



# A NEW WAY FORWARD

## Next Steps

Jefferson County Board of Education  
June 22, 2021

KDE rescinds Healthy at School guidance as governor lifts COVID-19 restrictions



**KDE Rescinds  
Healthy @ School**

“Pursuant to Gov. Andy Beshear’s Executive Order 2021-386 (EO2021-386), the Kentucky Department of Education (KDE) on June 11 rescinded its flagship COVID-19 guidance document, ‘Guidance and Safety Expectations and Best Practices for Kentucky Schools (K-12),’ commonly known as Healthy at School.

The use of cloth face coverings and social distancing measures are no longer mandated.”

**Executive Order**

# Vaccination

June 14 - 18 Vaccination Pop-Up clinics with Wild Health for anyone in the community 12 and over at these sites:

- Brandeis
- Iroquois
- Valley

We are working to create at least six more pop-up clinics with partners in the coming weeks

12 and over vaccination available

# Personal Protective Equipment (PPE)

PPE available at all sites, including summer school:

- Masks are available for students and adults
- Hand Sanitizer continues to be accessible
- All other items previously available are able to be requested for the warehouse

**Plant Operators** ensured that all air filters in buildings are replaced **three times each year** to ensure free-flowing air movement and air exchange in the schools, Custodial Staff removed debris, wiped-down and sanitized the interiors and exteriors of units. This is completed three times each year as well. Plant Operators keep a log to document filter replacement.

**JCPS Safety and Environmental Services** conduct **Internal Air Quality (IAQ) testing** periodically in schools/buildings to measure carbon dioxide levels, ensuring adequate and appropriate ventilation. The presence and magnitude of carbon dioxide levels are a significant factor in determining sufficient ventilation (measured during occupancy). When CO2 levels are found to be above ASHRAE guidelines\*, Safety & Environmental Services submit a Work Order to Maintenance to inspect air handling units and HVAC components (\*this is not common).

# Ventilation

Our **HVAC Team** inspects chillers and boilers yearly and water towers monthly. In addition to daily, in-person monitoring (by building plant operators), our digital control management system monitors the temperature of space and whether the units are functioning at optimal capacity-- so we have continuous monitoring. This means we can identify if and when a system has any issue and dispatch our experts to examine anytime there is any indication of concern.

As part of the **HVAC operational inspection process** for both heating and A/C equipment, outdoor air intake dampers at all buildings have been inspected to ensure proper function and maximum fresh air brought into the buildings. All heating and A/C units have been adjusted to operate continuously throughout the day as buildings are occupied by students and staff.

# Ventilation

Outdoor air intake vents (fresh outdoor air for ventilation) have been reprogrammed to remain open for longer periods every day to bring additional outdoor air into our buildings allowing more dilution of common pollutants and aerosols containing potential COVID-19 particles. **Continued operation throughout the school day**, of air handlers (central air) and uni-vents guarantees 6 to 20 air exchanges per hour. All of our various types of HVAC systems produce a sufficient number of air exchanges.

**Ventilation**



**Guidance from health officials** clarified that outside air could be circulated throughout a building by either bringing in air through the HVAC air handlers or by opening windows to allow for air exchanges. **The Operations Team** studied each school building, and determined that all but thirteen buildings had outside-air systems that brought in fresh air into the buildings.

It should be noted that by simply opening the windows, the increased circulation and air exchanges creates an environment well within the **Health Department Guidelines**, for air exchanges. There were some rooms where the windows did not open and the Maintenance Team was sent to each building to ensure windows were functioning properly in each classroom and workspace to facilitate air exchanges.

In rooms where there is no access to outside air (i.e., no windows and/or not connected to the outside-air HVAC system) a **mitigation device was installed by our HVAC Team** to combat any potential contaminants.

## Ventilation

The Operations Division delivered or installed **over 400 mitigation devices** in schools throughout the district. Over **260 mitigation devices** were installed in schools and areas with no access to outside air to enhance air quality and ventilation. Additionally, we provided **148 Mobile Air Scrubbers** to every school building to operate in their sick/isolation room.

- Mobile Air Scrubbers: HEPA filtration designed and engineered for a single, enclosed area. These were placed in each school's isolation/sick room.
- Ion Unit: An ionization unit can be placed within the HVAC system to reduce viruses, bacteria, and other allergens from the air. These were placed in rooms with fan coils and no access to outside air.
- UVGI: Ultraviolet Germicidal Irradiation is a disinfection method that uses short wavelength ultraviolet light to kill or inactivate microorganisms by destroying nucleic acids.
- REME Halo: This device uses UV-C light to create low-level airborne hydrogen peroxide throughout the room reducing surface bacteria, viruses, odors, and mold. These were placed in rooms that have DX units and no access to outside air.

## Ventilation

The Facilities Planning, Mechanical Maintenance, and Safety & Environmental Services Departments are continuing to review and analyze new guidelines, current research, and technological advances to ensure we have optimized indoor air quality in our buildings.

**Ventilation**

## **From 2003 - 2021, JCPS Facilities Planning Department has completed:**

- Capital Renovations - HVAC System (87 schools)
- Mechanical System Upgrades for Ventilation/Air Quality - (49 schools)
  - Boilers, Chillers, Digital Controls, Air Handling Units

## **Current Capital Renovations (\$36,849,375)**

- HVAC Renovations:
  - 2021 – Ahrens/Brown & Mill Creek (in-progress)

## **Proposed 2022 and 2023 Projects**

- \$100 million for HVAC Renovations (7 schools - Central HS, Johnson MS, Western MS, Fairdale HS, Dixie ES, Hazelwood ES, Sam Meyers Hall)
  - \$52.2 million (Capital Funds)
  - \$47.7 million (ESSER)
- \$13.3 million (ESSER) for Mech. System/Ventilation Upgrades (33 schools)
  - Chillers (16)
  - Boilers (11)
  - Window Replacement (9)
  - Variable Frequency Drives (4)
  - Digital Controls (3)
  - Outside Air Units (3)
  - Central Plant Mechanical Equipment (2)
  - Air Handler Units (1)

# Ventilation

# FEEDBACK & QUESTIONS