



Seeing Is Not Believing

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Feature

A clean appearance does not guarantee germs and bacteria are not present.

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In December 1999, a four-part study was conducted assessing the cleanliness of 113 surfaces in various hospitals over a 14-day period.

The surfaces were cleaned using conventional cleaning methods — sprayers, cleaning cloths, mops and buckets — and then visually inspected by the researchers, who concluded that the surfaces "looked clean."

The cleanliness of these same surfaces was then evaluated using an adenosine triphosphate (ATP) bioluminescence monitoring system.

This time, the results were quite different: According to the researchers, as much as 76 percent of the surfaces were determined to be "unacceptable after cleaning."

The researchers also reported that "the sites most likely to fail were in restroom and food service areas ... which are frequently implicated in the spread of infectious intestinal diseases."

One would hope that this report came from an old study and that today's hospital administrators and cleaning professionals use cleaning systems and procedures that more thoroughly clean surfaces, preventing the spread of infection.

Unfortunately, although this report is more than 10 years old, many health care facilities have still not changed their cleaning methods.

In fact, another study conducted 10 years later in four hospitals in England and Wales came to the same exact conclusions — proving that many hospitals still need to update their cleaning methods.

In this more recent study, researchers once again evaluated a range of surfaces after they were cleaned with conventional tools and methods and concluded that these surfaces were visually clean.

The same surfaces were then evaluated using an ATP device.

The report concluded: "Cumulatively, the results indicate that visual assessment is not a reliable indicator of surface cleanliness or of cleaning efficacy. Concerns also arise [in general] about the standards of surface cleanliness achieved after cleaning in the hospitals."

The conclusions we must reach from these studies include notions that:

- Just because something looks clean does not guarantee that it is hygienically clean
- Conventional cleaning systems do not always stop the spread of disease-causing organisms
- Scientific systems are needed to monitor and prove that surfaces are hygienically clean.

Scientific Systems: The ABCs Of ATP

The key scientific system now available to cleaning professionals to evaluate the actual cleanliness of a surface is the ATP monitor.

It has only been a relatively short time since the professional cleaning industry first became aware of this technology; however, scientists first discovered ATP — the universal energy molecule found

in all animal, plant, bacteria, yeast and mold cells — about 80 years ago.

Today, the biological importance of ATP is considered second only to deoxyribonucleic acid (DNA), which identifies an individual's entire genetic makeup.

The human body contains billions of ATP molecules and microscopic amounts of bacteria and pathogens found on surfaces may contain hundreds, if not thousands, of ATP molecules.

Although the presence of ATP on a surface does not necessarily mean it harbors disease-causing pathogens, it should serve as a warning for cleaning professionals that contaminants may be present and should be eradicated to ensure that a facility is hygienically clean.

One reason the cleaning industry has only lately become aware of ATP technology is because until recently, evaluating a surface for ATP was a costly, complicated and time-consuming process.

Initially, this testing had to be conducted by a trained technician who would swab a surface, then transfer those swabs to a lab where the samples were evaluated by room-sized computers.

Results were usually not available for two to three days.

Modern ATP technology has greatly improved on those cumbersome early systems.

Those room-sized computers have been replaced with relatively inexpensive handheld devices that look very much like a television remote control.

Although surfaces must still be swabbed by a technician, the procedure requires no special training.

What's more, with the advanced ATP systems available today, test results are available in less than 15 seconds.

Got Results — Now What?

As mentioned earlier, just because ATP is found on a surface does not mean that disease-causing germs are present.

However, for cleaning professionals testing surfaces with an ATP monitor, it does indicate that the surface needs to be properly cleaned or re-cleaned to protect the health of building users.

What exactly does it mean for a surface to be properly cleaned?

The evidence from today's ATP monitoring systems has proven that some conventional cleaning systems do not adequately remove soils and contaminants from surfaces.

Even worse, these old-fashioned cleaning methods may actually spread contaminants from one surface to another as they become soiled.

This is why many cleaning professionals use high-flow fluid extraction systems, often referred to as no-touch cleaning systems.

These machines and procedures combine automatic chemical metering and injection by an indoor pressure washer-type system — and, with more advanced units, a wet/dry vacuum — to remove moisture and contaminants.

Tests using ATP monitors indicate that these systems are as much as 60 times more effective at reducing bacterial contamination than conventional cleaning tools and procedures.

Selling With Scientific Proof

More and more building service contractors (BSCs) and in-house cleaning professionals are now using ATP rapid monitoring systems.

One Ohio-based restroom cleaning service relies on them to both show perspective clients that their restrooms are not as clean as they appear and then to prove that they are hygienically clean once they have been serviced using the high-flow fluid extraction systems mentioned earlier.

In this way, ATP monitors can serve as a powerful marketing tool for cleaning professionals to win over new customers.

This important breakthrough in scientific technology not only protects facility health but may also be one of the best marketing tools ever developed for the cleaning industry.

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