

CASE STUDY

# Butler School District 53 Chooses UV Angel to Support Safer In-Person Learning

See how UV Angel and Butler School District 53 partnered to protect in-person learning with next generation technology that delivers cleaner and safer environments needed to keep students and teachers safe in the classroom.



## Results at a Glance

54-73% reduction of airborne bacteria

52-100% reduction of bacteria on settled surfaces

Zero transmission within school buildings post-implementation

### About Butler School District 53

Butler School District 53 is a public K-8 school district located in Oak Brook, IL. Known for its high achievement and top test scores, Butler 53 takes a community-focused approach to education, providing enriching and engaging experiences that propel each and every student to new heights every day. When the COVID-19 pandemic hit, Butler 53 knew they would have to respond differently to maintain the community-focused education style that sets their students, their staff, and their achievements apart from the rest.



## The Challenge

### A Global Pandemic Threatening In-Person Learning

Schools and school districts everywhere were massively impacted by the COVID-19 pandemic. With constantly changing regulations and restrictions, Butler School District 53 had one goal — to “keep in-person learning, while maintaining a safe environment for students, teachers, staff, and parents” said Dr. Paul O’Malley, Superintendent, Butler School District 53.

As a community-focused school environment, remote learning presented a range of challenges for students and teachers alike, making it difficult to connect, assess student engagements and understanding, and much more. Butler 53 knew that to preserve the spirit of their school’s community and exceptional education standards, they needed to make changes to their pandemic response, and fast.



## The Solution

### Following the Science With A Layered Approach to Pathogen Control

From day one, Butler 53 was dedicated to following the guidelines and recommendations asserted by the federal, state, and local health agencies. They observed a safe six-foot distance for in-person learning. They implemented mask-wearing, contact tracing, and improved surface cleaning procedures. They even implemented regular testing, making antigen, antibody, and PCR testing available not just for students and staff, but for their families as well. With a robust contact tracing and testing program implemented, Butler 53 knew the next step should be addressing indoor air quality, as the coronavirus is airborne, and air is a transmission pathway.

The school began testing different pathogen control and air purifying technologies. Over the course of 4 months, Butler 53 tested a range of UV products, from HVAC-installed devices to UV Angel’s Clean Air™ units. The results of their study found that UV Angel was far and away the superior product. Key factors for Butler 53 on UV Angel’s product were:

#### A safe pathogen source-control solution that works.

UV Angel’s patented, proven UV-C technology effectively neutralizes harmful pathogens like viruses, bacteria, and fungi. The UV Angel Clean Air™ system uses peer-reviewed scientific papers, extensive field studies, and laboratory results show elimination rates of up to 99.99%. Unlike other pathogen control methods, UV Angel’s products do not add harmful chemicals or byproducts to the environment and are shielded and safe for use in occupied spaces. Butler 53 knew that these were a solution they could trust to effectively protect students and staff at school.

*UV Angel Clean Air™ units install directly into ceiling tiles.*

“By having something that was in the ceiling, it not only improves the indoor air quality, but we’re able to have the maximum capacity of our students, which is the most important, having the kids in-person.”

- Dr. Paul O’Malley, Superintendent,  
Butler School District 53

**Continuous air treatment, at the occupied room level.**

It's well known that people are the primary source of pathogen transmission. So it was important to bring safe treatment methods into the classroom while students and teachers are present. With UV Angel products, Butler 53 is able to actively reduce pathogens right at the source, or room-level, during normal classroom activities. UV Angel's products safely work in occupied spaces around the clock, 24/7/365, providing continuous treatment and removing airborne pathogens created by the breath zone in classrooms.

**Seamless, unobtrusive installation.**

UV Angel Clean Air™ products easily install directly into the ceiling tiles of Butler 53's classrooms and operate quietly, without disruption to students. And, as Dr. O'Malley notes, space is "precious in every classroom". Any space you give up implementing a large device is space you're losing for learning. UV Angel's products enabled Butler 53 to add a critical layer of pathogen control and protection, without giving up any floor space in their classrooms, or disrupting the learning environment.

**A vision for a cleaner, safer future.**

Butler 53 has a vision to create a school district where the entire community strives to achieve success beyond all limits. They know that this pandemic has brought to light larger issues surrounding indoor air quality, and they are dedicated to implementing visionary solutions that will protect their students and staff with cleaner, safer air now and well into the future. "UV Angel's commitment to continuous improvement and innovation set their products well apart from the competition," said Dr. O'Malley.

When compared to all the other products in Butler 53's study, UV Angel stood out as the superior product. Backed by clinical research, proven effective, and with an overarching company vision to continue innovating technologies that deliver cleaner, safer environments for all, Butler 53 chose UV Angel.

