

Health Smart Infection Control

Is there a Healthier way to limit the spread of colds, flus and other viruses in the workplace?

COVID 19 certainly had an impact on our world and on our view of cleaning in commercial facilities. Government recommendations for cleaning changed on a regular basis and left many people scratching their heads. In a genuine effort to quell the virus and protect working environments, cleaners responded by spraying disinfectant liberally using electrostatic sprayers, pump-up sprayers, paint sprayers, or anything they could get their hands on. This may have been a good short-term solution, but in the long run, continued, hyper-spraying of disinfectants can be harmful to our health and the environment. There is potential for “superbugs” to emerge, and the health of building occupants can be negatively impacted by overuse of disinfectants.

Approximately one year after the initial guidelines came out for dealing with COVID 19, the CDC changed their guidelines again, indicating that surface infection was rare. In the meantime, colds, influenza and other infections became prevalent again. At ESS Clean, we have continued to research the best way to protect the health of building occupants and keep them safe.

What is the best way to control surface infections without over-spraying disinfectant?

ESS Clean has a solution. After research and testing of various products, ESS Clean created a program that minimizes the microbial load on surfaces, while at the same time reduces the application of disinfectant products, which can be harmful to people and the environment when used in excess.

Disinfectants have their place. Using disinfectants on a regular basis to clean surfaces is an effective way to remove bacteria and viruses after the surfaces have been cleaned. However, excessive overuse and spraying disinfectants into the air can have negative health effects. Additionally, it’s important to know that surfaces which are thoroughly cleaned and disinfected can be immediately re-contaminated by just one touch or sneeze from a contaminated person.

Health Smart Infection Control (HSIC) is a custom approach to infection control that reduces the use of disinfectant and maintains the viral and bacterial load on surfaces at a much lower level than the daily use of disinfectant. The HSIC program accomplishes this by applying anti-microbial surface coating every 60 days, followed by high frequency cleaning of surfaces and regular interim ATP testing.

What is Anti-microbial surface coating?

Novalent Bioshield75 Biostatic Surface Protectant is an odorless, colorless, alcohol free, EPA registered food contact surface treatment. It is safe for application on wood, metal, plastics, fabrics and other surfaces. It is ideal for keyboards and computer screens. After the product is applied, it dries in 5-10 minutes and provides a safe, durable antimicrobial coating lasting up to 90 days. It is approved for all food contact and non-food contact surfaces by the United States Environmental Protection Agency (US EPA).

Bioshield75 forms a covalent bond with the surface, creating a protective microbiostatic layer of positively charged long chain molecules. Harmful microorganisms are attracted to the positively charged ion and through lysis of the cell wall, the cell is destroyed. This is a physical disruption similar to a balloon landing on a bed of pins. Because the cell is disabled mechanically, the destroyed cell wall cannot mutate or replicate.

This water-based formulation of BioShield75 has been in use in the United States for over 20 years. It is proven safe by the US EPA and the USDA. BioShield75 is completely non-toxic when dry. Extensive testing and over 20 years of use have shown it to be safe for humans and other mammals.

Regular cleaning should continue after the application of Bioshield75. Over time, soil and dead cells cover up the “pins” that disable the cell wall. The soil and dead cells should be removed by regular cleaning in order to minimize the microbial load on the surface.

What is ATP testing?

According to the encyclopedia Britannica, Adenosine triphosphate (ATP), is an energy-carrying molecule found in cells of all living things. ATP captures chemical energy obtained from the breakdown of food molecules and releases it to fuel other cellular processes.

ATP meters have been developed to reliably measure the relative quantity of ATP. A surface is swabbed, then the swab is activated by an enzyme to produce light. The meter is then used to measure the amount of ATP using relative light units (rlu's).

While the ATP meter is not used to measure viruses directly, it is used to measure the hygiene and cleanliness of surfaces. It does this by measuring the amount of “food” left on the surface that help the virus survive.

The ATP meter is the most practical and accurate way to measure cleanliness of surfaces.

What does the HSIC Program Look like?

1. Identify all high touch surfaces in the building
2. Work closely with the customer to determine which surfaces are critical areas and should be treated every 60 days with Zoono anti-microbial surface coating.
3. Identify the areas that can be cleaned with Ecologo or Green Seal certified cleaners that have low VOC content, minimal packaging, and minimal environmental impact. This is done to reduce the use of disinfectants. Regular cleaning with these products on surfaces that are coated with anti-microbial coatings is proven to maintain a much lower ATP load average throughout the cycle of cleaning and exposure (see chart on pg. 2). The CDC has determined that most viruses, including COVID 19 are disabled by cleaning with soap and water or a neutral cleaner.
4. Identify the areas that should be cleaned with an EPA registered List N disinfectant. List N products have been approved by the EPA to be effective against COVID 19.
5. Testing program: Determine the number of key surfaces that should be tested on a regular basis, using an ATP meter to verify cleanliness.
6. Test surfaces before application of anti-microbial surface coating.
7. Test predetermined surfaces 20-50 days after application of anti-microbial surface coating using ATP meter to verify the hygiene of the surfaces. Log results and report to customer.

