



Trafalgar Road Fire in Bella Vista, Arkansas

Frequently Asked Questions

Updated 3/6/2019

This document provides recommendations to help residents affected by the Trafalgar Road Fire make informed decisions related to their individual or household needs.

1. I can see or smell smoke from the Trafalgar Road Fire in or near my home. Is this harmful to my health?

The Arkansas Department of Health (ADH) has issued a health alert recommending that everyone who lives near the 8000 block of Trafalgar Road should avoid prolonged or heavy exertion, such as running, playing or yardwork, during smoky conditions. This health alert was issued based on particulate matter (PM) monitoring conducted by the Environmental Protection Agency (EPA) on December 11, 2018. Certain groups may be more sensitive to particulate matter (PM) in the air: those who suffer from breathing issues or lung diseases [such as asthma or chronic obstructive pulmonary disorder (COPD)]; those with heart disease; pregnant women; infants and young children; teenagers; and older adults. The health alert can be [found here](#). Residents who are concerned about their health should contact their medical provider.

2. What is particulate matter (PM)?

PM is a mixture of extremely small particles and liquid droplets that are carried in air or smoke. PM can be found in both indoor and outdoor air at varying levels, and can increase or decrease depending on weather conditions and the source of the PM. PM is measured based on size in micrometers. For example, there are PM_{2.5} for small particles and PM₁₀ for large particles. The Environmental Protection Agency (EPA) measures PM at many locations across the United States and translates those data into the Air Quality Index (AQI). Current AQI conditions for Arkansas can be found on the [AirNow website](#). The AQI provides a snapshot of local air quality and how air quality may affect health.

3. The Health Alert was issued in December. Is the air still unhealthy?

Conditions in the area near the Trafalgar Road Fire will continue to change depending on weather, wind direction, and activity at the site. The Arkansas Department of Environmental Quality (ADEQ) is conducting ongoing PM_{2.5} monitoring, and ADH is evaluating the PM_{2.5} data and issuing public health evaluations. These can be found within the Resources section of the [Bella Vista Community Information Page](#) on the

ADEQ website. All PM_{2.5} data collected by ADEQ and EPA since December 11, 2018 show AQI in the area to be within the Good to Moderate categories. All individuals should consider spending less time outdoors when they can see or smell smoke in the air.

4. How does particulate matter (PM) affect my health?

PM can be breathed into the lungs and cause respiratory tract (throat, chest and nose) problems. Smoke carries PM, and the particulates found in smoke may cause eye and respiratory tract discomfort and irritation. Children or adults with respiratory conditions such as asthma, allergies, or chronic lung conditions should limit their exposure to smoke by staying indoors during smoky conditions. In addition, residents should limit the use of indoor air fresheners as these can increase the likelihood of respiratory irritation and headaches. Residents who are experiencing symptoms should contact their doctor.

5. Can an N-95 facemask protect me from particulate matter (PM) or smoke from the Trafalgar Road Fire?

The most effective way to protect your health is to stay indoors, or limit your time outdoors when there is smoke in the air. A facemask may offer some protection against PM or smoke if the mask is properly fitted to the individual, and seals around the nose, mouth and chin. However, facemasks such as an N-95 or P100 can make it harder to breathe, and increase the risk of respiratory issues. People with heart, vascular or lung disease, including asthma, should talk to their doctor before using an N-95. N-95 masks are not recommended for children.

6. A reading from a Purple Air monitor indicated the air was unhealthy or hazardous. How should residents use the information from the Purple Air monitors?

Purple Air is a consumer-grade particulate monitoring system that provides real-time data that can be accessed through a website. Environmental Protection Agency (EPA) studies have shown that these monitors may provide some indication of air quality trends in the immediate area; however, these monitors may inaccurately read up to six times higher than absolute particulate matter values. In addition, these monitors are easily affected by humidity, fog, temperature, and very local emissions from running engines, smoking, backyard grills, and fire pits. These local conditions can cause short-term increases in particulate matter (PM) readings, and do not offer the best indication of overall air quality in the area. The Arkansas Department of Health (ADH) recognizes these monitors are a useful tool for the community; however, rigorous PM monitoring methods and standardized equipment, such as those used by the EPA and the Arkansas Department of Environmental Quality (ADEQ), provide a more comprehensive description of air quality in the area.