**The Results**

**A Visionary Solution for a School District with a Vision**

Butler 53 started their response to the COVID-19 pandemic by planning for a layered approach to school safety. They knew that no single solution could effectively keep their students, staff, and families safe, so they started from the ground up with an environmental cleanliness system that was built on a strong, scientific foundation.

With key elements like social distancing, regular surface cleaning and disinfection, contact tracing, and testing already in place, they needed a visionary solution that could address the air now and provide a future-focused layer of protection. That solution was UV Angel's Clean Air™ technology.



*"We looked at something that was visionary, that was going to set the tone for all schools across the country. And that's exactly why we made this purchase."*

- Dr. Paul O'Malley, Superintendent, Butler School District 53

**THE RESULTS**

<b>54-73% REDUCTION</b> of airborne bacteria	<b>52-100% REDUCTION</b> of bacteria on settled surfaces	<b>ZERO TRANSMISSION</b> within school buildings post-implementation
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### Effective pathogen control technology creating cleaner, safer classrooms.

Butler 53 hired an independent third-party environmental company to test their environment for bacteria and fungus in the air and on surfaces of occupied classrooms. In general, EPA and CDC recognize the fact that bacteria are more resistant to treatment technologies than viruses, so the observed reduction in airborne and surface bacteria is a very strong indicator of efficacy against viruses. Their results showed a 73% reduction of airborne bacteria, and a 100% reduction of bacteria on settled surfaces, confirming the technology's ability to create measurably safer learning environments for students and staff. Dr. O'Malley noted that "many studies show that as the environment in the room gets stirred up with activity, particles and/or pathogens that float around eventually settle. Another one of the incredible benefits of treating the air continuously with the UV Angel system, is that testing also showed dramatic improvements to our surface cleanliness."

UV Angel later returned to Butler 53 to conduct a larger scale study, and again measured dramatic reductions in the amounts of bacteria in the air and on settled surfaces.

### Always know it's working with best-in-class IoT connected platform

UV Angel Clean Air™ units have an integrated connectivity platform allowing every UV Angel device to connect to the internet, send and receive data, and stay updated with the latest technology. Butler 53 wanted to be able to monitor the technology ensuring each unit was functioning while having a system that can easily integrate with their building controls and maintenance system.

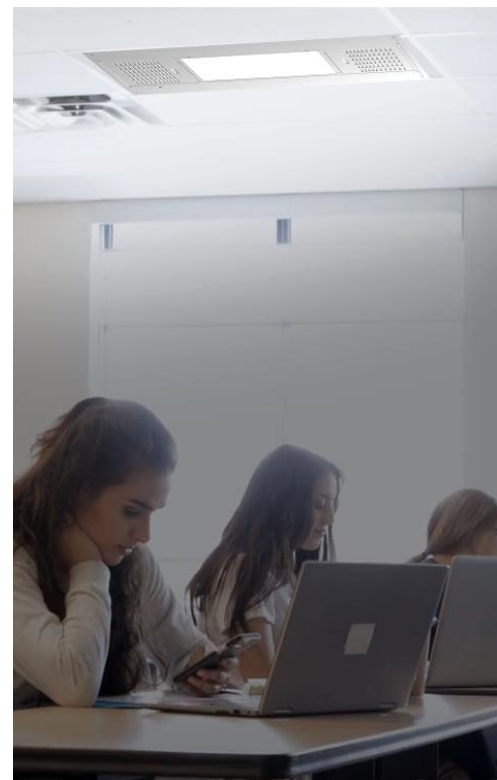
### A critical layer of protection for effectively treating the air in Butler 53 classrooms.

Butler 53 started the school year with just 60% in-person attendance but was able to end the year with over 90% in-person attendance. "UV Angel's Clean Air™ units helped us get there," said Dr. O'Malley. With the addition of an effective air treatment system, Butler 53 is adding a layer of indoor environment treatment they did not have before.

### The IAQ solution Butler 53 needs to protect students and staff well into the future.

Butler 53 knows that health and safety concerns won't go away when the pandemic is over. UV Angel's Clean Air units will continue to function long after students fully return to the classroom, helping to mitigate a number of room-level air quality concerns from allergies to seasonal colds, flu outbreaks and beyond.

Above all, UV Angel's Clean Air™ units delivered the visionary solution that Butler 53 needed. As a district focused on vision and innovation, Butler 53 chose a partner that would continue to deliver proven technologies for safe, clean school environments UV Angel is dedicated to delivering the very best in safe, effective pathogen source control technologies for schools and districts across the globe just like Butler 53.



#### LEARN MORE

Ready to see how UV Angel can help protect in-person learning at your school or campus? [Head to our website](#) to learn more about UV Angel's experience in education or give us a call at 888-277-2596 to speak directly with an education solutions specialist.

