



## Churchill Downs<sup>®</sup> takes Pyure out of the lab and to the Kentucky Derby<sup>®</sup>

With grounds for the famed Kentucky Derby<sup>®</sup> prepared for over 300,000 guests in three days and 750 races per year at Churchill Downs<sup>®</sup> see how the racing venue and parent company, Churchill Downs<sup>®</sup> Inc., build great guest experiences at their racing and gaming properties.

In partnership with:



**CHURCHILL DOWNS**  
INCORPORATED

# How Churchill Downs® gets healthy results.

**When Churchill Downs Inc® (CDI), owner of the Kentucky Derby®, the Kentucky Oaks® and many high-profile casino and gaming venues throughout the U.S. wanted to assure its guests and employees that it was safe to come and experience great moments, they did their homework.**

As an option to increasing the amount of outdoor air being introduced to their buildings and improving the filters for air moving through their venues they looked at other IAQ improvement technologies.

“We continue to strive for excellence with new technologies, so we’re always looking for new ways to improve our guest experience.”

CASEY RAMAGE  
VICE PRESIDENT MARKETING & PARTNERSHIPS  
CHURCHILL DOWNS®

How could they host thousands of guests for events on a global scale like the Kentucky Derby®, entertain gamers at their casinos, protect their employees all year-round and be sure that their



Churchill Downs®, Kentucky Oaks, Kentucky Derby®, and the Twin Spires design are registered trademarks of Churchill Downs® Incorporated.

systems were being effective and energy efficient all at the same time?

To find the answers, CDI turned to Pyure Dynamic Protection® equipment.

And they didn't just install the sun-mimicking, air purifying technology to make themselves look good. They elevated their game and ensured real protection was being given to their employees and their

guests by having Pyure's system independently tested both before and after guests were allowed in the space.

## THE RESULTS?

**This wasn't a photo-finish. Pyure won the air and surface treatment game by a mile and a quarter.**

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# 5-Star protection for the hospitality sector.

To enable the racing crowds to return safely, Churchill Downs® added Pyure’s patented layer of protection against virus and bacteria to each of the 112 suites at the famed Churchill Downs® racetrack in 2021.

Pyure recreates natural sunlight by creating powerful sanitizing agents called hydroxyls to destroy harmful contaminants in the air we breathe and on surfaces we touch. Pyure Dynamic Protection®

generates hydroxyls and deploys natural cleansers into the suites to safely sanitize indoor air and surfaces.

And, because it’s the same as outdoor air, it’s safe to breathe. So guests are having the air and surfaces cleaned without any disruption to their events.

Following the 2021 success on the racetrack, CDI is set to install Pyure’s solutions into its newly launched Homestretch Club in 2022.

The club will have Pyure Technology® fitted directly into its heating and cooling system (HVAC) to keep guests protected from what may be in the air or lurking unseen on surfaces.

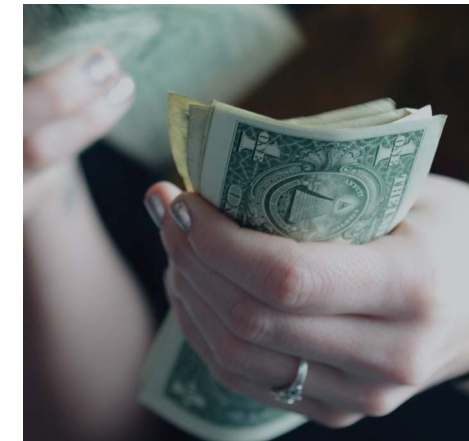
But first, to make sure the investment in the Homestretch Club was worth it, CDI put Pyure to the test in the demanding and varied conditions of their Newport Racing & Gaming site in Newport, KY.



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# Transforming shared spaces into healthy places.

The independent third party test confirmed that Pyure’s technology didn’t just remove the airborne contaminants that people breathe, it was also proven to clean the surfaces they touched from the ATM keypads to the bathroom door handles.



“We want to provide (a better) experience to the customers whether they know it or not...and Pyure is helping us do that.”

