



Safety Newsletter

Aug 2018

Protect Yourself from Wildfire Smoke

Dry conditions in much of the Riverside County increase the potential for wildfires in or near wilderness areas. Stay alert for wildfire warnings and take action to protect yourself and your family from wildfire smoke.



Who is at greatest risk from wildfire smoke?

People who have heart or lung diseases, heart disease, chest pain, lung disease, or asthma.

Older adults are more likely to be affected by smoke. This may be due to their increased risk of heart and lung diseases.

Children are more likely to be affected by health threats from smoke. Children's airways are still developing and they breathe more air per pound of body weight than adults. Also, children often spend more time outdoors engaged in activity and play.

Take steps to decrease your risk from wildfire smoke.

Check local air quality reports. Listen and watch for news or health warnings about smoke. Find out if your community provides reports about the U.S. Environmental Protection Agency's Air Quality Index (AQI) or check the report on AirNow.gov. In addition, pay attention to public health messages about safety measures.

Consult local visibility guides. Some communities have monitors that measure the amount of particles in the air. In the western United States, some states and communities have guidelines to help people determine if there are high levels of particulates in the air by how far they can see.

Keep indoor air as clean as possible if you are advised to stay indoors. Keep windows and doors closed. Run an air conditioner, but keep the fresh-air intake closed and the filter clean to prevent outdoor smoke from getting inside. If you do not have an air conditioner and it is too warm to stay inside with the windows closed, seek shelter in a designated evacuation center or away from the affected area.

Avoid activities that increase indoor pollution. Burning candles, fireplaces, or gas stoves can increase indoor pollution. Vacuuming stirs up particles already inside your home, contributing to indoor pollution. Smoking cigarettes also puts even more pollution into the air.



Follow the advice of your doctor or other healthcare provider about medicines and about your respiratory management plan if you have asthma or another lung disease. Consider evacuating if you are having trouble breathing. Call your doctor for advice if your symptoms worsen.

Do not rely on dust masks for protection. Paper “comfort” or “dust” masks commonly found at hardware stores are designed to trap large particles, such as sawdust. These masks will not protect your lungs from the small particles found in wildfire smoke.

Evacuate from the path of wildfires. Listen to the news to learn about current evacuation orders. Follow the instructions of local officials about when and where to evacuate. Take only essential items with you. Follow designated evacuation routes—others may be blocked—and plan for heavy traffic.

Protect yourself cleaning up after a fire. Cleanup work can expose you to ash and other products of the fire that may irritate your eyes, nose, or skin and cause coughing and other health effects.

Prevent wildfires from starting. Prepare, build, maintain and extinguish campfires safely. Follow local regulations if you burn trash or debris. Check with your local fire department to be sure the weather is safe enough for burning.



CAL FIRE Wildland Fire Retardant FAQ

What is Fire Retardant Made of?

Fire retardant is 88% water while the other 12% is ammonium phosphate, commonly found in fertilizers, which acts as the fire-retardant component. Other ingredients include gum thickeners to help the retardant stick to vegetation, flow conditioner to allow for easier transfer and mixing, and red coloring to help pilots see the fire retardant from the sky.

How Does Wildland Fire Retardant Work?

When retardant is applied to vegetation, it acts as a fuel break to help slow the fire. The solution coats the grass, brush, and trees and as the fire approaches, the phosphate salts react with the natural material present in the vegetation. This chemical reaction helps prevent combustion of the vegetation and woody materials, which normally provides fuel for the fire. The now coated vegetation decomposes under the increasing heat and gives off water vapor, leaving behind a non-flammable carbon coating.

Is it Safe?

People:

Fire retardant, when mixed with water, is not considered hazardous for potential respiratory side effects. Contact with the skin may cause irritation or chapping due to the ammonium. Immediate action is not required, but soap and water should be used for removal and any contaminated clothing should be washed before reuse. If inhaled, seek fresh air. If breathing becomes difficult, seek medical attention. If swallowed, immediate medical attention is not likely required. If there are any additional concerns, contact a physician or a poison control center for advice.

Animals:

There are no known adverse side effects to domestic or farm animals, which may eat small amounts of vegetation that has been covered in fire retardant. However, reaction may vary in animals. Should your pet eat significant amounts of fire retardant coated vegetation, consult a veterinarian. Another way to help protect your animals is to fill in any puddles or water supplies that could be contaminated with fire retardant. Use sand or dirt. Ensure all other water

sources are thoroughly cleaned out and refilled with fresh water. Fish and other water creatures may be impacted by fire retardant, but that threat is low. Direct contact can be harmful which is why care is exercised to minimize any introduction to sources of water. Sadly, fish are quite sensitive and even small impacts can be harmful, such as increased temperatures due to the fire and runoff of burned vegetation and debris.

Plants:

Fire retardant is similar to fertilizer. While not 100% biodegradable, it is able to provide plants nourishment due to the inorganic compounds used, like fire retardant salts. Other ingredients like the gum thickener are biodegradable and will break down over time. Retardant not removed from vegetation may cause it to brown and wither. After rain, plants should return to normal and be enhanced due to the plant nutrients.

