

# HOW MY COMMUNITY IS PREPARING FOR TORNADOES



## WHAT ARE THEY?

Violently rotating columns of air extending from a thunderstorm to the ground. Tornadoes are formed from the largest thunderstorms; the most destructive tornadoes are formed by “supercells.” The average tornado stays in contact with the ground for 30 minutes and covers a distance of 15 miles.

## WHEN DO THEY OCCUR?

Peak tornado season is the spring and summer. The period with the greatest probability of tornado activity is late March through mid-June. Tornadoes can occur at any time of the day, though they are most likely between 3 and 9 p.m.

## WHERE DO THEY OCCUR?

Although most often associated with the central U.S., tornadoes have been documented in all 50 states.

## CORRESPONDING HAZARDS

Weather conditions conducive to the formation of tornadoes often produce a variety of other dangerous storm-related weather conditions, such as severe thunderstorms, winds, lightning, hail and heavy rains.

## DAMAGE TYPE & SEVERITY

The damage associated with tornadoes is caused mostly by wind speed; in general, the greater the wind speed, the greater the potential damage a tornado can cause. Tornadoes can also create a large amount of debris that can harm people and infrastructure and block transportation routes.

## VULNERABLE AREAS

- Areas with high concentrations of people and structures, such as urban and suburban areas, apartment complexes and mobile-home parks.
- Structures without safe rooms or basements, whether residential, commercial or public buildings.
- Areas without multiple, redundant warning systems or no outdoor warning systems.
- Infrastructure, utilities (especially those that are above ground), livestock, crops and vegetation.

COMMUNITIES	ACTION
PC Rv WL HL Pk PI	1. Develop and distribute information on safe rooms.
Rv WL HL PI	2. Partner with trade organizations to conduct safe-room workshops.
Rv WL HL PI	3. Assess existing facilities for shelter suitability. Mark clearly and inform visitors/employees of locations.
Rv WL PI	4. Retrofit or add shelters to existing public facilities with inadequate protection from tornadoes and high wind.
Rv PI	5. Consider adopting policies requiring incorporation of safe rooms/shelters in new public-facility construction.
Rv PI	6. Offer residential/commercial builders/developers tax incentives to construct safe rooms/community shelters in new public facilities.
Rv WL PI	7. Work with chambers of commerce, school districts, corporations and others to promote benefits of safe rooms.
Pk PI	8. Consider adopting ordinances or regulations requiring the construction of tornado shelters in new buildings where people live, work or gather.

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COMMUNITIES	ACTION
PC Rv WL PI	9. Work with trade organizations to inform builders/developers of construction techniques and materials that may minimize tornado/high-wind damage to residential and commercial structures.
PC Rv WL HL Pk PI	10. Adopt current edition of a model building code to address structural and architectural issues related to tornadoes and high-wind events.
PC Rv WL Pk PI	11. Review and, if needed, enhance regulations related to design and installation of architectural features on buildings to minimize the creation of wind-borne debris.
WL PI	12. Require the use of tempered or shatter-resistant glass in windows of new public/private facilities where large numbers of people gather. Retrofit existing facilities.
WL HL Tr PI	13. Anchor or strengthen above-ground transmission lines, poles and similar structures.
WL Pk PI	14. Adopt ordinances/regulations requiring new electric and telecommunications transmission lines to be placed underground.
PI	15. Offer financial or other incentives to utility providers to replace existing above-ground utility lines with underground utility lines.

