

Is America #TornadoStrong?

2023 Consumer Survey Topline Report

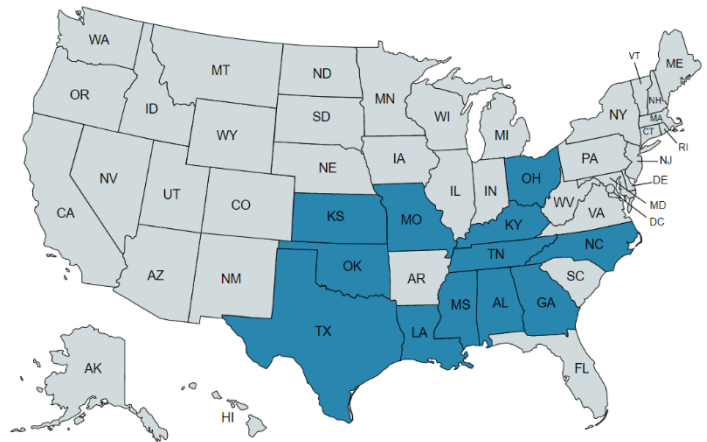
Background

The Federal Alliance for Safe Homes (FLASH)[®] surveyed consumers in April 2023 to measure awareness and understanding of tornado weather, safety, and protection. The survey identified opportunities to increase consumer safety through improved knowledge of meteorological terms, safe and unsafe behaviors during tornadoes, and information about tornado safe rooms and storm shelters.

Methodology

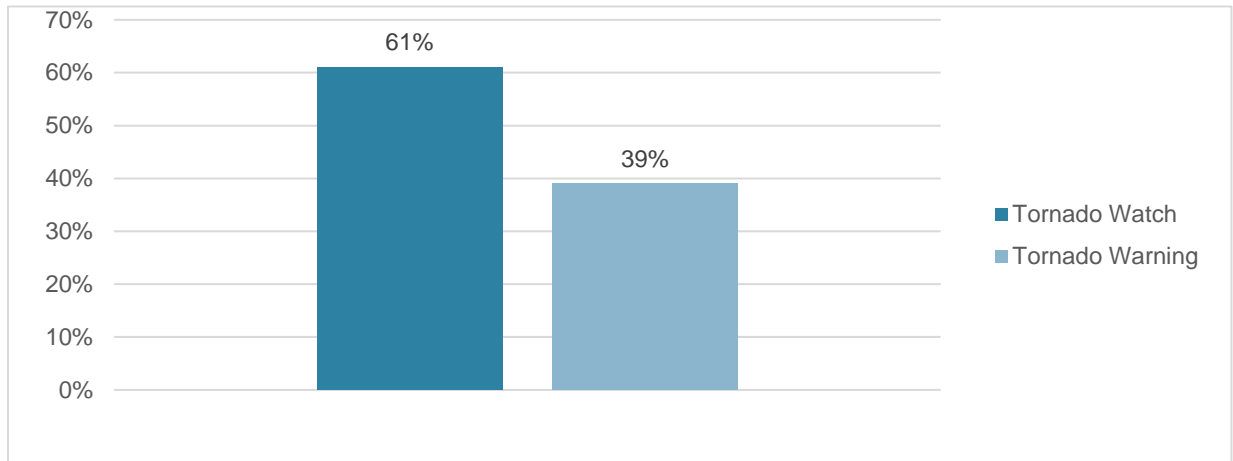
The survey sampled 500 respondents ranging in age from 18-24 (16%), 25-34 (21%), 35-44 (23%), 45-54 (17%), and >54 (23%). The respondents were 57% female and 43% male and resided in one of 12 tornado-prone states.

Alabama	4.80%
Georgia	10.40%
Kansas	1.40%
Kentucky	5.60%
Louisiana	4.20%
Mississippi	5.40%
Missouri	6%
North Carolina	12.80%
Ohio	12%
Oklahoma	4.20%
Tennessee	9.60%
Texas	20.60%

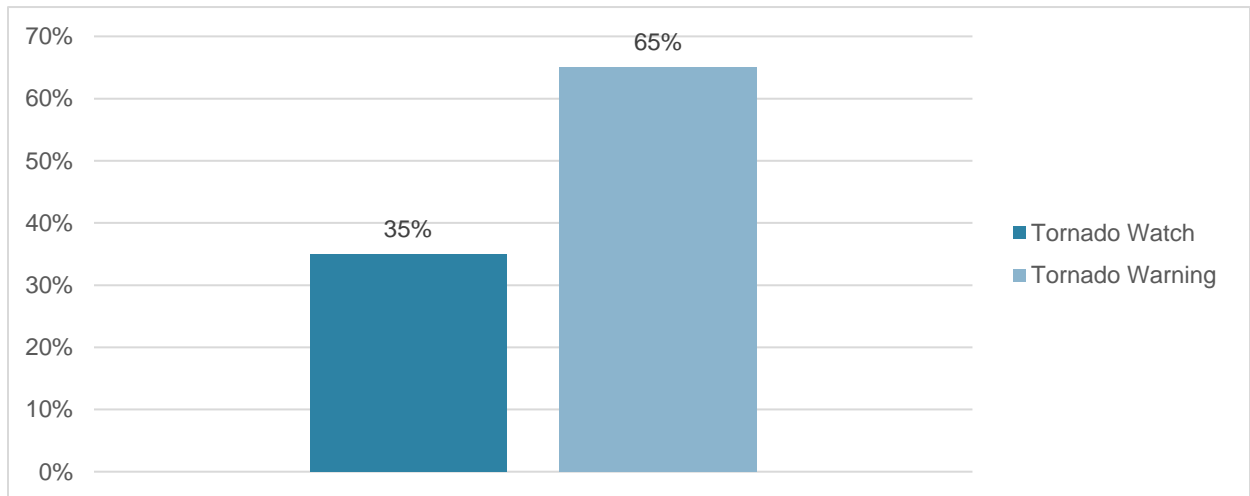


The annual survey findings support the #TornadoStrong outreach campaign, emphasizing key messages that drive tornado safety behavior and consumer choices regarding awareness, preparation, and sheltering.