7. How can I keep particulate matter (PM) from the fire from entering my home?

Keeping windows and doors closed, and heating, ventilation, and air conditioning (HVAC) systems running during smoky conditions can help keep PM out of your home. Residents can also reduce PM indoors by avoiding: burning candles, using fireplaces, cigarette smoking, and by making sure all space heaters or kerosene heaters are properly vented. Another step residents can take is to ensure HVAC systems are in good working condition and filters are clean and fit properly. The most common industry standard for filter efficiency is the Minimum Efficiency Reporting Value (MERV) rating, which ranges from 1 through 20. More information on selecting an HVAC filter can be found in the EPA's [Guide to Air Cleaners in the Home](#). Proper ventilation of homes through the use of HVAC systems can improve a home's indoor air quality.

8. Are residents who live near the Trafalgar Road fire being exposed to chemicals from the air?

Based on the air sample results collected offsite in October, November, and December of 2018, and January and February of 2019, data do not show risk of public exposure to harmful levels of volatile organic compounds (VOCs), such as benzene, or semi-volatile organic compounds (SVOCs) in the air. VOCs and SVOCs are a large group of chemicals that easily evaporate at room temperature. The VOC and SVOC readings collected off-site were below public health screening levels; these low levels are considered typical background levels and do not represent a harmful health effect from potential inhalation exposure (breathing) in short or long-term scenarios.

9. Are volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs) from the Trafalgar Road fire entering my home through my HVAC system?

Based on the air sample results collected offsite in October, November, and December of 2018, and January and February of 2019, data do not show risk of public exposure to harmful levels of volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs) in the air. The VOC and SVOC readings collected off-site were below public health screening levels; these values do not represent a harmful health effect from potential inhalation exposure (breathing) in short or long-term scenarios. Based on these data, use of heating, ventilation, and air conditioning (HVAC) systems in the community is still considered appropriate, and is the primary way to reduce or prevent particulate matter (PM) that may be generated from the site from entering homes.

It is important to note that VOCs and SVOCs are found throughout indoor and outdoor environments. The VOCs and SVOCs found in homes are typically emitted from common household materials and items, such as paint, aerosol sprays, cleaning products, air fresheners, and pesticides. Indoor levels of VOCs and SVOCs can be reduced by limiting the use of these products within the home, and by following all manufacturer's precautions.

10. What's the most effective way to ventilate my home when smoke is present outdoors?

In a home, heating, ventilation, and air conditioning (HVAC) systems are generally the most effective way to increase ventilation, and eliminate particulate matter, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) from indoor environments. When HVAC systems are turned off, there is a lack of ventilation inside a house. Ventilation is the combination of processes that result in the supply and removal of air from inside a building. The lack of adequate ventilation could also impact the health and comfort of the occupants.

11. Are there medical tests that can show if someone has been exposed to benzene or other Volatile Organic Compounds (VOCs) from the Trafalgar Road fire?

There are laboratory tests that can test for VOC exposure, but these tests are complex and have limitations. People are often exposed to VOCs in the daily living environment (i.e. burning candles, fire places, smoking tobacco, certain occupations, pumping gas, automobile exhaust, detergents or cleaning agents), and medical tests for VOC exposure cannot identify the source. Residents concerned about their VOC exposure should contact their medical provider.

12. Where can I find information about the air monitoring that has been conducted by the 61st Civil Support Team from the Arkansas National Guard?

The Arkansas Department of Health (ADH) will post public health evaluations based on the air monitoring data that has been collected by the 61st Civil Support Team (CST) from the Arkansas National Guard on the ADH website. These evaluations can be [found at this link](#). ADH will also send the public health evaluations to the Arkansas Department of Environmental Quality (ADEQ) for posting on the [Bella Vista Community Information Page](#).