4 oz per minute. Any more than that will cause extreme residue, overspray and waste of product.

• The only company we would recommend for a Non-Electrostatic Sprayer is the Germ Fogger by PKW. It is airless, has the correct flow rate and is built with solid materials. It may not be suitable for all office environments but it should be acceptable in open areas like stadiums, theatres and industrial plants.
WHICH DISINFECTANT SHOULD YOU SPRAY?

- ABBCO has used many disinfectants from the CDC official disinfectant list for COVID-19 but our favorite is PurTabs by EarthSafe. It is effective, easy to dilute safely in dry form, and does not leave a residue. Disinfectants can be corrosive so be careful to use one that is neutral in PH. This is another question to ask your contractor before they spray. Is the chemical neutral & CDC/EPA approved?

The active agent in PURTABLES is sodium troclosene (NaDCC). While it does provide chlorine in the form of hypochlorous acid (HOCL) for sanitizing and disinfection purposes, it is not a hypochlorite like chlorine bleach. The chemistry and mode of action of NaDCC is significantly different, producing a solution that is stable once diluted, particularly in the presence of organic contaminants.

Studies show that HOCL has four times the antimicrobial killing power of hypochlorites (-OCL). It is believed that this is due to the fact that HOCL is very similar to the structure and molecular size of water and is electrically charged—thus allowing it to penetrate cell walls as easily as water. Conversely, the hypochlorite ion is electrically charged and thus has a harder time getting through the cell wall.
• ABBCO recommends an Electrostatic Disinfection Spraying Program for all facilities.

• It is the fastest, healthiest and most economical way to disinfect a facility to protect your valuable employees and customers.

• This new technology from 2017 was unknown to most people but it has been brought into the spotlight during this pandemic.

• As the media likes to say, “The New Normal…” Electrostatic Disinfection will become a part of all cleaning programs in the near future!