Poster Abstract

Microbial Survival on Metallic Fomites

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The purpose of the project is to measure the survival rates of three pathogenic organisms on copper, steel, aluminum, and brass and compare these to the organisms' survival rate on a non-metallic surfaces including glass and plastic. The research is a time based project which includes inoculating the surfaces and testing for growth daily until no more colonies grow. This data will produce a visual image of how long the bacteria survive and how much bacteria survived at what points in the course of the trial. CHROMagar is used to visually differentiate the organisms by color and rule out any possible misidentification of contamination from the surface, environment, or handling. With an increased prevalence of antibiotic resistant and highly pathogenic bacterial infections in hospitals comes the increased possibility of those bacterial strains on surfaces within the hospitals and specifically the hospital laboratories. By studying the survival rates of these pathogenic bacteria on high touch surface materials, we can gain a better perspective on how they survive on these materials and if specific materials should be utilized for their possible antimicrobial effects compared to other materials.