



SEASONAL SMARTS DIGEST

ON THE ROAD

Spring 2016



WELCOME TO THE FARMERS INSURANCE SEASONAL SMARTS DIGEST!

The digest uses the previous three years' worth of actual claims from roads around the country to highlight some of each season's common dangers and provide suggestions to help drivers reduce their risk.

The Farmers Insurance Seasonal Smarts Digest has two important missions:

- What to **Look out** for this season — The insurance industry relies heavily on history to predict the future. The digest highlights seasonal hazards and the states in which those hazards are most likely to occur.
- What to **Think about** in addressing and helping to prevent dangers. To help drivers prepare for the season, we've gathered content from several resources for straightforward and practical application on the road.

Insurance terms you are unsure of

You will see some common insurance terms used throughout this report. If you're not familiar with these terms, Farmers has an easy-to-use Glossary of Terms at: farmers.com/glossary.html.

Did you know?

Pesky potholes

The transition from winter to spring can often include navigating a bumper crop of potholes – craters of varying sizes that form in roads after water seeps in. Pothole damage accounts for nearly 500,000 vehicle insurance claims every year. Farmers recommends the following tactics to help avoid potholes:

- **Slow down and anticipate potholes.** Driving more slowly can improve your reaction time and can generally reduce the magnitude of damage that occurs if you hit a pothole.
- **Don't tailgate.** Leaving more room between your vehicle and the car ahead of you is always a good idea. But this strategy comes in very handy at the height of pothole season because you are more apt to spot and safely navigate around a pothole.
- **Watch out for masked potholes.** After a snow or rainstorm, potholes can fill with water, making them harder to notice and their depth difficult to judge. When in doubt, safely avoid mysterious puddles.



ON THE ROAD

Look out!

According to Farmers claims data*, car claims related to the dangers of hail, rising water and flooding, sleeping at the wheel, glass damage, and tornadoes all present major hazards for drivers as spring's warmer weather arrives.

Think about!

Farmers is committed to helping customers plan for the unexpected. We've highlighted five common dangers and included five important pieces of information related to each to help drivers stay safe this season.

Major spring auto claims*



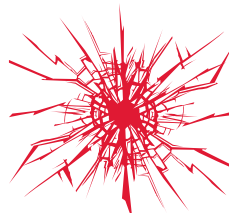
HAIL



RISING WATER
AND FLOODS



SLEEPING AT
THE WHEEL



GLASS DAMAGE



TORNADOES

* Based on Farmers Insurance claims from March to May 2013-2015. Percentages based on all auto claims nationwide.

Spring 2016: The start of tornado season

What is a tornado?

By definition¹, a tornado (also called a twister) is a narrow, violently rotating column of air that extends from the base of a cloud or thunderstorm to the ground. These condensation funnels can pack extremely damaging winds as well as water droplets, dust and debris, and are considered the most violent of atmospheric storms.

Where do tornadoes occur?

The U.S. experiences more tornadoes than any other place in the world.²

What to expect this spring

On average, 403 tornadoes occurred annually between March and May from 2013 to 2015.³ 59 percent of 2015's tornadoes occurred during this three-month window. Additionally, seven of the top 10 days for greatest tornado activity in 2015 occurred in the month of May. However, climatic changes and meteorological shifts have clearly shown that tornadoes can strike at any time during the year.

Dual tornado alleys

There are two geographic areas in the U.S. known as "Tornado Alley" because of their high volume of tornadoes.⁴ The first is a path in the south-central U.S. that is not neatly defined by state borders. This area, which often has the conditions necessary to produce violent storms, includes the region from central Texas, northward to northern Iowa, and from central Kansas and Nebraska east to western Ohio. The second is in Florida because of its almost daily thunderstorms, a key ingredient for tornado formation, as well as its vulnerability to tropical storms and hurricanes, which can spark tornadoes.

How is tornado strength measured?

The strength of each tornado is assessed after the storm has passed over an area, and is based upon 28 specific observable characteristics of damage.⁵ Tornadoes are assigned numbers (from the mildest EF-0 to the most severe EF-5) based upon the "Enhanced Fujita Scale",⁷ a second-generation tornado measurement scale first implemented in February 2007 by the National Weather Service, according to the Storm Prediction Center of NOAA.

Think about!

