



## **Cleaning With Chemicals is Insufficient**

In healthcare environments, controlling the spread of pathogens requires exceptional hygienic routines to disinfect biologically contaminated areas. Chemicals such as quaternary ammonium compounds, chlorine, and bleach are used for routine cleaning of hospitals and other health care related facilities (Cleaning Chemical Use). Health care workers perform manual cleaning and disinfection using these chemicals to routinely clean medical devices and equipment throughout patient rooms. However with the quick turnover rate and many hard to reach areas, numerous spaces may be overlooked or not thoroughly cleaned. UVC disinfection offers a way to significantly reduce environmental bacteria in an ecologically friendly and healthy way to aid in chemical disinfecting of potentially contaminated areas.

Research presented by “Comparison of UV C Light and Chemicals for Disinfection of Surfaces in Hospital Isolation Units”, shows results of statistical analysis of colony counts from various locations in patient rooms after various forms of disinfection. By only using standard cleaning methods, there is an average growth of 22.0 (+/- 37.2) colony-



forming units out of 42 cultured samples. However by using these cleaning methods in addition to introducing UVC light, the colony counts decreased to 1.8 (+/- 3.4) colony-forming units, a 91% decrease (Andersen).

In addition, Mark Rupp M.D. at the University of Nebraska Medical Center presents a study showing that the time spent cleaning a hospital room does not correlate with the thoroughness of the cleaning. The test studies 74 patient rooms in a medical critical care unit and the routine terminal cleaning of the room by different health care workers. Results show that even though most rooms were cleaned within the 30 minutes or more of expected routine cleaning, many rooms marked below average cleaning and there was not a correlation between amounts of time spent cleaning and adequacy of cleaning (Rupp).

UVC Cleaning Systems' technology offers a foolproof way to sizably reduce the risk for infections in healthcare facilities. By having the lethality to inactivate bacteria, viruses, pathogens and other potential biological contaminants and the ability to access hard to reach areas, UVC irradiation is an effective germicidal agent for whole-room disinfection.



## References

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