University of California AQI-Based Decision-Making Matrix for Wildfire Smoke Events (Version 1.1)

Levels of Health Concern	Current PM2.5 AQI Value	Who is Affected?	Actions						
			Outdoor Workers/Volunteers	**Classes**	**Campus Operations**	**Health System Operations**	**Athletics & Outdoor Rec**	**Outdoor Camps/Events**	**Pre-K -12**
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.	• Unusually sensitive people may require work accommodations.	No Action Anticipated	No Action Anticipated	• In patient care areas, consider modifying filtered mechanical ventilation systems and/or implementing other controls to reduce outdoor air intake.	No Action Anticipated	No Action Anticipated	No Action Anticipated
Unhealthy for Sensitive Groups	101-150	Sensitive groups including people with heart or lung disease, older adults, pregnant women, and children.	• Workers in sensitive groups may require work accommodations.	No Action Anticipated	• Consider closing building doors and windows to reduce outdoor air intake.	• As feasible, modify filtered mechanical ventilation systems to reduce outdoor air intake in patient care areas.	**• Medical/athletic staff/outdoor recreation staff should consult with individuals who fall into the sensitive groups about participation in practice, competition, and/or outdoor events.**	• At higher end of range, consider moving activities indoors.	• For longer activities such as athletic practice, take more breaks and do less intense activities.
Unhealthy	151-200	Everyone	**• Limit outdoor work and prolonged or heavy exertion if practicable.** **• Reassign employees who work outdoors for more than one hour or provide N95 respirators for voluntary use.**	• Consider academic accommodations for students and faculty with pre-existing health conditions. • Consider cancelling or moving outdoor classes indoors.	• Consider making N95 respirators and use/care guidance available for voluntary use. • Consider increasing campus-managed shuttle/bus service. • As feasible, modify filtered mechanical ventilation systems to reduce outdoor air intake.	• Consider making N95 respirators and use/care guidance available for voluntary use. • In patient care areas, consider monitoring indoor air quality and implement mitigation actions if indoor AQI is within this range.	• Medical/athletic training staff should closely monitor the health of all athletes in practice and competition. Modifications to athletic activities should be considered and implemented as necessary. **• Shorten/modify outdoor recreational activity to limit prolonged or heavy exertion.**	• Consider cancellation of more intense outdoor events or move events indoors.	**• For *all* outdoor activities, take more breaks and do less intense activities**. • Consider moving longer or more intense activities indoors or rescheduling them to another day or time.
Very Unhealthy	201-300	Everyone	**• Suspend outdoor work. If work is absolutely necessary, provide N-95 respirators for voluntary use.**	**• Per local procedures and in consultation with the divisional Academic Senate Chair or designee, cancel or restructure classes if current AQI levels have maintained in this range and are expected to continue (academic activities that support clinical operations or research may be excluded from cancellation).**	• To the extent possible, curtail campus operations. • Consider monitoring indoor air quality and implement mitigation actions if indoor AQI is within this range.	• To the extent possible, curtail health system operations. • Consider monitoring indoor air quality and implement mitigation actions if indoor AQI is within this range.	**• Outdoor athletic activities should be moved indoors or delayed, postponed, or relocated.** **• Cancel or move indoors outdoor recreational activities.**	**• Cancel outdoor events involving activity (e.g., sports).** • Consider cancellation of outdoor events that do not involve activity (e.g., concerts).	**• Close school if current AQI levels have maintained in this range and are expected to continue.**
Hazardous	301-500	Everyone	**• Follow recommendations for the Very Unhealthy category.**	**• Follow recommendations for the Very Unhealthy category.**	• Follow recommendations for the Very Unhealthy category.	• 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 activities.** • Consider cancellation of indoor camps that require participants or families to travel to and from campus.	**• Follow recommendations for the Very Unhealthy category.**
Beyond the AQI	>500	Everyone	All Groups: Follow recommendations for the Hazardous Category. **Suspend outdoor work and activities. If outdoor work is absolutely necessary, N95 respirators are mandatory and require training and fit testing.**						

Key characteristics:

- The matrix is designed for use when wildfire smoke conditions result in worsening and unhealthy air quality. It does *not* apply if there is a direct threat of wildfire and/or other significant hazard to the location, or for smog-related air quality conditions.
- *Required actions* are in **bolded red text**. These are definitive actions that must take place when - but not before - the corresponding AQI threshold is met.
- Non-bolded actions are recommended for consideration and should be implemented at the location's discretion.
- The matrix is not a stand-alone document. It should be used in conjunction with existing local response plans, protocols, and procedures including the *Emergency Operations Plan*, *Crisis Management Plan*, and *Continuity of Operations Plans*.
- If building indoor air quality is measured at a level consistent with the AQI thresholds, applicable mitigation measures should be implemented if feasible, and required actions listed in the matrix should be taken.
- Contractors working at UC locations should follow the advice of their own employers.
- The Pre-K-12 actions apply to UC-managed facilities only.
- The matrix incorporates actions required by Cal/OSHA Section 5141.1.
- University sponsored outdoor events held at off-campus locations are subject to actions associated with that location's AQI levels.
- Actions for athletic practice and competition were based on current National Collegiate Athletic Association (NCAA) guidance. Decisions regarding the cancellation and/or rescheduling of athletic competitions should be made in accordance with the NCAA. Rescheduling of athletic and recreation competitions may take place when the AQI lowers to an acceptable level.
- Locations should ensure timely communication of AQI-based decisions and expected actions via multiple and redundant communication methods.
- Higher AQI thresholds automatically incorporate all guidance and actions associated with lower AQI levels.

Revision History

Version	Revision Date	Change Made
1.1	10/30/2019	• Removed "PM2.5 (24hr avg; µg/m3)" column • Renamed "Current AQI Value" column to "Current PM2.5 AQI Value"