Tornadoes: 365/24/7

Tornadoes can occur on any day of the year, and at any time of the day or night⁷.

Tornadoes are frequently reported east of the Rocky Mountains during spring and summer months. In the southern states, peak tornado season is March to May.⁸

Tornado approaching?

- **Understand a watch vs. a warning.**⁹ A tornado "watch" means conditions are favorable for a tornado to develop, while a "warning" indicates that an actual tornado has been seen or reported and that individuals in the expected path should launch their emergency plans.
- **Stay informed.**¹⁰ Know how your community alerts residents of an imminent tornado, whether by siren, media reports, and/or cell phone alerts.

¹ Source: National Severe Storm Laboratory at: nssl.noaa.gov/education/svrwx101/tornadoes

² Source: National Severe Storm Laboratory at: nssl.noaa.gov/research/tornadoes

³ Source: NOAA's Storm Prediction Center at: spc.noaa.gov/climo/online/monthly/newwm.html

⁴ Source: NOAA at: hncdc.noaa.gov/climate-information/extreme-events/us-tornado-climatology/tornado-alley

⁵ Source: NOAA at: spc.noaa.gov/faq/tornado/ef-scale.html

⁶ Source: NSSL at: nssl.noaa.gov/education/svrwx101/tornadoes

⁷ Source: NSSL at: nssl.noaa.gov/education/svrwx101/tornadoes

⁸ Source: The Department of Homeland Security at: ready.gov/tornadoes

⁹ Source: NSSL at: nssl.noaa.gov/education/svrwx101/tornadoes

¹⁰ Source: The Department of Homeland Security at: ready.gov/alerts

Hail

Hail is a frequent by-product of spring (and summer) thunderstorms. Hail stones are actually layered ice balls that form when updrafts in thunderstorms carry droplets of rain upward and into very cold upper layers of the atmosphere. They then freeze into typically irregularly shaped balls of ice. When frozen hailstones become too heavy to stay aloft, gravity pulls them down toward the earth. Hail falls in paths known as hail swaths. Affected areas can range up to 100 miles long.

At Farmers, 58 percent of all annual hail claims related to damage to vehicles are reported between March and May. May tends to be the height of hail damage season, with 29 percent of hail claims occurring in this month.

A hail storm can come on suddenly from within a thunderstorm and even indicate that a tornado is being formed. If you are driving, take these precautions to keep you and your vehicle safe:

- **Watch the sky.** A greenish color in the sky is sometimes visible before and during severe weather, including hail storms, which can precede or accompany tornadoes, although scientists don't know exactly why the sky appears green.
- **Avoid stopping under an overpass.** While an overpass may seem like a great spot to wait out a hail storm, it may put you and your car in greater danger, since hail storms often are part of larger severe weather systems that may include tornadoes. Stopping under an overpass can result in even more damage to your car and occupants, if high winds – and the debris picked up by those winds – move through the underpass.
- **Stay inside your vehicle.** To help prevent harm, in general, do not leave your vehicle until the hail storm stops. Place small children under your body and shield their eyes.
- **Brace for shattering glass.** Stay away from front and rear windshields, if possible, whose sloping provides greater surface area for hail to hit and shatter glass. Also avoid being directly under sun roofs, whose glass can break and fall into the vehicle.
- **Covering your car.** Don't have a carport or garage where your car would be safe from hail? You can purchase a hail blanket or other car covers if you're forced to keep your car outside. Depending on your location, you may also be able to move your car into a covered parking lot for the duration of the storm if there's time. If all else fails, you can always ask friends and neighbors who have covered parking if they would be willing to share.



We've seen a thing or two

Hail vs. sleet¹¹

Hail is a form of precipitation that occurs when updraft winds created within thunderstorms carry droplets of rain up and into icy cold areas of the atmosphere. Once there, they freeze into ice balls and are classified as hail if they have a diameter of at least 0.20 inches (5 mm).

Sleet takes the form of smaller, translucent pellets of ice balls that often bounce when they hit the ground or vehicle surfaces.

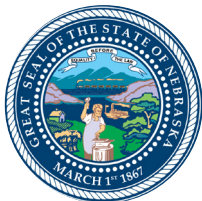
Did you know?

Paintless dent repair can be an effective repair option if you're caught in a hail storm. The technique allows technicians to remove minor dents from car bodies using specially designed tools that essentially massage small dents out of the sheet metal from the back of the panel.

