

SUBJECT: WILDFIRE SMOKE PREVENTION POLICY NO. 422B

CATEGORY: Safety	EFFECTIVE DATE: 10/21
POLICY CONTACT: Yvette Ruiz	UPDATE/REVISION DATE:
REVIEWED BY COMMITTEE(S): Environment of Care	

#### **PURPOSE:**

To ensure that all workforce members are protected from wildfire smoke during work.

#### **DEFINITIONS:**

1) AQI. The current Air Quality Index (AQI). The method used by the U.S. Environmental Protection Agency (U.S. EPA) to report air quality on a real-time basis. Current AQI is also referred to as the "NowCast," and represents data collected over time periods of varying length to reflect present conditions as accurately as possible. The current AQI is divided into six categories as shown in the table below, adapted from Table 2 of Title 40 Code of Federal Regulations, Part 58, Appendix G.

Air Quality Index (AQI) Categories for PM2.5	Levels of Health Concern
0 to 50	Good
51 to 100	Moderate
101 to 150	Unhealthy for Sensitive Groups
151 to 200	Unhealthy
210 to 300	Very Unhealthy
301 to 500	Hazardous

- 2) NIOSH. The National Institute for Occupational Safety and Health of the U.S. Centers for Disease Control and Prevention. NIOSH tests and approves respirators for use in the workplace.
- 3) PM2.5. Solid particles and liquid droplets suspended in air, known as particulate matter, with an aerodynamic diameter of 2.5 micrometers or smaller.
- 4) Wildfire Smoke. Emissions from fires in "wildlands," as defined in Title 8, section 3402, or in adjacent developed areas.

REVISED: REVIEWED:

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### **POLICY:**

At Harbor-UCLA Medical Center, all managers are responsible to inform, protect and take necessary precautions/preventions with workforce members who work more than one hour outside the building or in a building without a Heating Ventilation Air Conditioning (HVAC) system during a wildfire where smoke, solid particles and liquid droplets are suspended in the air (known as particulate matter) while working. If any concerns are noted, managers can call the Safety Office at ext. 67700 for assistance.

The information/system shall include effective procedures for:

- 1) Informing workforce members of:
  - (A) The current AQI for PM2.5 as identified above under the AQI definition.
  - (B) Protective measures available to the workforce member(s) to reduce their wildfire smoke exposure.
- 2) Encourage workforce members to inform the employer if any of the following occurs:
  - (A) Air quality worsens
  - (B) Any adverse symptoms that may be the result of wildfire smoke exposure such as asthma attacks, difficulty breathing, and/or chest pain.
- 3) Training and instruction shall include the topics listed below in section 3(A)

### PROCEDURE:

Harbor-UCLA Medical Center has established system to adhere to Wildfire Exposure and to communicate when hazardous wildfire smoke, solid particles and liquid droplets suspended in the air (known as particulate matter) are surrounding the work environment to allow workforce members and managers to take the necessary precautions/preventions.

#### 1) When the current AQI for PM2.5 is over 151 as identified above under definition #1.

- (A) The Safety Office will provide information during Harbor's Daily Check-In (Huddle) on the AQI level when there is wildfire that impacts air quality. Information on the AQI will be uploaded in Harbor's SharePoint for workforce members and/or managers to view for those workforce members working outside or in an area without a HVAC system for more than one hour.
- (B) All workforce members may call the Safety Office at ext. 67700 to obtain additional information.

# 2) The following protective measures will be made available to the workforce members: to reduce their wildfire smoke exposure.

- (A) Workforce members who work outside or without a HVAC system for more than one hour when the AQI is over 151 during a wildfire are recommended to wear an N-95 mask for protection.
- (B) N-95 respirators, NIOSH-approved to effectively protect the users from inhalation of PM2.5.
- (C) Managers of affected workforce members will stock and maintain enough N95 respirators to make available to workforce members in the event the AQI exceeds 151.
- (D) Managers will ensure that windows, doors, and other openings are kept closed, except when it is necessary to open doors to enter or exit in case of an emergency.
- (E) Ensure that windows, doors, and other openings are kept closed on vehicles, except when it is necessary to open doors to enter or exit the vehicle.

# 3) Workforce members are encouraged to inform their manager/designee if any of the following occurs:

- (A) Air quality worsens while working outside or in a non-HVAC area for more than one hour.
- (B) They experience any adverse symptoms that may be the result of wildfire smoke exposure such as asthma attacks, difficulty breathing, and chest pain.



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### 4) Training and instruction:

- (A) The hospital will provide training and instruction in a language and manner readily understandable.
  - I. Harbor UCLA Medical Center ensures that all information/policies provided to any workforce members is written in a Simple English language.

### (B) Health Effects of Wildfire Smoke

- I. Particulate matter can irritate the lungs and cause persistent coughing, phlegm, wheezing, or difficulty breathing.
- II. Particulate matter can also cause more serious problems, such as reduced lung function, bronchitis, worsening of asthma, heart failure, and early death.
- III. Workforce members over 65 and who already have heart and lung problems are the most likely to suffer from serious health effects.

## (C) Right to Obtain Medical Care

- 1. Workforce members have the right to obtain medical treatment without fear.
- II. Managers shall allow workforce members who show signs of injury or illness due to wildfire smoke exposure to seek medical treatment.
- III. Managers shall also have effective provisions made in advance for prompt medical treatment of workforce members in the event of serious injury or illness caused by wildfire smoke exposure.
  - Activate "Code Assist" or 911 for medical assistance.
  - Ensure that emergency contact number is current in the workforce member's area file if significant others must be reached.

