Innovation Keeps Students and Teachers Safer from Airborne Disease and Improves Cognitive Ability & Performance

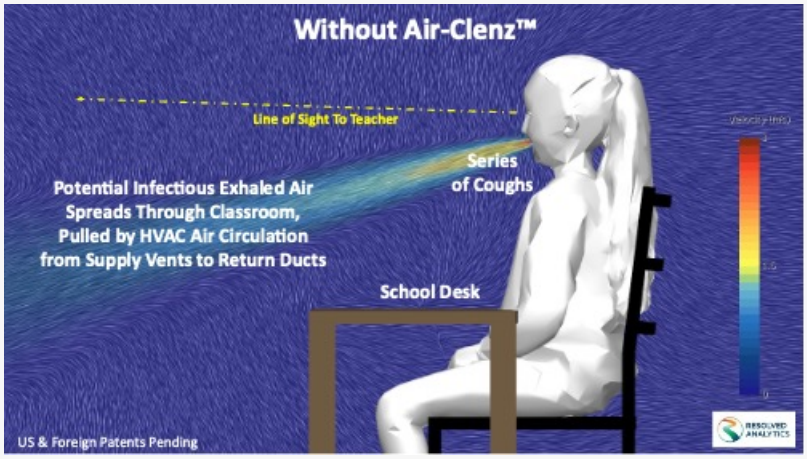
Significantly Exceeds Harvard-Recommended Room Air Changes Per Hour

Illustration of how Air-Clenz units attach to the front of school desks to stop, capture, and clean exhaled air from each individual before it spreads around the room.

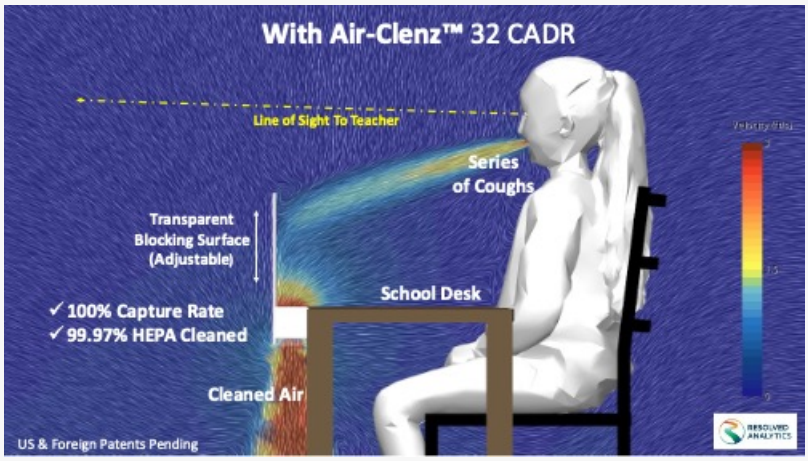
ATLANTA, GA, UNITED STATES, January 3, 2023 /EINPresswire.com/ -- Air-Clenz Systems (Air-ClenzTM) today announced an innovation that helps keep students and teachers safer from catching airborne disease such as COVID, RSV, Influenza, and the Common cold, while also improving cognitive abilities and performance. The desk-based Air-Clenz system permits seated students to easily see and talk with their teachers while the system quickly captures and cleans air exhaled by the students (breath, cough, or sneeze) along with general room air to a 99.97% level free of airborne viruses, bacteria, and allergens.

Anita Broach, PhD, Chief Scientist at Air-Clenz, explains in more detail, “In addition to quickly capturing and cleaning exhaled air - breath, cough, or sneeze - before it spreads throughout the room and possibly infect students or the teacher, Air-Clenz significantly increases air changes per hour in the classroom. Many indoor air quality studies, include ones from Harvard University, The Carrier Corporation and Technical University of Denmark show that improving indoor air quality both increases cognitive ability, performance, and productivity and improves health. A recent indoor air quality study published in Journal of Building Engineering 57 (2022) 104908 clearly shows in the following diagram how an improved classroom ventilation rate improves attendance, schoolwork, and grades. Also, Harvard recommends that school classrooms have at least six air changes per hour. With Air-Clenz on each student desk, air changes per hour can exceed ten and reduce the spread of airborne cross infection.”

