



Proposed Health and Safety Benchmarks for a Safe Resumption of Return to Schools

Presented to the School Committee of Andover by the Andover Education Association

August 13, 2020

The AEA proposes that to ensure the health and safety of staff, students and the community amid a pandemic, that each of the following benchmarks for the City, Essex County and the State of Massachusetts be met prior to the physical return of students and staff:

- 1) A two week period of decline in the Covid-19 virus as measured by testing positivity rate, and average daily case count based on a two week rolling average;
- 2) An infection reproduction indicator (R_0) of less than 1;
- 3) A testing positivity rate lower than 3 %;

- 4) Availability of staff testing with results availability within 48 hours;
- 5) A rate of new cases below 6 per 100,000.

The AEA proposes the following benchmarks concerning District building ventilation systems:

Prior to the occupation of all buildings, the HVAC system shall be inspected by an independent certified HVAC professional. A copy of the report will be provided to the Association in accordance with MGL ch. 150E.

The Employer and the Association agree to the following terms and conditions in each building:

(1) The person in charge of the day to day operation of the heating, ventilating and air conditioning (HVAC) system in a building, (usually the Building or Facilities Manager, the Building Mechanic, or the Service Manager) shall be available to discuss the operating status of the HVAC system upon the request of the Association. For example: If an employee has a problem, the problem will be assessed and the problem will be fixed. The affected employee will receive an update in writing. Information provided will include what service is needed, are parts clean, does anything need to be done to make the system work more effectively, are the Plans and Specifications available for review, and when were the filters last changed?

(2) The HVAC system shall be running whenever someone is present in the building and prior to, and after the building is occupied as a pre and post occupancy purge sequence. Fresh air and exhaust shall be operating 24/7 in the bathrooms, the nurses office, the isolation rooms and other areas subject to reduce SARS-COV-2 transmission.

(3) Carbon dioxide levels shall be maintained at no higher than 800 ppm when the space is occupied at normal capacity.

(4) The demand-controlled ventilation (DCV) device shall be disabled as recommended by ASHRAE.

(5) At all times people are present and during the pre and post purging sequences, as much as possible the fans shall be on and air being moved through the HVAC system (even when the thermostats are not calling for heating or cooling). Purging requires supplying 100% outdoor air equal to three air changes (when combining both pre-occupancy and post-occupancy periods)

(6) The systems fans shall be set to “On” or “Circulate” at the thermostat if the HVAC system does not provide a constant airflow at all times people are present and during the purge sequence.

(7) Thermostats shall be operating accurately and properly and set to the correct temperatures. Typical indoor temperatures are 68-74°F in the winter, and about 75-80°F in the summer.

(8) All supply and return grilles and registers shall be open, and operating properly so that fresh air is flowing through them when the system’s fan is on.

(9) Outdoor air (OA) intakes or controls shall be set to the maximum level of fresh outdoor air the system is capable of handling or providing. (Provided the system has sufficient cooling, dehumidification heating and humidification capacity)

(10) OA intakes shall be clean, open and not blocked by bushes, defective louvers, etc.

(11) Filters shall be clean and rated at the highest efficiency the system is capable of handling or a minimum of MERV 13. Filtration methods such as bipolar Ionization, Ultraviolet Energy (UV-C) shall be considered and installed by a professional. Portable room air cleaners with HEPA or High MERV filters will be provided if upgrading existing filters to a MERVE 13 or greater is not feasible.

(12) For Variable Air Volume (VAV) systems, the minimum airflow shall be set to the highest possible setting.

(13) Humidifiers shall be kept clean, operating properly. In-room relative humidity shall be maintained at 40-60%.

(14) When using free-standing fan (e.g., pedestal fans, floor fans, wall fans, desk fans) to cool a person or to help mix the air in the space, the fan will not blow from one person directly past to another.

(15) There shall be no water leaks or standing water in the building or HVAC system, e.g., in OA inlet plenums and return air plenums above ceilings. If leaks are discovered they will be repaired immediately or that day if possible.

(16) The HVAC system shall comply with local and state codes, standards and guidelines.

(17) Exhaust fans in all spaces shall be operating one hour prior to occupation of the building and continuously while the building is occupied. In restrooms, nurses offices, isolation rooms, changing rooms, and other areas where transmission of SARS-CoV-2 aerosols are likely, exhaust and supply fans shall operate 24/7. Airflow shall be exhausted to the outside of the building. Make up conditioned fresh air shall be supplied to these areas. The intake and exhaust source shall be inspected to insure that exhausted air is not leaking into the outdoor airstream.

(18) Kitchen exhaust hood ventilation systems shall be operating properly and exhausting air to the outside. (There may be air recirculation in some kitchen exhaust systems that will require a minimum MERV 13 filters)

(19) If odors are present in a space or in the building as a whole, facility management or a consultant shall check into it. Typical odor sources might include: garbage or trash, rodents or insect nests, stagnant water collected somewhere (e.g., in a wet carpet), rotting plants, spoiled food, mold growths in carpets or walls, dirty ductwork, and dirty kitchens or break rooms. Remove the sources of the odors.

(20) If odors are detected in, or coming from a space or room where chemicals are stored, the odor source shall be identified (e.g., a leaking storage container) and the problem corrected.

(21) In the first few weeks after opening, facilities management shall regularly check with occupants of the space to see if they feel comfortable with the environment and are not feeling ill in any way. They shall follow up on any complaints or reported feelings of being ill or irritated while present in the building in writing to the employee with a copy to the Association.