



Five Tips for Every Business to Become Tornado-Aware

Five Tips for Every Business to Become Tornado-Aware

Executive Summary

Tornado reports reached near-record levels in 2011, and above-average activity so far this year puts 2012 on track for another record. “Tornado alley” has more than tripled in size in recent years, and no state is immune to the threat of a twister.

It is important that businesses throughout the United States take practical steps to protect employees and property from the full spectrum of risks that can result from a tornado. Preparedness is essential. Businesses need to actively monitor threatening conditions closely — responding quickly and decisively to weather warnings. Ensuring they have the right insurance coverage in sufficient amounts is also essential.

It is important that businesses throughout the United States take practical steps to protect employees and property from the full spectrum of risks that can result from a tornado.

Introduction

On Sunday, May 22, 2011, a stunningly destructive EF5 multiple-vortex tornado ripped through Joplin Missouri, killing nearly 160 people, destroying homes and businesses, and pummeling St. John’s Regional Medical Center. The Joplin tornado was the worst single event in a remarkably active and destructive year for tornadoes in the United States. According to the National Oceanic and Atmospheric Administration, there were 1,691 tornadoes reported across the country last year, more than any year except 2004, when 1,817 tornadoes were reported.¹ With 552 deaths, 2011 ties the year 1936 as the second deadliest tornado season on record.²

As bad as 2011 was, 2012 may prove to be worse. Through the first quarter of 2012, there were 279 preliminary tornado reports compared to 154 tornado reports in the first quarter of 2011.³

The traditional definition of “Tornado Alley” extends through the Plains states from the Dakotas to Texas. The band of destruction has grown much wider in recent years, and now includes a swath running from the Upper Midwest through the Deep South plus Florida. According to a report from research firm CoreLogic, Kansas was the only state in the traditional Tornado Alley in a top-five ranking of states based on the number of tornado events between 1980 and 2009. The other leading states were Florida, Iowa, Louisiana and Mississippi.⁴

The new Tornado Alley may define the most active states, but no state is immune from tornadoes. A study covering the years 1950-1994 found that even seemingly unlikely locations such as Utah, Nevada and Oregon have experienced dozens of tornadoes.⁵

Unlike hurricanes, which can be tracked days in advance of making landfall, tornadoes can appear suddenly, allowing only a few hours for warnings of deadly storm conditions to be issued. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible. And while the path of a tornado is far narrower than that of a hurricane, tornadoes can be more destructive to homes and businesses. The peak wind speed of a Category 5 hurricane rarely exceeds 180 miles per hour, while an EF5 tornado has estimated wind speeds in excess of 200 miles per hour by definition — and can generate maximum wind speeds of greater than 250 mph. EF5 tornadoes can be powerful enough to strip the bark from a tree!⁶

Fortunately, companies can take steps to protect people, property and business income. The key factors are preparedness, vigilance, and rapid response to dangerous conditions.

The safest areas for employees to seek shelter typically include basements, hallways, interior stairwells and small internal first floor rooms. For businesses in tornado-prone areas, consider constructing a tornado-hardened safe room.

Five Tips for Minimizing Injuries, Property Damage and Business Losses

1. Plan in Advance to Protect People

Preparedness is essential to protecting people in an emergency situation. Elements of a tornado safety program include:⁷

- Identifying the safest areas in a building so employees know where to congregate in the event of a warning;
- Designating the roles and responsibilities of supervisors and employees, including the appointment of a tornado warden (typically the same person as the fire warden);
- Practicing for an event with tornado drills; and
- Posting signs in public buildings to direct customers and visitors to safe areas.

The safest areas for employees to seek shelter typically include basements, hallways, interior stairwells and small internal first floor rooms. For businesses in tornado-prone areas, consider constructing a tornado-hardened safe room.

2. Take Actions to Minimize Property Damage

Few structures can survive a direct hit by an EF5 tornado, but most tornadoes are far less powerful, and much of the damage is caused by debris hurled by the storm rather than direct damage from high winds in the vortex. Practical steps to minimize property damage from a tornado include:^{8,9}

- Securing outdoor gear and outbuildings to prevent them from becoming airborne missiles;
- Reinforcing vulnerable areas of a building, such as adding supports to garage doors and bracing and strapping the roof;
- Housing servers and other vital equipment in protected areas of a building, preferably in tornado-resistant server rooms; and
- For new construction, working with an architect or contractor to incorporate wind mitigation techniques and high wind-rated products.

Businesses should buy a NOAA Tone Alert Weather Radio, and the tornado warden or other designated employee should monitor information from the National Weather Service as well as from local radio and television stations.

3. Prepare in Advance to Maintain Business Continuity

Continuity and disaster recovery planning is essential for businesses to bounce back after any sort of catastrophe, not just tornadoes. However, the potential for total destruction of an individual property from a tornado, combined with likelihood of severe damage to local infrastructure, makes a well-conceived continuity and disaster recovery plan all the more essential.

Specific elements of continuity and disaster recovery plans will vary by size and type of business, but questions to address typically include:

- How employees will communicate;
- Where employees will work;
- How manufacturing and other critical business operations will continue until a damaged building is repaired or replaced;
- How data and information technology will be restored; and
- How supply chain logistics will be maintained.

4. Monitor the Weather When Threatening

Forecasters can sometimes identify potentially deadly weather systems forming more than a day in advance of tornadoes being spawned, and Doppler radar significantly improves the timeliness and accuracy of spotting tornadoes that have formed or are in the process of forming. However, advance warnings are not helpful if they are not heard and heeded. The National Weather Service provides local weather broadcasts over a radio network called NOAA Weather Radio from over 1,000 different transmitters nationwide. Businesses should buy a NOAA Tone Alert Weather Radio, and the tornado warden or other designated employee should monitor information from the National Weather Service as well as from local radio and television stations.