What Are The Best Ways to Remove Fire Retardant?

Fire retardant can dissolve in water and be removed quite easily prior to drying. If dried, the gum thickener additive can hold tightly to what it lands on and is harder to remove. The red coloring can also stain certain materials. After drying, scrubbing surfaces or power washing off structures and equipment may be required. A mild surfactant (soap or detergent) can help in the cleaning process. Use caution when cleaning due to the increase in slipperiness that fire retardant may cause,



www.fire.ca.gov Feb 2018

Heat Awareness in Cars-

We all know the dangers of leaving children and pets inside hot cars, but what about employee exposure? From Corona to Blythe many county employees use private and county vehicles to get to work and home as well as for work, depending on our job duties. County vehicles used sparingly can be parked for days or weeks unused baking in the sun. When the time to use them arises, the interior temperature could be up to 172 degrees!

a pre-calibrated direct read meter. Refer to table below for results.



Findings

Data show the differences between interior and exterior of both vehicles average 27 degrees Fahrenheit. Although significant, this assessment was not conducted during the warmest time of the day (3pm) or warmest month of the year (Aug). Under those conditions the levels would probably be higher.

5-10 minutes with the windows down and the fan on, raise windows and operate air conditioner as normal. Once at the desired indoor temperature, switching air conditioner to a recirculation mode helps to stabilize temperature.

Other safety tips to remember when entering hot vehicles:

Upon entering vehicle, be careful of physical contact with seatbelt buckles, door handles, vinyl seats and gear shifters because these items can be hot enough to cause

Vehicle	Time of day	Outside Temperature (F)	Inside Car Temperature (F)	+/- Difference
	11:29 am	98.6	131.9	+33.3
	11:38 am	88.7	109.4	+20.7

At 70 degrees on a sunny day, after a half hour, the temperature inside a car can exceed 100 degrees. After an hour, it can reach 113 degrees. - Jan Null, adjunct professor at San Francisco State University

When temperatures outside range from 80 degrees to 100 degrees, the temperature inside a car parked in direct sunlight can quickly climb to between 130 to 172.- American Academy of Pediatrics study (2005)

Introduction

On June 12, an informal temperature assessment was conducted by Safety Certified Industrial Hygienist James Jackson on two county vehicles using

Assessment conducted by:
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Safety Certified Industrial Hygienist

Therefore, on a hot day to cool your car's interior consider employing the following protocol:

After starting car lower all the windows and turn on the air conditioner setting fan to highest speed to blow out stagnant hot air; this works best when the car is in motion (in fresh air mode), because air-conditioning systems require an immense amount of wind passing over the condenser in order to effectively transfer enough heat, but it is effective when the car is stationary. After

a superficial skin burn;

Keep that icy cold bottle of water handy, you just may need it to cool down;

If possible, look for shady areas to park your vehicle, a parking garage or a good size tree can come in handy as this can reduce interior levels by 30 degrees Fahrenheit;

Utilize windshield shades, when used properly they not only protect car interior, but can reduce interior temperature by as much as 50 degrees Fahrenheit;

NEVER, NEVER, NEVER leave children or pets in car regardless of outside temperature.

Article links: www.CDC.gov

Article links: <http://noheatstroke.org/>

MISSION Possible

by Humberto Huerta Jr.

Greek poet Archilochus once said "We don't rise to the level of our expectations, we fall to the level of our training." With this in mind, how prepared are you for emergency? Have you planned for it? Did you expect the unexpected? Did you have what you needed?

As a safety professional, for the past twenty five years, I've noticed one thing; Safety means nothing until it means everything. I've actually been saying this for years. I feel most people have good intentions about safety but at times it is hard to put it to practice. I, like most people, go to Costco and see an emergency supply kit and think "90 bucks, nope I'll buy jerky instead." We see and or read about bad things on the news. We sermonize about what we see and that's great but shortly thereafter we stop talking about it and therefor stop thinking about it.

That's why I've always said "Safety Means Nothing Until It Means Everything"...

So lets change that and put our safety brain to work! Lets train our mind to **rise to the level of our expectation**. Below is a scenario that if you plan it in your head you may be better prepared for the situation if it where to actually take place.

Set your phone alarm (you always have your phone) to the time and date listed below. Name the alarm using the scenario. When that day comes read the alarm and react to it, think about it, make a plan and play it out in your head.

Date	Time	Scenario
8/22/18	10:18 am	FIRE

Fire alarm sounds, you are told there is a fire in the front of the building.

A. Assess the situation	Don't panic and assess your options
C. Choose your response	What are your options: 1. 2.
T. Take Action	Do it!

Record your answers on this form and review your first instinct. If you would like to share your response please us the link below or scan and send them to me Humberto Huerta huhuerta@rivco.org.

Fire Mind Training Link:

<https://goo.gl/forms/LkMYykwYXhyIKjmU2>