

New York City Department of Education Experience with IAQ and COVID



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NYC Schools During the SARS-CoV-2 Crisis

From the start of the COVID-19 pandemic, school facilities served as a crucial component in NYC's fight against SARS-CoV-2 by: providing space for the support and care of essential workers' children; forming the distribution network for food and other necessary items to get into the hands of local communities; and allowing for free and easy access to testing sites throughout the City.



Regional Enrichment Centers

Staffed by Department of Education employees and community-based organization partners, RECs were available for the children of first responders, healthcare workers, and our most vulnerable populations.

The RECs provided children across the City with three daily hot meals, remote learning time with their teachers, activities like art, music, and physical education, and social and emotional supports.



Food Distribution Sites

The Department of Education is committed to making free meals available daily for any New Yorker who wants one. To this end, there were more than 400 sites across the City. Meals were available from 7:30 am to 1:30 pm, Monday through Friday, including holidays.

These sites also served as the distribution network for other essential items needed by the public, e.g. feminine hygiene products and



Testing Locations

In partnership with NYC Health and Hospitals, the Department of Health & Mental Hygiene, and the newly created NYC Test & Trace Corps., specific school buildings served as COVID-19 testing sites throughout the five boroughs.

These testing locations formed part of the City's overall infrastructure needed to reach its ambitious testing goals.



A Changing Paradigm for Cleaning and Maintenance



- Custodial workforce schedules were shifted to ensure day-time touch point disinfection (wipes), adequate restocking of hand soap and paper towel dispensers throughout the day, and a daily night-time disinfection.
- The standard night-time disinfection routine used electrostatic sprayers and an EPA List-N disinfectant suited for the elimination of SARS-CoV-2. This routine included every surface in every utilized room throughout the entire school building.
- Disinfecting wipes were available to every teacher for use in their classroom at all times to optimize use of custodial workforce and address any immediate safety concerns in the classroom.
- Hand sanitizer stations were located in all high traffic areas of the buildings as well as all classrooms.
- All sinks were repaired to operative condition prior to school reopening to ensure ease of access to handwashing.
- Role appropriate personal protective equipment were available to all occupants, e.g., custodial staff will have access to Tyvek suits, goggles, face masks and gloves whereas everyone will have access to face masks.
- DOE explored various pedagogical models for reopening including a mix of in person and remote learning, with social distancing for in person learning.



HVAC Improvements and IAQ Monitoring

Improving HVAC systems, specifically ventilation, was one of the most critical components of the layered mitigation strategy in the fight against SARS-CoV-2. The general approach of the NYC school system was to repair existing ventilation equipment; install air purification systems; provide field staff with the tools they needed; and build out management systems to ensure every issue was addressed.

- All ventilation equipment was repaired and checked by engineers prior to the start of the school year.
- Each classroom was provided with multiple air purifiers meeting or exceeding HEPA standards.
- All windows were repaired prioritizing fresh air intake.
- Large scale air purifiers were installed in congregate settings, e.g., school cafeterias.

- Metrics tools, e.g., IAQ monitors/CO2 readers, were provided to every building's custodian engineer.
- Anemometers were distributed for on-site diagnostics.
- A centralized complaint database was created to monitor issues across all 1,400+ sites and better inform management about how to allocate limited resources and trades personnel.