## (D) How to Obtain the AQI?

- I. Download the AirNow.gov apps from your smart device.
- II. Workforce members can click on the "Air Quality Index" (AQI) icon on the Harbor's Sharepoint home page to automatic get the current AQI reading.
- III. If you do not have a telephone or computer access, ask your area manager or call the Safety Office at extension 67700 for the current AQI.
- IV. The current AQI is also available from the U.S. Forest Service at https://tools.airfire.org
- (E) How to obtain information on Wildfire?
  - I. Go to: https://www.fire.ca.gov
- (F) Methods/Information of Communication
  - I. Managers shall inform their workforce members when the air quality is harmful and what protective measures are available to them.
  - II. Managers shall encourage workforce members to inform them if they notice the air quality is getting worse, or if they are suffering from any symptoms due to the air quality when working outside or in a building without HVAC system for more than one hour when the AQI reading is over 151.
  - III. Verbal and Written Notice
    - Daily Huddle Report
    - Daily Dash Board Email Notification

## 5) Methods of Protection & Benefits

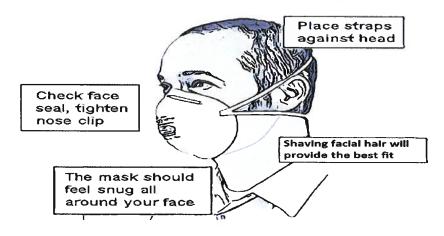
- (A) Hospital and manager methods must protect workforce members from wildfire smoke when the current AQI for PM2.5 is 151 or greater. Examples of protective methods besides an N95 respirator, closure of door, windows or opening include:
  - Relocate workforce members in enclosed structures or vehicles where the air is filtered.



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- II. Change work procedures such as moving workforce members to a place with a lower current AQI if possible
- III. Reduces work time in areas with unfiltered air/outside
- IV. Increases rest time and frequency, and provide a rest area with filtered air
- V. Reduce the physical intensity of the work to help lower the breathing and heart rates
- (B) The importance, limitations, and benefits of using a respirator when exposed to wildfire smoke.
  - I. Respirators can be an effective way to protect the workforce members employee health by reducing exposure to wildfire smoke, when they are properly selected and worn.
  - II. Respirator use can be beneficial even when the AQI for PM2.5 is less than 151, to provide additional protection. When the current AQI for PM2.5 is 151 or greater, managers with the support of the hospital shall provide the workforce members with proper respirators for voluntary use if working outside more than one hour.
  - III. A respirator should be used properly and kept clean (refer to Policy # 479A & 479B). The following precautions shall be taken:
    - a. Respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) of the U.S.
      - i. A label or statement of certification should appear on the respirator or respirator packaging. It will list what the respirator is designed for (particulates, for example).
    - b. Surgical masks or items worn over the nose and mouth such as scarves, T-shirts, and bandanas will not provide protection against wildfire smoke. An N95 filtering facepiece respirator, shown in the image below, is the minimum level of protection for wildfire smoke.
    - c. Properly put on, and use, and maintain the respirators to get the most protection from a respirator.
    - d. Workforce members should keep track of their respirator so that they do not mistakenly use someone else's respirator.
    - e. Workforce members who have a heart or lung problem should ask their doctor health care provider before using a respirator.
    - f. A respirator will provide much less protection if facial hair interferes with the seal.
    - g. For those who use an N95 or other filtering facepiece respirator mask that is made of filter material:
      - i. Place the mask over the nose and under the chin, with one strap placed below the ears and one strap above.
      - ii. Pinch the metal part of the respirator over the top of the nose so it fits securely.





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- iii. Adjust the respirator if air leaks between the seal and the face. The more air leaks under the seal, the less protection the user receives.
- iv. Respirator filters should be replaced if they get damaged, deformed, dirty, or difficult to breathe through.
- v. Filtering facepiece respirators are disposable respirators that cannot be cleaned or disinfected.
- vi. A best practice is to replace filtering facepiece respirators at the beginning of each shift.
- vii. If you have symptoms such as difficulty breathing, dizziness, or nausea, go to an area with cleaner air, take off the respirator, and get medical help immediately.

<u>Note</u>: Due to medical conditions, a workforce member can refuse to wear a respirator. Wearing a respirator is voluntary.

## 6) Administrative Control and Engineering Measures

(A) Administrative Control:

Whenever engineering controls are not feasible or do not reduce employee exposures to less than a current AQI of 151, the manager shall implement administrative controls, if practicable, such as:

- I. Relocate workforce members in enclosed structures or vehicles where the air is filtered.
- II. Change work procedures/schedules such as moving workforce members to a place with a lower current AQI if possible
- III. Reduce work time in areas with unfiltered air/outside
- IV. Increase rest time and frequency, and provide a rest area with filtered air
- V. Reduce the physical intensity of the work to help lower the breathing and heart rates

### 7) Engineering Control

- (A) Managers shall reduce workforce members exposure to less than a current AQI of 151 by engineering controls whenever feasible.
  - I. For instance, by providing:
    - Enclosed buildings, structures, or vehicles where the air is filtered. If engineering
      controls are not enough to reduce exposure to less than a current AQI of 151, then the
      manager shall reduce workforce member exposures as much as to the extent feasible.

### 8) Control by Respiratory Protective Equipment

(A) Where the current AQI is equal to or greater than 151, managers shall provide a sufficient number of respirators to all workforce members for voluntary use and encourage workforce members to use respirators.

### 9) Emergency

If the hospital has to evacuate, managers must follow emergency disaster protocols.

### **AUTHORITY:**

California Occupation Safety & Health Standards, Title 8, Division 1, Chapter 4, Section 5141.1

### **CROSS REFERENCES**:



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Harbor UCLA Medical Center Policies: Policy # 479A, Respiratory Protection Program Policy # 479B, Respiratory Fit Testing Policy # 460. Respiratory Protection Program