Top 5 states for hail claims*



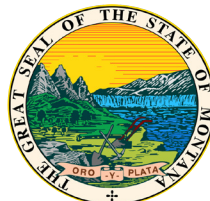
Kansas



Nebraska



Oklahoma



Montana



Texas

*Based on Farmers data from March to May 2013-2015. This number represents the percentage of states' claims due to this specific hazard during spring.

¹¹ Source: NSSL at: nssl.noaa.gov/education/svrwx101/hail/types

Rising water and flooding

Spring is a common time of year for outings and events that make for lifelong memories. But it's also the time of year when drivers can encounter significant flooding – especially as winter snow melts and combines with abundant spring rain showers.

Some roads are known to flood easily or suddenly due to poor drainage, uneven road grading and other factors. Other times, unexpected storms, overflowing levees, and damaged dams can overwhelm roads and cause hazardous driving conditions.

Flash floods can often bring rolling water ranging from 10 to 15 feet high. It takes as little as two feet of rushing water to carry away a car, despite it weighing a few thousand pounds when dry. Moreover, if you think your state's roads are not at risk, think again. In the past five years, all 50 states have experienced some level of flooding, including flash flooding.¹²

More than half (51 percent) of all rising water and flooding claims occur in the spring between March and May. 2015 proved to be an especially treacherous year, as rising water and flooding claims more than quadrupled from the same three-month window in 2014. Here are some tips for safely dealing with rising water and flooding situations on the road this spring:

- **Know your surroundings.** Know where you are at all times and understand if you're driving (or even parking) near drainage channels, underpasses or similar areas. These are areas where flash flooding can occur at any time, regardless of whether typical warning signs like rain clouds or heavy rain are present.
- **Keep your phone charged.** If you must drive in potential flood conditions, make sure your mobile phone is charged or you have a backup car charger with you. You won't want a dead phone when you're stuck on a flooded road and need to call for help.
- **Wait for water to recede.** Just because water stops rising or the rain ceases doesn't mean it's okay to proceed. Water on the road ahead might be deeper than it appears, and it can also obscure from view a whole variety of potential hazards, like downed trees and even live electrical wires, which can turn an already serious situation worse and, potentially, deadly.
- **Don't panic if you're caught in a flood.** If you've heeded the warnings and did not drive into a flooded area but are now surrounded by floodwater, don't panic. If you're inside, you should consider staying where you are and waiting for rescue if safety permits.
- **Night driving requires extra awareness.** Drivers must be extra aware and cautious if driving at night. Low light levels make it harder to see potential flood dangers and make drivers more susceptible to accidentally driving into a flooded area.

Top 5 states for rising water and flooding claims*



Texas



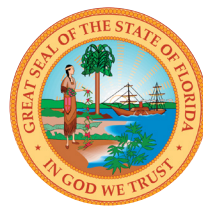
Illinois



Alabama



Oklahoma



Florida



We've seen a thing or two

Flooding¹³ is a coast-to-coast threat to the United States in all months of the year. Flooding typically occurs when prolonged rain falls over several days or, when intense rain falls over a short period of time. The most common cause of flooding is water due to rain or snowmelt that accumulates faster than soils can absorb it or rivers can carry it away.

Did you know?

On a spring break road trip and unsure of what conditions may exist ahead? [The National Traffic and Road Closure Information website](#) from the Federal Highway Administration is great resource if your passenger has an Internet connection, or you can call 511 in any state to get travel information.

More than half of flood-related drownings in the U.S. occur when a vehicle is driven into floodwater.¹⁴

*Based on Farmers data from March to May 2013-2015. This number represents the percentage of states' claims due to this specific hazard during spring.

¹² Source: National Flood Insurance Program at: floodsmart.gov/floodsmart/pages/flood_facts.jsp

¹³ Source: NOAA at: floodsafety.noaa.gov/hazards.shtml

¹⁴ Source: NWS at: nws.noaa.gov/os/water/tadd

Sleeping at the wheel

Falling asleep at the wheel is a serious problem for all drivers. More than one-quarter (27 percent) of Farmers car insurance claims related to sleeping behind the wheel occur from March to May each year. Moreover, Farmers saw a staggering 37 percent increase in these claims from 2014 to 2015.