MIKE ZIEGLER  
SENIOR VICE PRESIDENT & GENERAL  
MANAGER, CHURCHILL DOWNS®

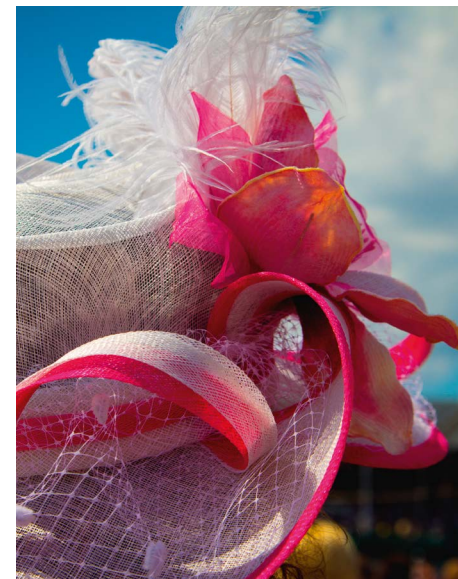
## SMART, DYNAMIC PROTECTION PROVES ITS VALUE

With guests and employees returning to events and arenas and hotels nationwide, treating the air and surfaces around us is more important than ever. Indeed, the recently released Federal Government’s Clean Air in Buildings Challenge is calling for significant investment to ensure we can all be safe indoors.

In this respect, CDI is ahead of its time with investments in ensuring a clean environment and in testing, but the company

will also reap the energy efficient benefits of bringing the sun indoors, via Pyure’s UV-based solutions, as well. Pyure’s technology actively cleans 24x7, setting CDI up to reduce the hot, humid, or cold air they bring in from outside maintaining code levels, while also reducing its future dependence on air filters that restrict air movement and increase energy expenses.

Getting it right like CDI and making it economically feasible is hard - [here’s how it was achieved.](#)



For the first time, in an environment where people are constantly entering and exiting, smoking, dining and drinking, touching ATMs, gambling machines and more, air and surface quality were proven via third party testing - outside the lab and in the real world.

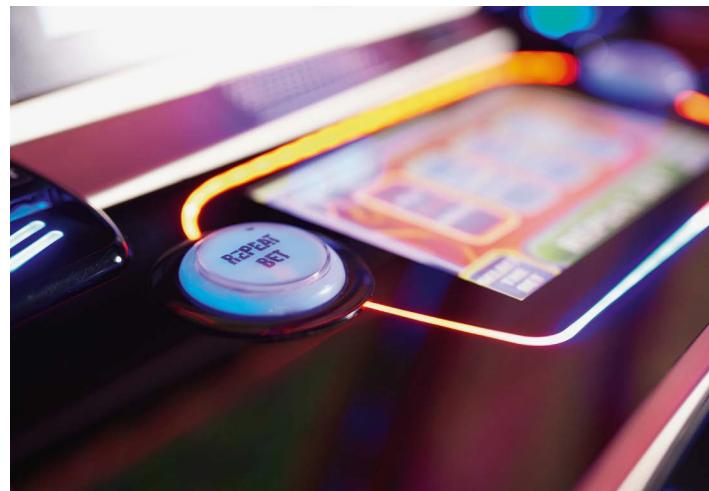


# Testing comes out of the lab and into the real-world.



**With Pyure's solutions installed inside the heating and cooling system and controlled by sophisticated sensors throughout their Newport Gaming site, CDI wanted to know more about the effectiveness of their air and surface quality investments.**

Hiring test lab, The IEP Group, air and surface testing sought to understand if bacteria, mold, smoke odors and even nicotine could really be removed in the real world beyond testing labs.



## Two testing phases

# 1

**SEPTEMBER 30 2021**

**The first tests were conducted as the baseline to prove Pyure worked as advertised.**

Pyure's MVP Series units, controllers and sensors were installed and began operating prior to employees and even the IEP Group being allowed inside. CDI takes their employee experience so seriously, they wanted it sanitized before the team were allowed inside.

# 2

**NOVEMBER 3 2021**

**After the initial test, crowds were allowed into the gaming area and smoking resumed in the Smoking and Gaming room.**

With the Pyure system running and guests in the building, the second round of testing was underway.

## The results

“The tests came back exactly as Pyure said they would... When guests first walk in, we survey them, and they sensed that the place is very clean.”

CHIP BACH  
GENERAL MANAGER, NEWPORT RACING & GAMING

Read on to find out more.

The information in this report isn't from a lab experiment - it's real-world results from a challenging environment which saw indoor conditions improve even when the outdoor conditions worsened.



