SCHOOLS, COVID-19 & ASTHMA: OUTDOOR ENVIRONMENTAL TRIGGERS

NMASBHC Tip Sheet – Asthma Series – #3 of 3

Staff and students planning re-entry to school environments may have questions about safety related to COVID-19. People with asthma may be at greater risk if they contract COVID-19. As schools work to achieve student social distancing required in the era of COVID-19, many are exploring and instituting greater use of outdoor spaces. While the increased ventilation outdoors can be a positive for reducing COVID-19 transmission, it can be a negative for students/staff with asthma if they are exposed to additional triggers. The following reviews some of the considerations and tools that schools and the health care experts that advise them can use to ensure the best possible outcomes.

The Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), and the Allergy and Asthma Foundation of America (AAFA) have long-standing guidance on mitigation of outdoor environmental triggers. The majority of recommendations involve tracking of outdoor air quality and avoidance of outdoor activity or selection of location of activity to achieve greatest possible distance from sources of outdoor pollutants. Additionally, schools may wish to make adjustments where they have control of pollutants (e.g. reduction/elimination of bus idling).

The following are relevant resources to utilize in making those decisions to address outdoor environments. Whether decisions are made by the state, districts, individual schools, individual staff at the school, or families, adherence to guidance from the most up-to-date resources will mitigate risk for those students and staff that have asthma.

GENERAL GUIDING PRINCIPLES & TOOLS

The following list of outdoor triggers can function as a reminder of what locally-specific issues schools may wish to consider and need to mitigate. Additionally, schools may wish to review the asthma action plans of all students to determine which triggers are of greatest concern on their campus.

- Proximity of school to polluting industry/factory
- Proximity of school to agricultural fields where pesticide/herbicide pollution may be of concern or where controlled burns may be utilized
- Proximity of school to busy roads or parking areas with idling car or buses where vehicle emissions have impact
- Seasonal smoke from nearby homes using wood-burning heating·
- Proximity of non-paved roads, where dust may have impact ·
- School landscaping schedules/products; recent "blowing," cutting or laying of herbicide/pesticide·
- Weather/event impact on air quality (e.g. wildfires) ·
- Winter cold air or high humidity air·
- Smoke during fire season/events·
- High pollen in air

OUTDOOR ENVIRONMENTAL TRIGGERS

Follow your Asthma Action Plan. Know your triggers. Take precautions - physical distance, wash your hands with soap, wear a mask, clean and disinfect objects you touch frequently.

OFFICIAL FEDERAL AND ORGANIZATIONAL GUIDANCE DOCUMENTS:

The following are hyperlinks to useful resources. To find documents with the websites listed, please visit the NMASBHC Asthma page.

Allergy and Asthma Foundation of America - newly released COVID-19 and Asthma Toolkit for Schools

American Society of Heating, Refrigerating and Air-Conditioning Engineers - August 20th release of new "Guidance for Reopening of Schools"

EPA - Managing Asthma in the School Environment guidance

EPA Air Quality Index Reporting

EPA and Partners data on Air Quality (and downloadable app)

EPA Air Quality Flag Program (with instructions for schools to participate)

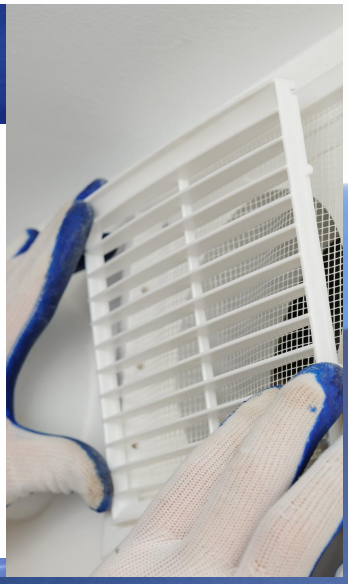
CDC Outdoor Triggers Resources

CDC Schools, Asthma and COVID-19

RAMP (Regional Asthma Management & Prevention) - Asthma Environmental Intervention Guide for School-Based Health Centers and Tips for Success

VENTILATION

There is new understanding about the aerosolization of the COVID-19 virus which has increased/changed recommendations regarding ventilation. This may result in a challenging balance regarding outdoor and indoor air quality and triggers. New recommendations for increasing outdoor air components of HVAC circulation may improve COVID-19 transmission but may increase introduction of outdoor pollutants into indoor air. The ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) has newly released special **COVID-19 guidance**.
Note: if increasing outdoor air, keep in mind the possibility that outdoor environmental triggers could impact individuals with asthma.



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*The information included herein was gathered by NMASBHC from the CDC, EPA, American Lung Association, and Regional Asthma Management Program. None of this information is intended to replace official guidance from New Mexico authorities or a patient's medical provider. If you have questions about this information, please reach out via contact information at www.nmasbhc.org.