

School Policy Templates: Heat and Air Quality

SCHOOL WELLNESS POLICY

How to Use This Document

The sample language below (text in black, non italics) is meant to offer a template for schools or school districts who want to adopt policies to protect students, staff and other school-based staff from extreme temperatures and days with elevated levels of air pollution. The template offers a practical approach to addressing the current and emerging impacts of climate change on our school environments.

The template uses the following structure:

- *Text in blue italics* denote guidance
- Text in black is sample language that may be used directly in policies
- [Text in red that is bracketed] denotes sections that are intended to be modified to fit a specific school's context and preference
- Text in blue boxes includes mitigation best practices

The sample policy language is meant to be discussed at a district level so that there can be a consistent approach across individual schools. However, it is important to recognize that there may be a difference in the options at the schools in any district; for example, some schools have central HVAC and others do not. In those instances, the district-wide approach should not change, but each individual school can lay out their individual protocols in a separate document (i.e., school handbook).

Additionally, the sample policy language provides examples for protocols that a district can use to mitigate elevated levels of air pollution and extreme temperatures. This is not a one-size-fits-all policy, and a district can add or subtract measures based on their individual preferences.

This template was developed in partnership with the Massachusetts Association of Health Boards as part of the Massachusetts Asthma Action Partnership (MAAP) [Healthy Environments Advance Learning](#) project. **This information is provided for educational purposes only and is not to be construed as legal advice. Legal advice can only come from municipal attorneys.**

Template Language

The [District Name] Public School District (the “District”) is committed to a district-wide, strategic effort to improve the air quality and to provide a learning environment that is temperate and comfortable for its students, faculty, and staff. The District understands that actively managing classroom and school environments will maximize students’ capabilities to learn, teachers’ capabilities to teach, and staff’s capabilities to perform their day-to-day responsibilities.

If the District is interested in pursuing wellness policy updates related to either air quality or extreme temperature, but not both, remove the following paragraph and exposure-specific language in the following sections

The District recognizes that the commitments to improving the indoor air quality of its buildings and creating a temperate and comfortable learning and working environment are interrelated priorities that affect one another. While it may take steps to address either priority at any given time, the greatest positive effect on the wellness of students, teachers, and staff includes a holistic approach to these priorities.

The District also recognizes that each of its schools may have distinct limitations for implementing policies and protocols related to air quality and excessive heat. The District encourages its administration and staff to create and adhere to protocols and procedures, invest capital, and train its administration and staff to address the issues of exposure to poor air quality and extreme temperatures to ensure the best possible environment for learning, teaching, and working.

Studies show that children are more susceptible to air pollution than healthy adults as their respiratory systems are still developing and they have faster breathing rates. Asthma, which affects 6.3 million American school children, is the most common chronic childhood disease in America, making air quality in the District a priority.

Note, consider adding or substituting the national asthma rate for your municipal asthma rate. In MA, these can be found in the [MA-DPH Environmental Public Health Tracking Community Profile](#).

Below please find protocols and practices that the District has identified to improve the learning and working environment at schools, reducing exposure to both indoor and outdoor air pollution. Improving indoor air in classrooms and other occupied school spaces is a powerful mitigation tool that can decrease the risk of both asthma and the transmission of infectious diseases. Monitoring outdoor air quality and adjusting student behavior to limit exposure to poor air quality will further decrease those same risks. The District promotes the following approaches: **[list/table of mitigation tactics]**

What to Include as an Air Quality Mitigation Tactic

Below are examples of best practices for reducing outdoor exposure to air pollution and improving indoor air quality that could be included in this section. Schools or School Districts can adopt a variety of policies and practices to address concerns about exposure to outdoor air pollution and improve indoor air quality.

When considering which tactics are most relevant to your school and context, it is important to consider what the primary sources of outdoor air pollution are in your community. Explore the MAAP [Clearing the Air](#) toolkit for additional information, best practices, and resources.

Best Practices to Reduce Outdoor Exposure to Air Pollution

- Know your risk – outdoor air pollution can vary depending on season, wind, weather, and location, sign up to receive local air quality alerts or monitor AQI.
- Modify school activities based on AQI. For example, when AQI is high, keep windows and doors closed and reschedule strenuous activities such as physical education and sports outside.
- Identify and maintain an indoor alternative space to promote healthy indoor physical activities – particularly in instances of extreme heat or poor outdoor air quality.
- Establish a framework for activity modification at different AQI levels as a school policy.
- Increase air pollution awareness in your school community - sign up to participate in the EPA's AirNow Air Quality Flag Program. The Flag Program uses brightly colored flags based on the daily AQI, flown by participating organizations, to create awareness of outdoor air quality conditions.
- Plant roadside vegetation barrier to reduce traffic-related air pollution exposure and plan for their maintenance
- Upgrade buildings and technology to reduce emissions in and around school buildings –
 - Retrofit existing buses with particulate matter filters or oxidation catalysts or replace them with zero- or low-emission models and
 - Upgrade outdoor maintenance equipment (i.e. mowers) with low emission options.
 - Transition to all-electric, high performance HVAC systems which do not burn fossil fuels or emit pollutants.
- Institute and reinforce anti-idling policies. Make sure that anti-idling policies are clearly communicated to everyone. This can include letters and/or emails to parents, training for bus drivers, and signage near parking lots and drop-off/pick-up zones.

