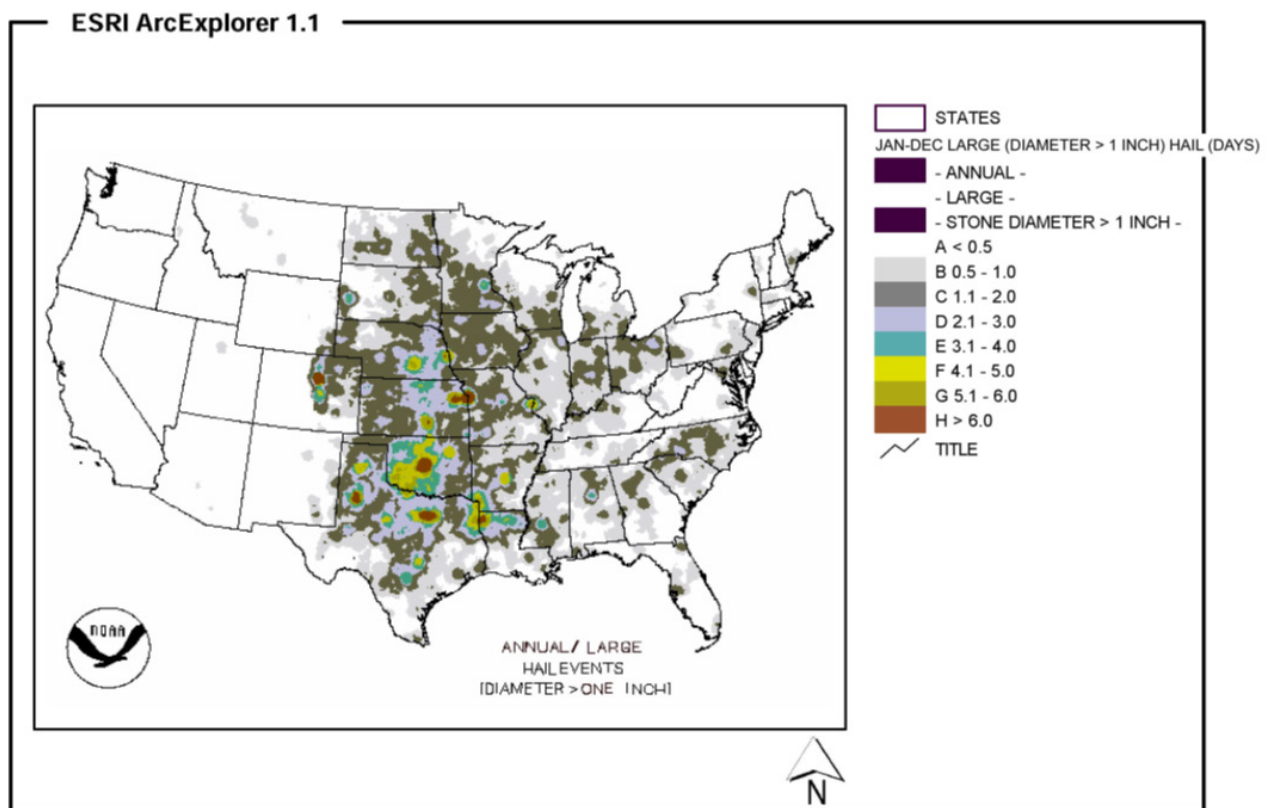


HAIL DAMAGE PREVENTION GUIDE

Storm related hail damage occurs yearly throughout the country. The net result could render millions of dollars of damage to property and vehicles over a wide area. Hailstorms may develop quickly, leaving healthcare organizations with limited time to react. Therefore, having a pre-set plan in place to reduce loss exposure provides the best chance of limiting the impact of hail occurrences.

