

## If There Is a Fire, What Should I Do

- Get yourself and all others out of and away from the vehicle. If the vehicle is in a garage or other structure, exit immediately.
- After you are a safe distance from the vehicle, call the fire department at 911 or the local emergency telephone number. Tell them the location of the fire.
- Remain away from the vehicle; do not attempt to get back into a burning vehicle to retrieve personal property.
- If you choose to use a fire extinguisher, only do so from a safe distance and always have a means to get away.
- Use a fire extinguisher approved for use on class B and class C fires.
- Do not open the hood or trunk if you suspect a fire under it. Air could rush in, enlarging the fire and leading to injury.
- The dangers of motor vehicle fires often are overlooked. Each year, these fires kill over 300 people and injure 1,250 more. Toxic gases and other hazardous substances, along with flying debris and explosions, combine to produce serious dangers in motor vehicle fires.

- Be aware that there are alternative fuel vehicles in use, which include those powered by batteries, fuel cells, hydrogen, natural gas or propane. These vehicles may also be powered by a hybrid of these alternative fuels and regular internal combustion engines. Alternative-fueled vehicles can sometimes be identified by specific markings or different fuel ports (such as large electrical plugs, etc.). These vehicles can present special hazards such as release of flammable or explosive vapor; flames from fuels like alcohol (methanol or ethanol), which burn with light blue flames that are difficult or impossible to see in daylight or in bright lighting; and potential electric shock from high voltage wires. If you confront an alternative-fueled vehicle fire, do not approach, and call the fire department from a safe distance.

For more information or copies of this publication, please contact:

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# Vehicle Fires

## What You Need to Know



# FEMA



a  
seldom  
recognized  
part of  
**AMERICA'S  
FIRE  
PROBLEM  
is MOTOR  
VEHICLE  
FIRES**

## Vehicle Fires Can be DANGEROUS

Vehicle fires can produce toxic gases. Automobiles, trucks and other motor vehicles are made of many synthetic materials that emit harmful, if not deadly, gases when they burn. A main byproduct of fires is a lethal concentration of carbon monoxide, which is an odorless, colorless and tasteless gas.

Fires can cause fatal or debilitating burn injuries. A vehicle fire can generate heat upward of 1,500 degrees Fahrenheit. Keep in mind that water boils at 212 degrees Fahrenheit and that most foods are cooked at temperatures of less than 500 degrees Fahrenheit. Flames from burning vehicles can often shoot out distances of 10 feet or more.

Parts of the vehicle can burst because of heat, shooting debris great distances. Bumper and hatchback door struts, two-piece tire rims, magnesium wheels, drive shafts, grease seals, axle, and engine parts, all can become lethal shrapnel. Vehicle fires also may cause air bags to deploy.

Although relatively rare, gas tanks of motor vehicles can rupture and spill flammable fuel, posing a clear potential for serious injury.

In even more extraordinary instances, gas tanks have been known to explode. Hazardous materials, such as battery acid, can cause injury even without burning.

Vehicle fires are so dangerous that firefighters wear full protective fire-resistant clothing and equipment, as well as self-contained breathing apparatus to keep themselves safe. They also have the ability to quickly put out vehicle fires with large amounts of water or other extinguishing agents. You don't have these safety advantages, so use extra caution.

## Vehicle Fires Can be DANGEROUS

According to the U.S. Fire Administration (USFA) and the National Fire Protection Association (NFPA):

- Nearly one out of seven fires involves vehicles.
- One out of 10.5 fire deaths results from vehicle fires.
- An estimated 300 civilians are killed and 1,250 are injured each year from vehicle fires.
- Four percent of fire-related firefighter injuries each year result from vehicle fires.

Sources: USFA, "Highway Vehicle Fires (2008-2010)," Topical Fire Report Series, Volume 13, Issue 11 (January 2013); USFA, "Fire-Related Firefighter Injuries Reported to NFIRS," Topical Fire Report Series, Volume 11, Issue 7 (February 2011); and 2008-2010 NFPA fire loss data.