# Advancing the guest experience & employee wellbeing.

“The tests came back exactly as Pyure said they would. Our air quality had improved, even with our outdoor air quality being worse the second (day of testing)...”

CHIP BACH  
GENERAL MANAGER, NEWPORT RACING & GAMING

Ready to see results in your space?  
Contact us at:  
[Sales@pyure.com](mailto:Sales@pyure.com)

## Pyure makes a difference where it's needed



### HOSPITALITY

Commercial kitchens, banquet halls, hotel rooms & bathrooms.



### INDUSTRIAL FOOD & BEVERAGE

Microbial film, animal health & slaughterhouses, odor mitigation, fruit & vegetable lifespan by removing molds, ethylene and other pollutants.



### INDUSTRIAL WASTEWATER

Odors offsite, wet well, headworks room, dissolved air flotation room, biosolids storage.



### MEDICAL FACILITIES

Common hospital acquired infections from Pneumonia/MRSA, surgical site eColi & C difficile, FLU, and COVID.

Indoor bacteria, mold, viruses, and volatile organic compounds (VOCs) are introduced by sources including outdoor air, people, animals to factories making things like engines to plastic bags.

At Newport's gaming site, Pyure Dynamic Protection® significantly reduced air and surface bacteria and mold in multiple casino areas. The challenge was significant and different from a controlled lab environment as new outdoor air was brought in by opening doors and through people entering and exiting.

This real-life test scenario provided a more reliable way of testing air and surface purification systems because the sources of pollution are constant and unknown. In a lab, a fixed amount of pollution is generated so a device can be fully measured.

Decrease in airborne bacteria where the money is counted of

↓79%

### AIRBORNE MOLD

Airborne mold spores are all around us and carried through air currents. Mold is an irritant to those with allergies, asthma and respiratory conditions, and can show up where you least expect it. When it lands on surfaces with moisture it begins to grow.

Small games room saw a reduction of airborne bacteria of over

↓83%

Decrease in airborne mold in the smaller games room of

↓87%

ATM in small games room saw a reduction of surface bacteria of over

↓98%

### PYURE TREATS BOTH AIR AND SURFACES

It's the combination of reproducing the cleaning power of the sun indoors, then spreading that power to the rooms and spaces where we work and live that makes Pyure unique. There's no need for the air to pass through Pyure's systems to be treated. Like outdoors, the cleaning agents are safely cascading to all corners of our homes and buildings to treat the areas where we live, work and breath.

Small games room saw a reduction of surface mold of over

↓73%

ATM in large games room saw a reduction of surface bacteria of over

↓72%



## Smoking without the smell or haze.

**Nicotine, a volatile organic compound (VOC), commonly found in second hand smoke in air and on surfaces, was not detected in either testing.**

Nicotine was not expected to be found on the first testing day as no smoking had been allowed. However, after the casino opened

and several weeks of smoking in the big gaming room, the second testing day still showed no detection of nicotine.

The test results suggest the efficacy of Pyure in breaking down the VOC nicotine and reducing the exposure of this harmful chemical to the casino's guests and staff.

“When I came home, my clothes smelled of smoke, and my wife... would make me get rid of them before I walked into the house. And so, when the Pyure system was enabled here at Newport, ...(I spent) a weekend walking around the smoking area and then coming home to see if my wife could detect it, and she could not... As a matter of fact, she was so excited about the system that we bought a whole house system for ourselves...”

CHIP BACH  
GENERAL MANAGER, NEWPORT RACING & GAMING

Multiple tests in the casino found a Nicotine (VOC) reading of

↓ 0%

### SURFACE BACTERIA

Pyure Dynamic Protection® has been proven to drastically reduce surface-bound bacteria and nicotine on some of the most commonly touched surfaces. Once Pyure is activated, and hydroxyls and natural

cleansers are diffusing through the air, the surfaces in your organization are being sanitized. In addition, Pyure treats surface-bound viruses, mold and volatile organic compounds (VOCs).

