

Smoke Information Resources

Arizona Department of Health Services

The Arizona Department of Health Services (ADHS) maintains a wildfire safety web page at www.azdhs.gov/phs/oeh/extreme/wildfires/index.php. This web page includes precautions the public can take to reduce impacts from smoke.

Air Quality Monitoring

ADEQ collects PM2.5 data (fine particulate matter with a diameter of 2.5 micrometers or less) from several monitoring stations in Arizona. PM2.5 is an indicator of the relative health risk from smoke. The hourly average PM2.5 concentrations for each station are available at www.phoenixvis.net (click on Portable Particle Monitors)

Open Burning

Visit ADEQ's Web site to learn about proper open burning techniques and procedures:
www.azdeq.gov/environ/air/permits/class.html#open

Prescribed Fire

ADEQ's Web site contains up-to-date information on prescribed fire approvals, contact information, smoke advisories, and general information about smoke:
www.azdeq.gov/environ/air/smoke/fires.html

Wildfire Support

ADEQ maintains a web page for "Wildfire Support", providing information on smoke advisories, air quality and smoke, fire weather forecasts, and other information regarding wildfire in Arizona.
www.azdeq.gov/function/programs/wildfire.html

Smoke Complaints

To make a complaint about smoke in your area, please visit our web site:
www.azdeq.gov/function/compliance/complaint.html
or call (602) 771-2286.

Contact Information:

Main Office

1110 W. Washington St., Phoenix, AZ 85007
(602) 771-2300 AZ Toll Free: (800) 234-5677
(602) 771-4829 (Hearing impaired)

Southern Regional Office

400 W. Congress, Tucson, AZ 85701
(520) 628-6733 Toll free: (888) 271-9302
E-mail: sro@azdeq.gov

Community Liaisons

Northwestern Arizona

Coconino, Mohave and Yavapai Counties
E-mail: nwaz@azdeq.gov
(928) 679-7307

Northeastern Arizona

Apache, Navajo and northern Gila Counties
E-mail: neaz@azdeq.gov
(928) 337-3565

Southeastern Arizona

Cochise, Graham, Greenlee, Santa Cruz and southern Gila Counties
E-mail: nwaz@azdeq.gov
(928) 679-7307

Southwestern Arizona

La Paz and Yuma Counties
E-mail: swaz@azdeq.gov
(520) 770-3309

Pima County

E-mail: sro@azdeq.gov
(520) 628-6716

Central Arizona

E-mail: ncw@azdeq.gov
(602) 771-2311

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Fires Smoke AND YOUR HEALTH

Smoke and Your Health

Smoke from fire can be a health concern. To protect yourself from smoke, it is important to understand types and uses of fire, health effects from smoke, and techniques for minimizing smoke impacts. The Arizona Department of Environmental Quality (ADEQ) is providing this information to help the public respond to smoke issues and address concerns related to smoke from fires.

Types of Fire

Residential Woodburning — The cumulative impact of fireplace and woodstove fires can be significant in certain parts of Arizona, especially those communities in valleys. This type of fire is not regulated by ADEQ. For more information visit EPA's Web site, Burn Wise (www.epa.gov/burnwise).

Open Burning — Open burning is defined as the combustion of materials outdoors and in open areas. With a few exceptions, most outdoor fires are regulated by ADEQ and must occur during daylight hours. Open burning permits from ADEQ or a delegated local authority are required, and many types of waste materials are not permissible to burn because of the toxic smoke that can be produced. Open burning, when correctly practiced, can be a useful approach to clearing unwanted vegetation.



Wildfire — Wildfire events can create significant smoke impacts to Arizona communities. While wildfire is a fact of nature, residents can take precautions to minimize the effects of smoke.



Wildland Prescribed Fire — Federal, state, and tribal land management agencies intentionally set fires to control wildland fuel loading and improve the overall health of the forests and land. The land manager's goal is frequent, less intense smoke from prescribed fire to guard against infrequent, dense smoke from dangerous and destructive wildfires. ADEQ's Smoke Management Program issues burn approvals to federal and state land managers and coordinates with Tribal authorities.

Unintentional Fire — Smoke from structure, car, or tire fires generally contains more harmful pollutants than smoke from the combustion of natural fuels.



Smoke Characteristics

Smoke is made up of gases and microscopic particles called particulate matter (PM). If PM is inhaled deeply into the lungs, it can damage lung tissue and cause respiratory problems. The smallest particles are the most harmful. Smoke may also contain toxic air pollutants. The type and concentration of toxic pollutants are dependent on fuel sources like wood, plastics, etc.

Smoke also contributes to local and regional haze and can impair visibility and the enjoyment of the outdoors.

Health Effects

Excessive, persistent air pollution is a health threat, especially to children, the elderly, and those with compromised immune systems. Children are active outdoors and breathe more air, and have the potential to breathe more air pollution per pound of body weight.

Air pollutants have been associated with increases in respiratory problems and diseases in children, including reduction of lung function and increased severity or frequency of asthma attacks. Air pollutants have also been associated with a number of other adverse health effects, including cancers and heart disease.

Symptoms from short-term exposure to smoke include scratchy throat, cough, irritated sinuses, headaches, runny nose and stinging eyes, and more serious reactions among those in high-risk groups. Elevated levels of PM also increase the potential for asthma attacks and other asthma-related symptoms in children.

Precautions — If you see, smell or taste smoke and it is affecting you and your family consider some of the following actions:

- If you are beginning to experience symptoms, consider temporarily locating to another area as long as it is safe for you to do so.
- Stay indoors with doors and windows closed.
- Run the air conditioning on recirculate with a clean filter or the fan feature on your home heating system with the heat turned off. The filtration systems on home systems can provide some benefit.
- Run room air filtration units that use HEPA filters.
- Reduce your physical activity. Do not exercise.

If symptoms persist or become more severe, please contact your primary health care provider - even persons considered healthy can experience symptoms when exposed to smoke!