

Trafalgar Road Fire in Bella Vista, Arkansas

Frequently Asked Questions

Updated 12/21/18

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 avoid prolonged or heavy exertion outdoors. Examples of exertion are running, playing or yardwork. In particular, these 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 that 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. How does PM affect my health?

PM can be breathed into the lungs and cause respiratory tract (throat, chest and nose) problems. Smoke carries PM and 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.

4. Can an N-95 facemask protect me from 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.

5. 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. EPA studies have shown that these monitors may provide some indication of air quality in the immediate area. However, 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 PM readings, and do not offer the best indication of overall air quality in the area. 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, provide a more comprehensive description of air quality in the area.

6. How can I reduce PM in my home?

Keeping windows and doors closed, and 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 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](#).

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

Based on the air samples collected by EPA around the Trafalgar Road fire in Bella Vista, there does not appear to be a risk to the general public of exposure to dangerous chemicals in the air. The results from samples collected offsite (not at the Trafalgar Road dumpsite) do not show high levels of Volatile Organic Compounds (VOCs) or Semi-Volatile Organic Compounds (SVOCs), otherwise known as chemicals, in the air. An elevated level of benzene (a VOC) was detected onsite; however, the VOC levels detected onsite do not exceed the well-established occupational health screenings levels. As a result, these levels likely do not pose a risk to either the public or workers onsite.

8. Are there medical tests that can show if someone has been exposed to benzene or other 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.