

Air Quality Decision Matrix for Wildfire Smoke Preparation

Prolonged and significant poor air quality can pose a variety of negative impacts on the campus population and campus operations. Any impact will vary dramatically based on location (indoor vs. outdoor), level and duration of physical activities, and population (i.e., young children vs. healthy adults) etc. Depending on the air quality severity and the forecasted duration, it may become necessary to:

- 1) move outdoor activities to indoor spaces having mechanical ventilation and air filtration, or
- 2) postpone/ cancel activities.

The following matrix summarizes the primary areas where University level decisions may be needed and provides guidance to assist decision makers in determining when to adjust or cancel certain activities. This matrix references EPA's air quality index (AQI) for air quality and associated level(s) of concern. AQI forecasts and real time measurements can be used to supplement and improve decision making when available. During periods of poor air quality, local units are encouraged to work with staff and students to voluntarily adjust plans where possible.

For all actions listed in the table below, local units are to direct activities based on guidance provided by the Air Quality Decision Making Committee. Local units will also ensure COVID-19 hygiene best practices continue.

Overview of Procedures:

1. Air Quality Decision Making Committee monitors AQI, and discusses proposed action internally using [EPA's AirNow](#), NOAA's National Weather Service, and other tools.
2. Committee determines the final decision regarding campus activities and informs stakeholders/ local units via email.
3. Each unit sends a unit-specific email notifying their affected employees of identified action items. Note that general wildfire impacts may be communicated via AlertSU and campus wide email messaging.

Footnotes:

**This document is intended as general guidance for the institution when making decisions during wildfire smoke events based on air quality. These are definitive actions that must take place when, but not before, the AQI threshold is met.*

***To the extent possible, consider monitoring indoor air quality and implement mitigation actions if indoor AQI is 201 or above. *Values above 500 are considered Beyond the AQI. Follow recommendations for the Hazardous Category.*

Level of Health Concern	Current AQI Value	Persons Likely Affected	Actions						
			<i>Classes and Instructional Activities</i>	<i>Work Outdoors and in Buildings with Unfiltered Air</i>	<i>Work Indoors in Buildings with Filtered Air</i>	<i>Athletics & Outdoor Recreation</i>	<i>Outdoor Events/Camps</i>	<i>Childcare</i>	
Good	0-50	None expected	No Action Anticipated	No Action Anticipated	No Action Anticipated	No Action Anticipated	No Action Anticipated	No Action Anticipated	No Action Anticipated
Moderate	51-100	Unusually Sensitive Individuals (people with lung and heart disease) may be affected.	No Action Anticipated	Unusually sensitive people may require work accommodations.	No Action Anticipated	No Action Anticipated	No Action Anticipated	No Action Anticipated	No Action Anticipated
@ ~100-150 AQI, building mechanical HVAC systems may be modified to increase air recirculation where possible.									
Unhealthy for Sensitive Groups	101-150	Sensitive groups include people with heart or lung disease, older adults, pregnant women, and children.	No Action Anticipated for indoor classes. Consider moving outdoor classes to remote instruction or indoors. Instructors and students in sensitive groups may require accommodations.	Consider limiting work in outdoor or unfiltered air locations. Workers in sensitive groups may require work accommodations.	Keep doors and windows closed	Medical/Athletics/Outdoor Recreation staff should consult with individuals who fall into the sensitive groups about participation in outdoor practice, competition, and events. Consider moving outdoor classes to remote instruction or indoors.	At the higher end of range, consider moving activities indoors.	Consider moving all activities indoors to filtered air.	
Unhealthy	151-200	Everyone	No Action Anticipated for indoor classes. Move all outdoor classes indoors, or to a remote platform.	Staff assigned work outdoors or in campus buildings with unfiltered air for more than 1 hour per work shift: -For critical operations, provide required training and N95 respirator for voluntary use. -For non critical operations, re-assign staff to work in filtered air locations or inform staff not to report for work.	Keep doors and windows closed.	Shorten/Modify outdoor recreational activity to limit prolonged or heavy exertion. For outdoor classes and practices, move indoors or cancel. If AQI exceeds 150, end within 1 hour.	Consider cancellation of more intense outdoor events or move events online or indoors.	Move all activities indoors to filtered air or reschedule them to another day.	
Very Unhealthy	201-300**	Everyone	Consider canceling indoor classes if current AQI levels have maintained in this range and are expected to continue (academic activities that support clinical operations may be excluded from cancellation).	Suspend work where possible. If work is absolutely necessary, provide N95 respirators for voluntary use.	To the extent possible, curtail campus operations. Keep doors and windows closed.	Outdoor athletic activities should be moved indoors or rescheduled/relocated (any decisions regarding cancellation of athletic competitions should be made in accordance with NCAA policy). Cancel or move outdoor recreational activities indoors.	Cancel outdoor events involving physical activity (e.g., sports). Consider cancellation of outdoor events that do not involve physical activity (e.g., concerts).	Move all activities indoors to filtered air or reschedule them to another day. Consider canceling in-person operations if the indoor environment is negatively impacting learning.	
Hazardous	301-500**	Everyone	Follow recommendations for the Very Unhealthy category.	Follow recommendations for the Very Unhealthy category. Note: At current AQI levels over 500, outdoor work should be totally suspended. If absolutely necessary, N95 respirators are mandatory and require respiratory protection training and fit-testing.	Follow recommendations for the Very Unhealthy category.	Cancel or move indoors all outdoor athletic and recreation events/activities. Consider cancellation of indoor events/activities based on indoor air quality measurements.	Cancel all outdoor events and camp activity. Consider cancellation of indoor camps that require participants or families to travel to and from campus.	Follow recommendations for the Very Unhealthy category. Consider canceling in-person operations if the indoor environment is negatively impacting learning.	