Kevin Karem, PhD - a career virologist and an Air-ClenzTM Scientific Advisory Board Member - explains the importance of the unique approach, "Stopping a breath, cough, or sneeze before it disperses into indoor room air is a very smart approach to reducing airborne cross infection. Air-ClenzTM stops the forward motion of exhaled air and then quickly captures, cleans, and returns it to the room. This approach appears to have significant promise in reducing the spread of indoor airborne infectious disease."



Vector Analysis shows how a cough begins to spread across a classroom, potentially infecting others..



Vector Analysis shows a series of coughs stopped, captured, and cleaned by Air-Clenz.

Stu Sheldon, CEO of Air-ClenzTM, adds, "HVAC systems cannot quickly stop and clean exhaled air before it spreads and potentially infects others in the room. In fact, their very design helps spread exhaled air – and any related airborne pathogens – across a room. While HVAC systems provide terrific temperature and humidity control as well as air filtering, even with the most advanced HEPA filters and/or UV light air treatment, they can't do what Air-ClenzTM does. HVAC systems pull exhaled air from a supply vent to the nearest air return, 'mixing' exhaled air more than ten feet from a contagious individual, usually past several other occupants, in the process.

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>
> *Stuart Sheldon*

Traditional air purifiers are a step in the right direction, but in an environment like a classroom, they also pull contaminated air across other. In contrast, Air-ClenzTM on every desk capture and cleans up to 100% of exhaled air before it reaches others."

About Air-Clenz SystemsTM

Air-Clenz SystemsTM (Air-ClenzTM) www.Air-Clenz.com based in Atlanta, Georgia, was launched by success-proven inventors, scientists, and collaboration partners attempting to solve major global challenges caused by the coronavirus

pandemic, with an eye to benefiting the global population at large. Air-Clenz proprietary technology and approach is directed at the quick capture and cleaning of airborne particles from exhaled air before they can disperse within an indoor room and be transmitted to others. The technology can be adapted to work in most indoor venues where individuals are seated, including schools, offices, houses of worship, learning institutions, theaters, and vehicles of all types, including aircraft.

The Air-ClenzTM approach to business is that of licensing and or selling its IP, after having invented, developed working prototypes, proven and protected its intellectual property.

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Classroom Ventilation Without and With Air-Clenz™

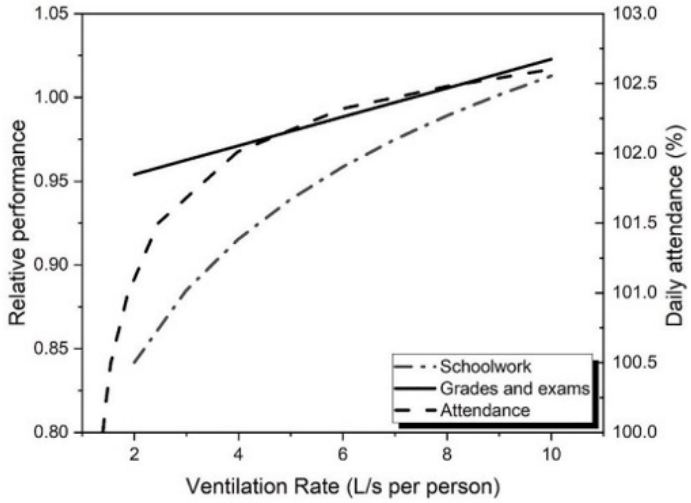
Number of people In a classroom	Average ACH for School Classroom In US	eACH Air-Clenz™ Without HVAC	eACH Air-Clenz™ With HVAC (~3 ACH)
20 students + 1 teacher	~2 - ~3	~6	~9
25 students + 1 teacher	~2 - ~3	~7	~10
30 students + 1 teacher	~2 - ~3	~8	~11

20-30 student classrooms equipped with Air-Clenz™-units attached to the students' desks in combination with the classroom's HVAC will always have an **eACH of 9 or greater.**

Calculation assumptions: 7,200 cubic feet is the volume of an average classroom in the US. *(Numerous references show 900 square feet, 8 feet ceiling height, and 20 –30 students per classroom)*

eACH (equivalent air turns per hour) in a classroom

Table of Air Changes per Hour in classrooms without and with Air-Clenz



A recent indoor air quality study published in Journal of Building Engineering 57 (2022) 104908 clearly shows in the following diagram how an improved classroom ventilation rate improves attendance, schoolwork, and grades.

This press release can be viewed online at: https://www.einpresswire.com/article/609158572

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