Accidents related to drowsy driving are becoming an increasing concern. U.S. drivers reported getting less nightly sleep than ever before; 71 percent reported getting less than seven hours a night.¹⁵ Further, sleep disorders are increasingly being recognized and diagnosed. Working overnight shifts or drinking alcohol can exacerbate sleepiness.

Adding to this is the daylight saving time, the artificial changing of our clocks in March of each year ("spring forward"). It's intended to move one hour of daylight from the morning to the evening. This occurs once again on March 13, 2016. That one-hour loss may not stress most people, but it can disrupt individual body (circadian) rhythms for days or even weeks, depending upon the individual.²¹⁶

Here are some tips to help you prevent drowsy driving this spring:

- **Signs of fatigue.**¹⁷ It's important to know the signs of fatigue so you can identify them before it's too late. Knowing what your body's warning signs are will allow you to safely pull off the road and find a spot to stop while your body recharges or another driver takes over.
- **Watch your intake.** It should go without saying, but drivers should avoid alcohol and medications (including over-the-counter options) that may make you drowsy before operating a car.
- **Take a nap.**¹⁸ Short naps between 20 minutes and 30 minutes can help with short-term alertness. If you feel drowsy, play it safe and take a short but restful nap in a safe, off-the-road location.
- **Make a lifestyle adjustment.**¹⁹ Sleep hygiene is the act of having healthy sleep habits. Don't wait until the day before a cross-country drive to adjust your sleep habits. Sticking to a sleep schedule, creating a relaxing bedtime ritual, getting regular exercise, and giving your body time to wind down an hour before bed are a few ways to promote better sleep hygiene, according to the [National Sleep Foundation \(NSF\)](#).



We've seen a thing or two

Want better sleep?

Here are some tips for getting a more restful night's sleep:²⁰

- Begin a wind-down ritual two to three hours before bedtime.
- Avoid vigorous exercise in the hours before bed, but gentle stretching can facilitate sleep.
- Turn off technology and the television.
- Try a warm bath to relax muscles.
- Have something warm and soothing to drink, but avoid caffeine or alcohol.

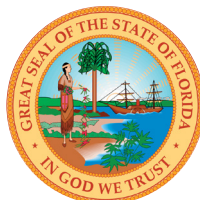
Top 5 states for sleeping at the wheel claims*



California



Texas



Florida



Washington



Oklahoma

* Based on Farmers data from March to May 2013-2015. This number represents the percentage of states' claims due to this specific hazard during spring.

¹⁵ Source: National Sleep Foundation poll at: [drowsydriving.org](#)

¹⁶ Source: WebMD at: [webmd.com/sleep-disorders/features/coping-with-time-changes](#)

¹⁷ Source: Centers for Disease Control and Prevention at: [cdc.gov/features/dsdrowsydriving](#)

¹⁸ Source: National Sleep Foundation at: [sleepfoundation.org/sleep-topics/napping](#)

¹⁹ Source: National Sleep Foundation at: [sleepfoundation.org/sleep-tools-tips/healthy-sleep-tips](#)

²⁰ Source: The Farmers Almanac at: [farmersalmanac.com/health/2013/03/04/cant-sleep-try-these-tips](#)

Glass claims

Glass in your vehicle, whether a windshield, back or side window, or a sun roof, can break, chip or crack due to collisions with animals, falling objects, fires, storms such as wind, hail, tornadoes and hurricanes, or vandalism. Glass can also spontaneously crack when a sudden change of outdoor air temperature occurs.

Most comprehensive vehicle insurance covers the cost of full glass replacement or repair, although deductibles may apply.

Farmers data shows that more than one-quarter (26 percent) of the full year's glass claims occur during the spring, which represents a 23 percent increase over the number of glass claims reported during winter months. These claims have steadily been on the rise in recent years, too. Glass claims jumped 11 percent in 2014 compared to the same time period in 2013. In addition, 2015 saw an increase of 15 percent over the number of claims reported in 2014.