- Encourage active transportation like walking and biking to minimize the number of motor vehicles on the road. Students and their families will not only breathe cleaner air, but also be more physically active.
- Consider locating new school buildings away from major roads. In addition, consider locating spaces that are often occupied by people (e.g., classrooms, playgrounds, and athletic fields) away from busy roads, and put spaces for maintenance, storage, and parking there instead.
- Educate parents, staff, and bus drivers about the harmful impacts of outdoor air pollution, and include them when planning and making decisions around various policies and practices.

Best Practices to Improve Indoor Air Quality

- Educate staff about best ventilation practices such as keeping air vents clear of clutter that may block airflow, and simply keeping HVAC (heating, ventilation, and air conditioning) systems turned on throughout the day.
- Reduce sources of indoor air pollution such as mold spores, dust, and fragrances.
- Retrofit existing school buildings with central heating, ventilating, and air conditioning (HVAC) systems. Ensure thermal comfort and ventilation needs are met and that the system can use high-efficiency filters (MERV 13 or higher).
- In buildings with existing mechanical ventilation systems, upgrade air handling units to use high-efficiency filters (MERV 13 or higher) without restricting the airflow rate.
- Ensure that air intakes are away from roadways, idling buses, drop-off zones, and other pollutant sources (e.g., designated smoking areas). For example, redesign/move school bus parking zones and drop off/pick up locations to minimize pollutants from exhaust getting into the school.
- Where a central system to provide filtered air is not available, use portable HEPA filters in each classroom.
- Establish protocols for frequency of filter replacements for air-handling unit or portable HEPA units, and standards for regular testing, maintenance, and cleaning of ducts.
- Weatherize buildings to reduce infiltration of outdoor air and improve the efficiency of HVAC systems. This step can reduce heating/cooling energy demands, operation costs, and the contribution of school buildings to climate change. When taking an action that reduces ventilation, explore compensatory steps (e.g. a portable air filter) to ensure healthy air quality.

Concurrently, the District will prioritize temperate and comfortable learning, teaching, and working environments. Studies show that heat stress can contribute to serious illness and disrupt normal organ function. Additionally, heat stress has indirect effects including increasing fatigue; impairing brain function, learning, and academic performance; and reducing concentration. Children are more susceptible to heat stress because they are less able to regulate their body temperature. Children are more likely to depend on adults for adaptive behaviors, such as access to drinking water or migration to a more comfortable physical area. The District promotes the following approaches: [\[list/table of mitigation tactics\]](#)

What to Include as an Extreme Heat Mitigation Tactic

Below are examples of best practices for reducing exposure to heat that could be included in this section. There are a variety of steps that schools or school districts can take to reduce heat stress among students and staff by addressing environmental factors such as humidity, air circulation, classroom temperature, and supporting protective behaviors. Consider which tactics are most relevant to your school and context.

Explore the MAAP [Clearing the Air](#) toolkit for additional information, best practices, and resources.

Best Practices

- Know the risk to your school community by monitoring weather conditions. Sign up to receive local emergency weather alerts and weather warnings or monitor your local forecast for temperature and humidity (heat index number).
- Modify school-based activities based on weather. Take preventative actions (such as increasing hydration, rescheduling events, or moving activities to cooled, indoor environments) during high heat days.
- Establish a framework for activity modification at different heat index thresholds as a school policy.
- Designate and maintain ‘cool rooms’ in schools. These spaces should be equipped with air conditioning and made open to all students and staff on days of high heat. Monitor students and staff for signs of heat stress or illness and relocate them to cool rooms. Nurses’ offices should not be used for cool rooms.
- Adjust conditions to reduce heat in classrooms without air conditioning. For example, install opaque, heat-absorbing curtains to block heat transmission or close windows and blinds during the hottest part of the day. Note, this reduces ventilation, and may increase the need to adjust other ventilation systems or use portable air filters if

available, to maintain healthy air quality. When temperatures are cooler outside than inside the school building (usually early in the morning), consider opening windows and using a window fan facing inside if available to increase the intake of cool air.

- Increase air flow in the school building by keeping windows and any appropriate doors open 1-2 inches and using window fans facing outside to create cross-ventilation.
- Make water easily accessible and encourage students and staff to drink water throughout the day. Consider increasing the number of water fountains or water coolers available.
- Train faculty and staff at the beginning of the school year and in the spring about the school's program for preventing heat stress and the most efficient methods for reducing heat and maximizing ventilation in classrooms.
- Provide heat health education for students and families. Use existing online materials to help plan in-class activities for students to learn about extreme heat and climate readiness. Educate families about the health effects of heat and symptoms of heat stress to look out for.
- Adapt school grounds to be more resilient to heat. Install shade structures (e.g., canopies, tents, sails, etc.) strategically throughout play, seating, and arrival/dismissal areas. Consider planting trees to provide natural shade coverage (trees offer many climate, health, and habitat co-benefits). When possible avoid materials that increase heat (e.g., rubber surface) in outdoor play areas.
- Adapt school buildings to be more resilient to heat.
 - Install cool roofing materials to reduce heat or thermal gain and demand on cooling systems.
 - Consider retrofitting schools with central air conditioning systems.
 - Weatherize buildings and electrify HVAC systems to improve the efficiency of cooling systems. This can reduce heating demands, operation costs, and the contribution of school buildings to climate change.