

COVID-19 & K-12 School HVAC Systems: What to do next?

As the worldwide pandemic continues to dominate headlines well into April of 2020, organizations and facilities around the world continue to adjust to the affects of the COVID-19 pandemic. Therefore, leaving many districts wondering how they can reduce risk while also complying with CDC recommendations.

Last week we provided information on how to implement secondary protections against COVID-19 through HVAC controls and UV light. This week, we would like to review an effective disinfectant and technology that is being used to combat COVID-19 in a multitude of applications including K-12 schools.

Hypochlorous Acid to Combat COVID-19

Hypochlorous Acid (HOCl) is a naturally occurring chemical that is produced by our white blood cells to fight bacteria and inflammation after an infection or trauma. HOCl provides a unique power to eradicate dangerous organisms while not causing harm to our cells.

In addition, HOCl happens to be the active ingredient in electrolyzed water, which is an industrial technology used for green cleaning and sanitizing - making it an effective disinfectant to combat COVID-19 in the school systems. The single most important feature of HOCl is that it is unusually efficient in eliminating viruses. **This powerful, yet very safe oxidant is up to 100 times more efficient at killing microbial pathogens than sodium hypochlorite, aka chlorine bleach.**

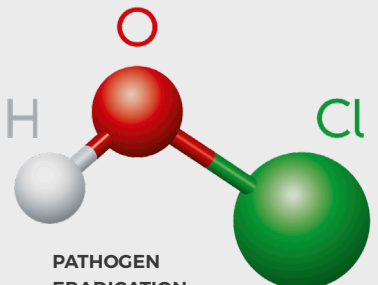
HOCl is approved by the EPA and listed by the CDC as a disinfectant against SARS-CoV-2.

K-12 HOCl Challenges

Although Hypochlorous Acid has demonstrated to be effective in virus reduction, there have been challenges associated with the disinfectant within K-12 schools.

In the past purchasing, transporting and storing the disinfectant have produced logistical challenges to the district due to the 5-6 day shelf life of HOCl. However, with research and technology, there is now a solution to this hurdle. **Districts can produce their own HOCl on-site by using simple elements that make up the disinfectant; water, salt, weak acid and electricity.**

These elements are inexpensive to purchase and in addition, HOCl can replace a number of conventional chemicals used on a daily basis.



PATHOGEN ERADICATION

- INFLUENZA
- NOROVIRUS
- BACILLUS
- CAMPYLOBACTER
- ENTEROCOCCUS
- ESCHERICHIA COLI
- LISTERIA
- PSEUDOMONAS
- SALMONELLA
- STAPHYLOCOCCUS
- VIBRIO
- HEPATITIS
- FUNGI

New Health Challenges Call for New Sanitation Solutions

The **ChlorKing HYPOGEN** is a stand alone, on-site generator optimized to produce Hypochlorous Acid, aka Neutral Electrolyzed Water (NEW) with neutral pH, using ChlorKing technology.

The system converts salt, water, weak acid and electricity into an effective, safe and powerful solution that can substitute for a number of conventional chemicals used daily. The applications for this technology are infinite and include any process or facility requiring sterilizing, disinfecting, cleaning or water purification.

One properly sized system can produce enough disinfectant in a day to treat every building in an average sized school district. As a result of its simple application, a district's custodial staff can disperse HOCl during the evening hours easily through a fogging system in order to eliminate disrupting any student's education.



HYPOGEN
On-Site Hypochlorous Acid Generator

	CHLOR KING (NEW) HOCl	OZONE	CHLORINE DIOXIDE	HYDROGEN PEROXIDE	SODIUM HYPOCHLORITE (BLEACH)
READY TO USE	X		X	X	X
ENVIRONMENTALLY FRIENDLY	X				
KILLS BACTERIA	X	X	X	X	X
NON-CORROSIVE	X				
NON-TOXIC	X				
HARMLESS TO HUMANS	X				
DEODORIZER	X	X		X	X
NON-FLAMMABLE	X	X		X	X
EASILY DISPOSED	X			X	
NO PPE REQUIRED	X				
NO REQUIREMENTS FOR STORAGE	X				

***Safe & Stable** - all organic, non-toxic, non-irritant, environmentally and ecologically safe sanitizing and disinfecting solution.*

***Santizes** - provides a sanitizer and disinfectant that is up to 100 times more powerful than bleach.*

***Neutral Electrolyzed Water (NEW)** - stable, cost-effective to produce, greener than traditional chemical technologies, and can be used in multiple applications across a wide variety of industries.*

***NEW is Efficient** - eliminates logistical concerns, hazardous chemicals and the need to monitor for chlorine dioxide residuals and provides more effective cleaning ability.*

This technology provides both flexibility and convenience to K-12 schools - allowing districts to generate HOCl on demand and apply where required, without a large investment/expense. By using this type of system and technology, districts will be maintaining a sustainable, environmentally friendly solution that is safe for its staff and students.

[Click here](#) to learn more information regarding prevention of COVID-19 according to the CDC.