**Bathroom handle bacteria decreased an impressive**

↓ 93%

Slot machines saw a reduction of up to

↓ 90%

Bar drink station (5 swab locations) saw a reduction of

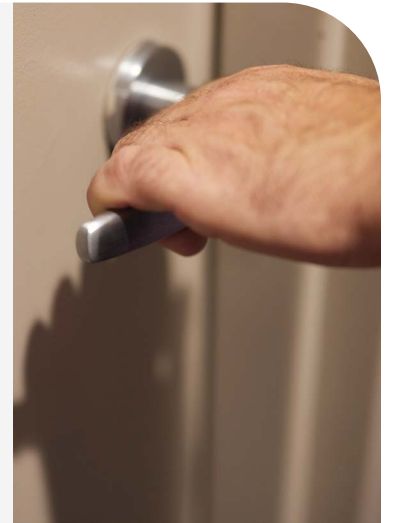
↓ 80%

ATM keypad saw a reduction of

↓ 84%

Handrails (3 swab locations) saw a reduction of

↓ 100%

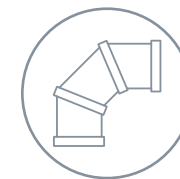


## Add Pyure where and how you need it.



### PORTABLE

Ideal for treating smaller spaces and spaces without ductwork e.g. meeting rooms or individual classrooms.



### IN-DUCT

Installed directly into accessible ductwork it leverages the air circulation in the air handling system.



### HVAC/AHU

Complete integration of purification units, sensors and controls with the HVAC and air-handling systems.



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Book your surface bacteria test.  
Contact us at:  
[sales@pyure.com](mailto:sales@pyure.com)

# How Pyure is cleaning at Newport.

By safely replicating the levels of hydroxyls found in nature, Pyure brings these most important of natural cleansing agents to shared indoor spaces.

Just as they do outdoors, the hydroxyls naturally react with volatile organic compounds (VOCs) to generate additional powerful sanitizing natural cleansers helping to remove unwanted odors and attacking potentially dangerous bacteria and mold.

“Nicotine contamination did not occur even after the introduction of smoking within portions of the facility.”

THE IEP GROUP  
INDOOR AIR QUALITY INVESTIGATION REPORT

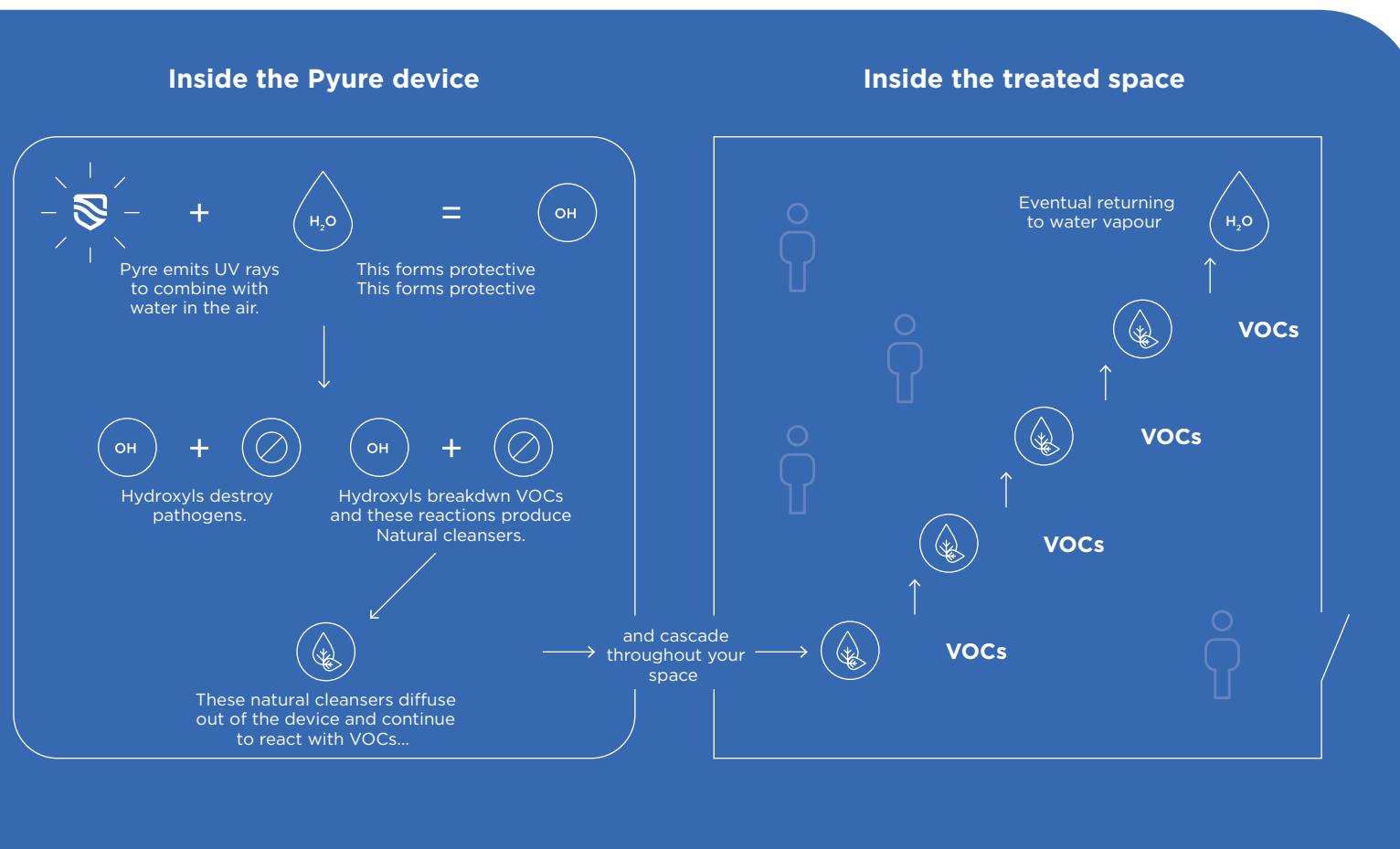
## Get the detailed report to truly see just a few of the problems Pyure solves.