8. Any surfaces that fail ATP testing will be re-coated at no charge.

Acceptable RLU range for surfaces

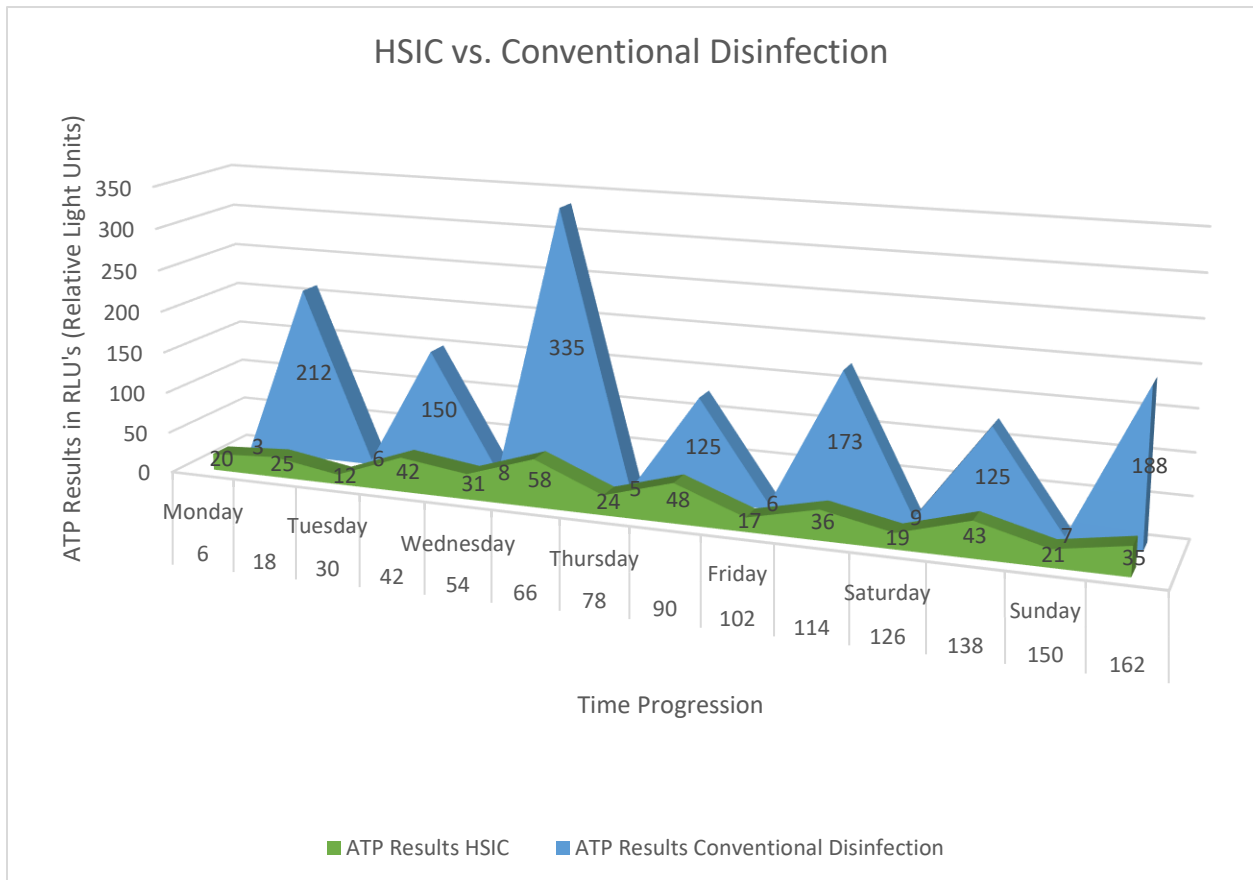
Break room 0-50

Rest room 0-100

Conference table 0-100

Door Handle 0-200

The purpose of the HSIC program is to maintain the microbial load on surfaces at a much lower level on high-touch surfaces than a standard disinfection program. Using ATP testing, **we will prove** that this is working at your facility.



How much does the HSIC Program cost?

The cost of the service will depend on the size of the facility and the scope of the work. We will audit your facility and provide a custom approach depending on the types of areas treated and the frequency of use of those areas. While it is impossible to provide a per square foot cost for the program, it is typically less than 10% of the cost of cleaning for a commercial facility. In many cases, we can reduce the cost of cleaning by changing cleaning methods and reducing frequencies, resulting in a cost-neutral conversion.

What are the Benefits of the HSIC program?

- *Significantly reduced use of disinfectants to create a safer workplace*
- *Improved hygiene of surfaces and reduced spread of infection*
- *Turnkey program for infection control that is verified*
- *Reduced liability against the spread of infection in the workplace*
- *Lowered insurance cost*
- *Visible displays for the workplace showing that your business cares about protecting their team*
- *Reduced absenteeism*
- *Improved morale of building occupants by providing a safe workplace*
- *Reduced employee turnover*