

INDOOR AIR QUALITY

TO PROMOTE A HEALTHY LEARNING ENVIRONMENT, KENILWORTH PUBLIC SCHOOLS HAS ALWAYS HAD AN INDOOR AIR QUALITY PROGRAM IN PLACE TO ENSURE PROPER VENTILATION PROCEDURES ARE FOLLOWED AND SYSTEMS ARE MAINTAINED. BUT AFTER THE ARRIVAL OF COVID-19, THE DISTRICT IMMEDIATELY ACTED TO ACQUIRE MORE AIR-CLEANING EQUIPMENT AND REINFORCE MAINTENANCE PROTOCOLS.

THE ISSUE OF VENTILATION HAS RECEIVED A LOT OF ATTENTION SINCE THE PANDEMIC BEGAN, BUT WE UNDERSTAND THAT THE DETAILS CAN BE COMPLEX. THIS BREAKDOWN OF OUR AIR QUALITY SYSTEMS DETAILS THE STEPS WE'VE TAKEN.

PLANS ALREADY IN ACTION

- While some districts are still searching for supplies and equipment to enhance air quality, or have items on backorder, in anticipating our return to school in the spring of 2020, Kenilworth got ahead of the high demand. The district's building team met with vendors in early spring to learn which new products were recommended to mitigate COVID-19. As a result, Kenilworth is well-stocked with PPE and cleaning/sanitizing supplies, and prepared with the latest clean-air technology.
- Each classroom was evaluated for safe occupancy.
- Filters were changed for each mechanical system according to the manufacturer's specifications, and will continue to be changed quarterly or more often if needed.
- All HVAC equipment will be monitored daily. The district's maintenance procedures call for routine inspections to include unit ventilators, exhaust fans and other components.
- Two additional custodians will ensure high-touch surfaces and bathrooms are cleaned throughout the day.

MULTIPLE LAYERS OF PROTECTION

NEW JERSEY'S BLUEPRINT FOR REOPENING SCHOOLS, <u>THE ROAD BACK: RESTART AND RECOVERY PLAN</u>
FOR EDUCATION, REQUIRES DISTRICTS TO HAVE "ADEQUATE VENTILATION." THE KENILWORTH
DISTRICT HAS GONE FAR ABOVE THAT STANDARD TO PREPARE FOR THE 2020-2021 SCHOOL YEAR.

- The district has made sure that every classroom will manage air quality in three ways: mechanical, natural and through an ion-based air-purifying device that actively filters out airborne contaminants. The state requires one method; Kenilworth will go beyond that by providing three.
- Mechanically operated unit ventilators will pull outdoor air into the classroom, and the air conditioning system will also circulate air. Opened windows will provide additional, natural ventilation. As fresh air comes in, exhaust features in every occupied room will pull air out.
- As an additional safeguard, the district purchased iWave air-purifying devices for each classroom. The iWave units use ion technology: They emit positive and negative ions into the classroom as they draw in fresh air. The ions neutralize viruses, bacteria and molds. They also attach to allergens and dust, making tiny particles large enough to be trapped by the system's filter. The improved air-filter efficiency contributes to a healthier environment.

THE ABCs OF A/C

- Air conditioning will be running in Kenilworth classrooms; the chillers will be on. But while air conditioning creates comfort, A/C alone does not provide fresh air.
- Unit ventilators are the key to circulating outdoor air into a room. Fresh air is drawn in, filtered, and sent throughout the classroom. Each Kenilworth classroom in use has a unit ventilator.
- An automated temperature control system monitors the unit ventilators to ensure a balanced exchange of air. The classroom HVAC systems exhaust an amount of air equal to the fresh air that's brought in.
- Staff members will be reminded to keep the tops and fronts of the unit ventilators clear to ensure proper operation. The outdoor grill area will be kept free of grass, weeds and debris.



HIGH-TECH HELPERS

BEYOND THE AIR-PURIFYING IWAVE UNITS, THE DISTRICT HAS ACQUIRED A NUMBER OF ITEMS TO BETTER PROTECT STAFF AND STUDENTS THIS SCHOOL YEAR.

- Hydroxyl Air Processing Units: This long name is more easily understandable by its nickname, "nature's broom." Hydroxyl molecules naturally seek out and destroy contaminants in the air. The district has purchased portable units for each of its nurse's offices and the high school trainer's room, where they will instantly purify the air. This protects nurses and other staff members in locations where students will be evaluated and isolated if they are feeling ill. And the portability of the units means they can be taken elsewhere if needed.
- Electrostatic Disinfectant Sprayers: Technology in this equipment contains positively charged particles that are able to aggressively adhere to surfaces and objects. When the solution is sprayed, it attaches itself to a surface to thoroughly clean and get into hard-to-reach crevices. The sprayers are effective for a wide range of surfaces, including computers and desks.
- HEPA Filtration Vacuums: This high-powered filtration system can capture all types of particles. It works in conjunction with the iWave air-purification system.