Historically, there are regions throughout the United States that have a higher frequency of hail storms and related damage. The NOAA map below identifies the middle section of the United States as the area most subject to hail storms with the severity of the storm often relating to the size of the hail stones. The most dangerous region is the 'north-south corridor' from Texas up through Nebraska and Iowa. Still, heavy hail activity (one to two hail occurrences annually) can affect states all the way to the east coast. For the most part, the far western states (Arizona, Utah & Idaho on west) do not have a significant hail exposure issue.



IMPACT

Why is hail a concern?

Significant hail damage can ruin the exterior of a vehicle. The metal and window components of the vehicle can be damaged or destroyed. Structural roofing systems not designed for hail impact may also be severely damaged and building window systems can be broken or significantly damaged. Once the vehicle or building window systems are compromised, interior damage may occur.

A significant consideration is that damage could occur at the same time. Geographically, the scope of the storm can be wide spread. The damage can impact multiple locations and involve numerous pieces of equipment and facilities that a healthcare organization operates.

Due to potential high wind situations, hail damage can have an impact effect horizontally as well as vertically. The potential for hail travelling horizontally should be factored in when planning protective measures.

Planning & Loss Prevention

Monitoring weather data during developing storm conditions may provide an opportunity to obtain information to help protect against for potential exposure. Instruct personnel and guests to seek shelter in hail conditions.

Property

Review the physical construction of facilities to determine the potential for hail damage. Construction features and preventative actions to consider include:

- Design and upgrade roofing systems to enhance structural integrity. Appropriate upgrading may include consideration of local code building standards for wind resistance. Impact resistant roofing systems can be less susceptible to damage.
- Evaluate windows (in high threat regions) for potential hail impact and where necessary, impact window upgrading or shutters are an option to consider. Metal awnings can also deflect the impact of the hail to protect vulnerable building elements.

- Evaluate equipment and yard storage for the need to use secured heavy tarps to provide protective covering.
- Clear public areas (public parking lots, paths, driveways and other exposures) after a hail storm, to help prevent slip/fall conditions.
- Evaluate wastewater and water treatment plant equipment such as motors, electrical panels, generators and other process components to determine if additional physical protection may help reduce the potential for hail damage.
- Remote well sites or open area distribution pumping stations have well pumps, electrical control and distribution panels and generators that may be unprotected from hail exposure. Consider overhead protection to shield critical equipment in high-hazard areas.

Vehicles

- Establish a procedure for drivers of company vehicles to help protect them by finding shelter, pulling off the road under overpasses and other approaches to that may reduce physical damage.
- If possible, store company vehicles indoors at night. If this is not possible, then secured, heavy coverings can reduce the potential for damage to vehicles when storm conditions are approaching.
- Instruct employees to reduce extended driving during a hail storm. Often a driver may believe the storm will be short and therefore extend the time unnecessarily into a hazardous condition.

References: National Oceanic and Atmospheric Administration, Annual/Large Hail Events, Diameter > One Inch, State Farm "Hail Storm Precautions"

HAIL DAMAGE PREVENTION GUIDE CHECKLIST

PROPERTY			
Function	Yes	No	N/A
Roofing systems evaluated for design and structural integrity.			
Windows evaluated for potential hail impact and protective upgrades installed.			
Equipment and yard storage evaluated for the need to use secured heavy tarps for protective covering.			
Procedures to review public areas (public parking lots, paths, driveways and other exposures) after a hail storm, to prevent slip/fall conditions.			
Wastewater or water treatment plant equipment such as motors, electrical panels, generators and other process components evaluated for the need of additional physical protection.			
Remote well sites or open area equipment stations that are unprotected evaluated for overhead (or other) protection.			

VEHICLES			
Function	Yes	No	N/A
Emergency procedure for drivers of company vehicles to protect them by finding shelter, pulling off the road under overpasses and other approaches to reduce physical damage.			
Vehicles stored indoors at night or provided with heavy covering in approaching storm conditions.			
Procedure to reduce extended driving during a hail storm.			