Here are some tips to help keep your windshields out of harm's way:

- **Watch for falling ice.** As cold day's give way to spring-like weather, watch overhangs, bridges, and overhead roadways for icicles and other objects that can turn into free-falling dangers. Avoid parking under trees, overhangs and locations where melting ice can crash down on your windshield.
- **Seek cover when possible.** Spring's severe weather often brings high winds, which may whip up debris around your car and cause glass damage. When possible, avoid leaving your car near areas like pebbled walkways and active construction sites where materials may blow up and into your car.
- **Practice good glass maintenance.** Keep car windows and front and back windshield wipers clean and operating efficiently. Dirty or worn wipers can scratch glass, and the scratches can morph into cracks.
- **Repair small cracks and chips in glass.** Don't wait to file a claim with your insurance agent if you have a small crack or chip in your window. Small damage can often turn into a bigger problem if not addressed in a timely manner, so repair glass imperfections quickly. Companies are available and will repair cracks or entire windshields wherever your car is parked – including driveways, parking lots and roadsides.
- **Just noticed a scratch or crack in a window?** Avoid washing the window, which will force water into the damaged area. Also avoid road bumps, slamming car doors, using the air conditioner, or parking in a sunny spot, all of which can worsen a crack.



We've seen a thing or two

Is the glass damage less than six inches in length? If so, then it's possible your windshield can be repaired rather than completely replaced.

Top 5 states for glass claims*



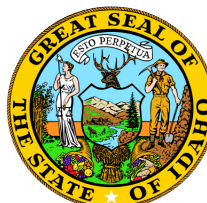
Florida



Wyoming



Arizona



Idaho



Utah

* Based on Farmers data from March to May 2013-2015. This number represents the percentage of states' claims due to this specific hazard during spring.

Tornadoes

Where and when a tornado of any strength will form can be tough to predict. Whether you live in a well-recognized Tornado Alley, or a state with a low incidence of tornadoes, preparing ahead for an emergency like a fast-moving tornado is important. Read on for tips on what to do if a tornado presents as you are driving.

Farmers data shows that nearly two-thirds (63 percent) of the full year's tornadoes claims occur during the spring, which represents a fourfold increase over the number of tornado claims reported during winter months. Tornado-related claims were on the rise last year, too, with 2015 having more than double the number of claims during the same time period in 2014.

Both years, however, pale in comparison to the wide-ranging impact of tornadoes in 2013, which saw a stretch of devastating tornadoes during the spring that accounted for slightly fewer claims than the 2015 and 2014 springs combined. May 2013, in particular, proved to be especially dangerous, with more claims that month than the entire spring season in 2015 and 2014 combined.

Tornado approaching? Here's what to do:

- **Stop your car in a safe location.** Highway overpasses do not provide adequate protection from tornadoes and may increase the risk of damage to your car or injury to you and your passengers.
- **Seek shelter.** If a tornado is approaching, NOAA recommends exiting your car and seeking shelter in a sturdy building or underground shelter – but never inside a mobile home.
- **Get lower than the roadway.** If you can safely do so, find a ditch or area lower than the roadway to get into; lie down and cover your head with your hands until the storm passes.
- **Stay put.** Your last resort is to stay in the car with your seat belt on. Keep your head down and below the windows, and cover yourself with a blanket, if possible, to minimize the potential for injury from broken windows.
- **Never drag race with a tornado.** You would have to drive faster than 70 miles per hour to outrun the fastest tornado.

Did you know?

Distinguish tornado facts from fiction:²¹

- Tornadoes can and do strike large cities — not just rural areas — and have done so in Dallas, Oklahoma City, Miami, St. Louis, Salt Lake City and Wichita Falls.
- Tornadoes can cross rivers and can occur in mountainous areas.
- Underpasses create “wind tunnels” that can drive tornado wind speeds up to 300 miles per hour or greater.
- Strong tornadoes can turn otherwise harmless objects into deadly missiles.

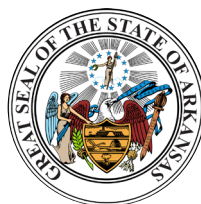
Top 5 states for tornado claims*



Oklahoma



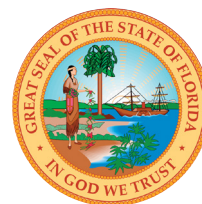
Alabama



Arkansas



Missouri



Florida

*Based on Farmers data from March to May 2013-2015. This number represents the percentage of states' claims due to this specific hazard during spring.

²¹ Source: NOAA at: [ncdc.noaa.gov/oa/climate/severeweather/tornadosafety.html](https://www.noaa.gov/oa/climate/severeweather/tornadosafety.html)

