

This study evaluates the effectiveness of ultraviolet- C (UVC) light as a disinfectant for these commonly touched surfaces. Though bacterial contamination is widespread, this investigation focuses on assessing UVC light for a potential alternative to regular chemical disinfectants, as its established use in the medical and food services since the early 20th century. It was hypothesized that bacterial loads on certain settings would decrease after UVC light exposure. Samples were collected from a classroom table, door handle and computer keyboards, then these samples were cultured to measure initial bacteria growth. The same surfaces were also exposed to UVC light from a distance of 5cm for durations of 1, 5, and 10 minutes. Each surface was swabbed using both horizontal and vertical strokes to ensure consistent coverage. Following treatment, samples were re-collected, incubated, and analyzed by counting colony-forming units to quantify bacterial growth. Results were compared to pre-exposure levels to determine the effectiveness of using UVC as a disinfectant. Overall, this study tests the potential of UVC light to reduce certain bacterial contamination on everyday objects.