

# Are You Prepared for the Monsoon Season?

"Monsoon season" has begun and if you live in the far north valley or far southeast valley, you have probably already witnessed the power and destruction of a good ole' Arizona monsoon. The weather services states that most destruction will occur between June 15 through September 30. We hope the following information is helpful and keeps you and your loved ones safe throughout this monsoon season.

## Flash Flood Safety

Flash floods kill two to three Arizona residents or visitors each year. Our summertime thunderstorms often produce more rainfall than the ground can absorb. In these cases, runoff occurs and water levels in washes and streambeds increase. Flash flooding occurs when stream flow increases to the point that it is a threat to life and property. Arizona has many low water crossings that can quickly become impassable.

One of the most important things you can do to prepare for a flash flood is to stay informed of weather forecasts and warnings and, if living in a flood-prone area, to develop an evacuation plan. When outdoors, stay out of washes and streambeds even under sunny skies. Thunderstorms produce heavy precipitation that can follow waterways for miles and pose a threat far from the storm. If caught unaware by a flash flood, move to higher ground immediately.

If driving, and blocked by water over a roadway, wait for the water to subside or find an alternate route to your destination. Do not drive into the water. It's difficult or impossible to know how deep the water may be and surprisingly shallow, flowing water can carry a vehicle away. Most flash flood fatalities occur when motorists attempt to drive through floodwaters. The National Weather Service advises drivers to "Turn around, don't drown!"

For more information on flash floods and flash flood safety, please visit [www.nssl.noaa.gov/edu/safety/flashflood.html](http://www.nssl.noaa.gov/edu/safety/flashflood.html). You can also visit [www.Weather.Gov/Phoenix](http://www.Weather.Gov/Phoenix) to access official forecasts and warnings for South Central and Southwest Arizona.

## Lightning Safety

Every thunderstorm produces one or more bolts of lightning. This hazard kills one to two Arizona residents each year; as many as 15 are injured. Because all of us are exposed to thunderstorms during the course of Monsoon Season, it is important to know how to protect yourself.

Indoors is the only truly safe place to be during a thunderstorm and any sturdy, enclosed structure will do. If you can't get indoors, inside a hard-topped vehicle (with the windows rolled up) is your next best choice. In either case, stay away from interior metallic objects that may conduct electricity during a strike (wiring, piping, etc.). The idea is that metal conductors in the house walls or car body will divert the electrical charge around you and safely to the ground.

The most reliable way to protect sensitive electronic appliances (TVs, computers, etc.) during a thunderstorm is to unplug them **before** thunderstorms occur. If thunderstorms have already begun, stay away from appliances and their cords since these are possible pathways for lightning's electrical charge.

You can safely use a cell or cordless phone provided they aren't connected to their chargers/bases. Don't ever use a corded telephone during a thunderstorm; it's connected directly to metal conductors (wiring) that may bring the lightning's electrical charge your way.

For more information on lightning and lightning safety, please visit [www.lightningsafety.noaa.gov](http://www.lightningsafety.noaa.gov) or [www.srh.noaa.gov/srh/jetstream/lightning/lightningintro.htm](http://www.srh.noaa.gov/srh/jetstream/lightning/lightningintro.htm).

## Dust Storms and Downburst Winds

One of the most frequent signs that the monsoon is in full swing is the formation of strong thunderstorms. These storms can form any time of the day or night and anywhere in the southwest U.S. but are most commonly found developing over elevated terrain during the afternoon.

If conditions are right, these storms can send strong outflow boundaries down through the lower terrain, which can yield winds as high as 50 mph or more – strong enough to drag dust up into the atmosphere. On an active day, several of these boundaries can interact with each other producing more rapid thunderstorm development.

Dust storms in the desert are dangerous and often lead to highway injuries and fatalities. If you are driving and encounter a dust storm, try to move off of the highway as far away as possible from traffic. Pull out of the traffic lanes, turn your lights off and do not leave your foot on the brake pedal.

It is also important to stay informed of weather forecasts and warnings and to monitor highway information signs for indications of dust storms. NOAA weather radio is also a good way to get immediate notification of dust storm warnings issued by the national weather service.