

**Air Quality Protection Information**  
**Hazardous Air Quality Index (AQI)**  
**06/08/2023**

**What’s happening** - The air quality index or “AQI” is a basic scale running from 0 to 500. The greater the level of air pollution, the greater the health concern. Due to wildfires burning in Canada, expansive plumes of smoke have descended into our area introducing small particulates into the air we breathe. As of June 8<sup>th</sup>, the fires have been minimally contained and are expected to continue burning. Smoke conditions in our area will continue to fluctuate over the next week. Below are some considerations for our residents.

**Who’s at risk** – This depends mostly on how much particulate matter is in the air. However, the American Heart Association (2020) identifies susceptible or sensitive persons as those having chronic respiratory ailments, pulmonary, or cardiovascular disease. The elderly, pregnancy, transplant patients, and those who rely on outside (ambient) air for cooling their homes are also at increased risk.

Color	AQI	Interpretation
Green	0-50	Satisfactory air quality posing little or no acute risk.
Yellow	51-100	Moderate concerns in unusually <b>susceptible individuals</b> .
Orange	101-150	<b>General public</b> is unlikely to be affected. Acceptable to be active but <b>susceptible populations</b> should reduce prolonged or heavy exertion outdoors.
Red	151-200	<b>General public</b> may begin to experience health effects and should begin to take steps to reduce exposure. <b>Susceptible populations</b> should reduce prolonged or heavy exertion outdoors and move activities indoors.
Purple	201-300	<b>General public</b> should reduce prolonged or heavy exertion outdoors. Move activity indoors and reschedule outdoor events. <b>Susceptible populations</b> should avoid all physical activity outdoors and take measures to reduce indoor particle levels.
Maroon	301-500	<b>General public at risk</b> . Should avoid all physical activity outdoors. <b>Susceptible populations</b> should avoid all activity outdoors and keep activity levels low. *Take measures to reduce indoor particle levels and outdoor exposures with personal protection devices.
Maroon	>500	<b>Everyone at risk</b> and should avoid all physical activity outdoors. Take active measures to reduce indoor particle levels and outdoor exposures with personal protection devices (PPE).

**What can I do** – There are a few ways to reduce exposure during this time.

Intervention	Personal Protection Type	Use Considerations
PACs	Electronic air cleaners Electronic precipitator	Electrostatic precipitators and electronic air filters should be avoided Consider use of indoor PACs with HEPA filters, especially in vulnerable and high-risk populations. Be sure to change filters and recommended.
Face masks and respirators	N95/N100 respirators	Consider use of N95/N100 masks when air pollution levels are high (>150 - Red) and for susceptible or high-risk individuals.
HVAC	Mechanical in-duct air filter, Ventilation air conditioning	Consider properly installed MERV 7-13 filter and change filters frequently. Consider closing windows to limit indoor penetration. Use filters and run air conditioning fan continuously, with outdoor intakes closed.
Automobiles	Air conditioning and cabin air filters	Consider closing windows and switch vents from fresh air intake to recirculation mode. Consider using high efficiency cabin air filters and change frequently.
Other	Cloth or surgical masks	Cloth and surgical masks may not provide as much protection as N95/N100 masks. If used, pay attention to good facial/nasal fit and coverage. Wash, and/or change frequently to avoid particulate build up.

\*Adopted from the American Heart Association (2020)

Consider moving activities indoors to the greatest extent possible, based on air quality conditions.

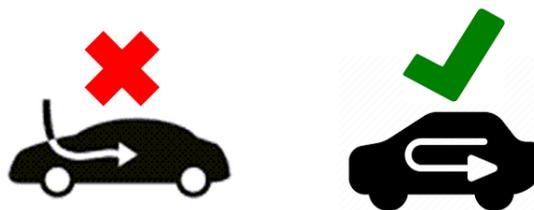
Avoid prolonged physical activity or exertion outdoors. This might include considerations for keeping your pets inside as well.

Personal protective equipment or devices - Masks may provide additional protection from particulates for those who are looking for additional protection. High quality masks such as N-95s and N-100s will provide the greatest protection from the smallest particulates.

While in buildings, consider keeping windows closed as much as possible. When running air conditioning units, be sure to switch the air intake from outside air to recirculation. Ensure that HVAC filters are checked and changed. For homes without air conditioning, please remain cautious of rising temperatures inside.

Portable air cleaners (**PACs**) are inexpensive devices which can be used in all homes and apartments with electricity. Families with additional concerns can explore the use of PACs in their homes and businesses.

While in your vehicle, keep your windows closed, use your air conditioning to stay cool, and switch your vents from fresh air to recirculating air.



**First Aid** – People may experience symptoms ranging from mild coughing, sniffing, runny nose, sneezing, and a scratchy throat to trouble breathing, nausea, lightheadedness, and dizziness. Persons experiencing trouble breathing, chest pain, lightheadedness, dizziness, or other symptoms should seek medical attention as soon as possible.

If you find someone experiencing medical difficulty, be sure to call 9-1-1.

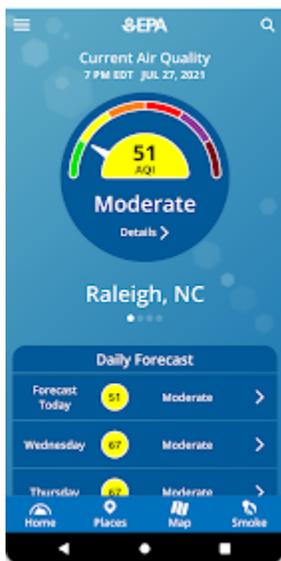
For any questions regarding you or your family’s health, consult your chosen primary care provider.

**Stay Informed** - For up-to-date information on air quality index (AQI) reports, expected signs/symptoms of exposure, prevention measures, and more, go to the Pennsylvania Department of Environmental Protection website or AirNow.gov.

Download the app for current air quality index at your location:

Google Play Store: <https://play.google.com/store/apps/details?id=com.saic.airnow>

Apple App Store: <https://apps.apple.com/us/app/epa-airnow/id467653238>



## References

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<https://www.airnow.gov/?city=Lancaster&state=PA&country=USA>