June 28, 2023

As many are aware, the Canadian wildfire smoke is continuing to impact much of the midwestern United States. As of this morning, the outdoor Air Quality Index (AQI) around Ann Arbor is fluctuating between the Unhealthy Level of 150-200 and Very Unhealthy Level of 201-300. According to the Michigan Department of Environment, Great Lakes, and Energy (EGLE), plumes will be coming in waves, so it is possible to see concentrations decreasing for an hour or two, then increasing; it may be a back-and-forth scenario with concentrations.

Smoke from wildfires contain fine particles that can harm health. Breathing fine particles in the air can reduce lung function; worsen asthma and other existing heart and lung conditions, and cause coughing, wheezing and difficulty breathing.

When the Air Quality Index is Unhealthy (151-200):
- Sensitive groups should avoid prolonged or heavy exertion outdoors and consider moving activities indoors or rescheduling.
- Others should reduce prolonged or heavy exertion outdoors and take more breaks during outdoor activities.

When the Air Quality Index is Very Unhealthy (201-300):
- Sensitive groups should avoid all physical activity outdoors and move activities indoors or reschedule to a time when air quality is better.
- Others should avoid prolonged or heavy exertion outdoors and consider moving activities indoors or rescheduling to a time when air quality is better.

Additional guidance from the EPA on reducing exposure can be found here.

Particulate levels inside buildings are typically much lower due to the filters on the HVAC system. Spot checks at several campus buildings confirmed that particulate levels are lower inside buildings.

Outdoor workers can also reduce the impact of particulate exposure wearing a facemask or respirator. To filter out fine particles, respirators must be labeled N-95, N-99, N-100, R-95, P-95, P-99, or P-100, and must be labeled as approved by the US National Institute for Occupational Safety and Health (NIOSH). Outdoor workers can voluntarily obtain and wear an N95 respirator. EHS has a large supply of N95s that can be picked up from our office for voluntary use.