5. Take Warnings Seriously and Act Quickly

Most often, the aftermath of a tornado warning is a funnel cloud producing little or no damage, or sometimes even no tornado at all. As a result, many people become complacent and underestimate the danger inherent in a severe weather situation. Weather service officials in some areas are now enhancing warning communications to convey a sense of urgency for extreme events. For example, one warning in Wichita, Kansas, in advance of April's powerful EF3 tornado proclaimed: "This is a life-threatening situation. You could be killed if not underground or in a tornado shelter."¹⁰ But even in the absence of enhanced communications, every warning should be taken with the utmost seriousness, and appropriate measures should be taken immediately to protect lives and property.

Companies should work closely with their brokers to identify their tornado-related exposures, and to assure they have enough of the right coverages.

Insurance

Most property insurance policies provide protection for tornado damage to both real and personal property. These policies also may cover costs to remove, clean up and dispose of debris after a tornado. Companies also should consider time element coverages, especially Business Interruption and Extra Expense, which cover lost business profits and the additional expenses to keep a business running while insured property is being restored or replaced. Civil Authority and Ingress/Egress coverages cover lost business profits due to disruptions caused by the inability of customers or employees to access a building.

Even if a company is undamaged by a tornado, its business still may be disrupted if suppliers are damaged and unable to deliver goods to the company, or customers are damaged and are unable to receive goods. Contingent Business Interruption coverage can provide protection for this scenario. Companies should work closely with their brokers to identify their tornado-related exposures, and to assure they have enough of the right coverages.

Conclusion

Tornado damage can cripple or even destroy a company, but businesses are not helpless in the face of even the most powerful twister. Advance preparation can help business owners and executives rest assured that both lives and property will be preserved to the greatest extent possible, and continuity and disaster planning can contribute to a rapid and complete rebound in the aftermath of a catastrophic event. Advance preparation, however, can be undermined by failing to react effectively to an imminent threat. Companies need to monitor developing weather conditions and respond quickly and decisively as soon as severe conditions materialize. Insurance protection also is essential, and companies should work with their brokers to guarantee they have traditional property insurance policies that cover loss to tangible property, as well as time element coverages that help businesses remain financially viable after a catastrophe.

- ¹ 2011 tornado information, NOAA, http://www.noaanews.noaa.gov/2011_tornado_information.html
- ² Mark Fischetti, "Tornadoes in 2011 Set Deadly Records," Scientific American Observations <http://blogs.scientificamerican.com/observations/2011/12/28/tornadoes-in-2011-set-deadly-records/>
- ³ "IBHS Offers Recovery Resource to Midwest Residents Affected by Tornadoes," Insurance Institute for Business & Home Safety, https://www.disastersafety.org/page;jsessionid=725749B06F7C4DD1A921764359296803?execution=e1s1&pageld=tornado_page#post
- ⁴ Doyle Rice, "'Tornado Alley' grows wider, report says," USA Today <http://www.usatoday.com/weather/storms/tornadoes/story/2012-04-09/tornado-alley/54157872/1>
- ⁵ "Tornado Numbers, Deaths, Injuries and Adjusted Damage," NOAA <http://www.spc.noaa.gov/archive/tornadoes/st-trank.html>
- ⁶ Jonathan Erdman, "F/EF5: The Most Violent Tornadoes," The Weather Channel http://www.weather.com/outlook/weather-news/news/articles/tornadoes-ef5_2011-04-29
- ⁷ "Steps to Reduce the Risks of Tornado Damage in Commercial Structure," Insurance Institute for Business and Home Safety <http://www.disastersafety.org/publicPolicy/legislation/article?articleId=6913>
- ⁸ "Simple Tips to Reduce High Wind, Tornado Damage," FEMA, <http://www.fema.gov/news/newsrelease.fema?id=43210>
- ⁹ "Steps to Reduce the Risks of Tornado Damage in Commercial Structure," Insurance Institute for Business and Home Safety <http://www.disastersafety.org/publicPolicy/legislation/article?articleId=6913>
- ¹⁰ Manny Fernandez and Matt Flegenheimer, "100 tornadoes, 5 deaths: New early warning puts Midwest towns on notice to take care," New York Times, April 16, 2012 http://www.twincities.com/ci_20404646/100-tornadoes-5-deaths

Zurich

1400 American Lane, Schaumburg, Illinois 60196-1056
800 382 2150 www.zurichna.com

The information in this publication was compiled from sources believed to be reliable for informational purposes only. All sample policies and procedures herein should serve as a guideline, which you can use to create your own policies and procedures. We trust that you will customize these samples to reflect your own operations and believe that these samples may serve as a helpful platform for this endeavor. Any and all information contained herein is not intended to constitute legal advice and accordingly, you should consult with your own attorneys when developing programs and policies. We do not guarantee the accuracy of this information or any results and further assume no liability in connection with this publication and sample policies and procedures, including any information, methods or safety suggestions contained herein. Moreover, Zurich reminds you that this cannot be assumed to contain every acceptable safety and compliance procedure or that additional procedures might not be appropriate under the circumstances. The subject matter of this publication is not tied to any specific insurance product nor will adopting these policies and procedures ensure coverage under any insurance policy. Insurance coverages are underwritten by individual member companies of Zurich in North America, including Zurich American Insurance Company. Certain coverages are not available in all states. Some coverages may be written on a nonadmitted basis through licensed surplus lines brokers.

©2012 Zurich American Insurance Company

Zurich HelpPoint
Here to help your world.

