

Study Shows CASPR Tech Removes Pathogens on Common School Surfaces

Schools are well known for spreading germs and infection, thanks to groups of people crowded into small spaces—not to mention little hands touching lots of shared objects and surfaces throughout the facility.

While administrators have always tried to keep their schools clean, the efficiency and effectiveness of their methods came under greater scrutiny during the COVID-19 pandemic of 2020. Many schools began looking for new and better ways to prevent illness while giving peace of mind to staff, students and parents alike.

Thankfully, new sanitization technologies, like those from CASPR Group, have emerged that can safely provide continuous cleaning and protection for enclosed environments such as schools while people are still present.



CASPR's mobile and in-duct disinfection technology uses a proprietary Natural Catalytic Converter (NCC) process that extracts oxygen and moisture from ambient air and then produces and continuously delivers a low concentration (less than 0.03 ppm) of gaseous hydrogen peroxide to clean a target area.

With so much attention on finding the safest and most effective ways to protect kids and teachers during school, Sterasure, a Canadian biotechnology distributor, worked with Sporometrics, an accredited laboratory, to test and demonstrate the real-world effectiveness of CASPR's technology in a school setting. The test was arranged through a Toronto preschool and kindergarten school in October 2020.

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During the test, the school's air was analyzed along with multiple surfaces for bacterial load. The CASPR 5000 In-Duct units were then installed, and the environment was tested again two weeks later. The surfaces tested included various high-touch surfaces, including keyboards, bathroom surfaces, desks, furniture and tech equipment.

Results & Conclusions

The testing clearly demonstrated a reduced burden of bacterial load on most surfaces in the school environment, which validated the efficacy of CASPR's technology in real-world conditions.

Overall microburden reductions varied between 95.5% to 100% on all of the surfaces tested. The figure below shows the various reduction levels, with some normal variations as seen in real-world environments.

Given the successful and significant reduction in bacterial burden, the report concluded that these results "may be translated into other real-world environments where airborne- and surface-contaminating organisms may pose a risk to the health and wellbeing of those frequenting these environments."

And that's great news for schools looking for a newer, easier to maintain, and safer means of protecting their staff and students from COVID-19 and other illnesses.

Location	Pre-CASPR Bioburden	Post-CASPR Bioburden	% Reduction
Teacher's Keyboard	14	0	100%
Red Table in Junior Class	1	0	100%
Front Bench in Hallway	400	18	99.5%
Admin Keyboard	2	0	100%
Teacher's Desk in Kindergarten	2	0	100%
Staff Stove Handle	172	0	100%
Men's Bathroom Sink Handle	1000	1	99.9%
Toddler Desk	1000	1	99.9%

Source
"Toronto School Report",
Sporometrics, Sterasure
November 2020