In the full report, you have an opportunity to review the IEP Group’s research and findings in more detail.

The results provide a clear picture of how Pyure’s hydroxyl generating system performs when fully tested in challenging, real-life environments.

### SAMPLE DATA

AREA TESTED	SEPTEMBER 30th - CFU's/m <sup>3</sup>	NOVEMBER 3rd - CFU's/m <sup>3</sup>
Outdoor Air Pre/Back Elevation	Contact us to view the full report: sales@pyure.com	
Count Room	488	99
Bar	Contact us to view the full report: sales@pyure.com	
Big Gaming Room	Contact us to view the full report: sales@pyure.com	
Small Gaming Room	382	64
Simulcast Room	Contact us to view the full report: sales@pyure.com	
Vestibule	Contact us to view the full report: sales@pyure.com	
Cashier Area	Contact us to view the full report: sales@pyure.com	
Outdoor Air Post/Back Elevation	Contact us to view the full report: sales@pyure.com	
Total Average	Contact us to view the full report: sales@pyure.com	
Outdoor Average	Contact us to view the full report: sales@pyure.com	
Indoor Average	Contact us to view the full report: sales@pyure.com	



# Report conclusions.

**“The main purpose of the IEP Group’s indoor air quality validation investigation was to determine if the Pyure hydroxyl generator was efficacious in the reduction of microbiological contaminants, such as bacteria and fungi, and chemical contaminants, such as nicotine.**

Because the client did not feel it prudent to operate the facility (in light of COVID-19) without the use of the hydroxyl generator, no absolute baseline was able to be established prior to its use. However, as the efficacy of the hydroxyl generators is known to have an accumulative effect over time, it was recognized that in regard to the reduction of the tested parameters, then conditions should improve with extended use of the hydroxyl units.

The IEP Group report concluded that, based on its measurements and analysis, it did appear that a reduction of microbiological contaminants did occur over the course of the study, and that nicotine contamination did not occur even after the introduction of smoking within portions of the facility.”

## SAMPLE DATA

AREA TESTED	SEPTEMBER 30th CFU's/Plate	NOVEMBER 3rd CFU's/Plate
Bar Bar and Wall	Contact us to view the full report: sales@pyure.com	
Big Gaming ATM	50	8
Big Gaming Fortune Gand Slot		
Small Gaming ATM		
Small Gaming Ultimate Fire Link Slot		
Small Gaming Middle Ticket Machine		
Small Gaming Table and Chair		
Back Hall Keywatcher	Contact us to view the full report: sales@pyure.com	
Back Hall Employee Check In		
Small Gaming Chair and Divider		
Big Gaming Chair and Divider		
Cashier and Restroom Hall Fortune Charm Slot		
Big Gaming Hot Hit Slot	66	6
Count Room Counter	Contact us to view the full report: sales@pyure.com	
Average Counts		

## CONTACT

For further information or to find out how Pyure can help you, please contact us:

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