1. The National Weather Service weather alert “tornadoes are possible in and near the watch area” indicates which of the following:

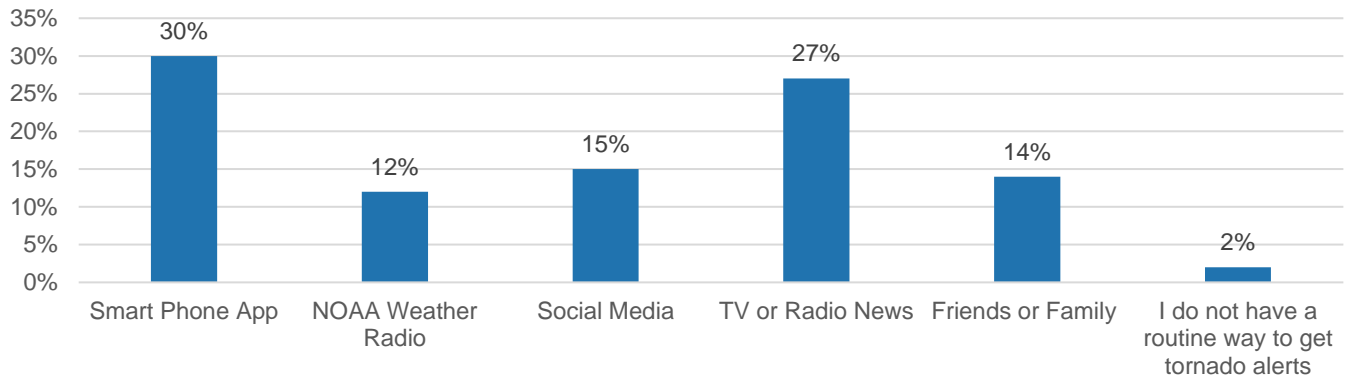


2. The National Weather Service weather alert “a tornado has been sighted or indicated by weather radar” indicates which of the following:



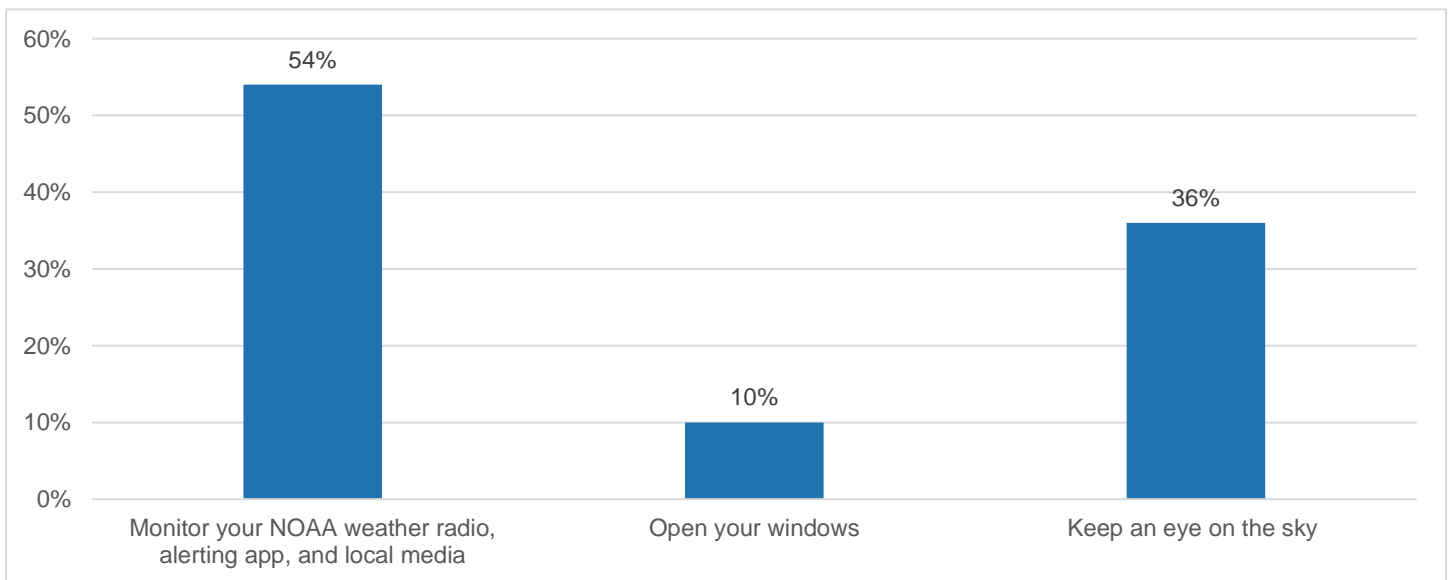
Survey respondents were confident that they knew the difference between tornado watch and tornado warning; when provided specific definitions, 61% correctly identified a watch and 65% correctly identified a warning. Respondents ability to identify the difference between a tornado watch and a tornado warning remained similar to the [2022 survey](#).

3. How do you receive tornado watches or warnings? Check all that apply.

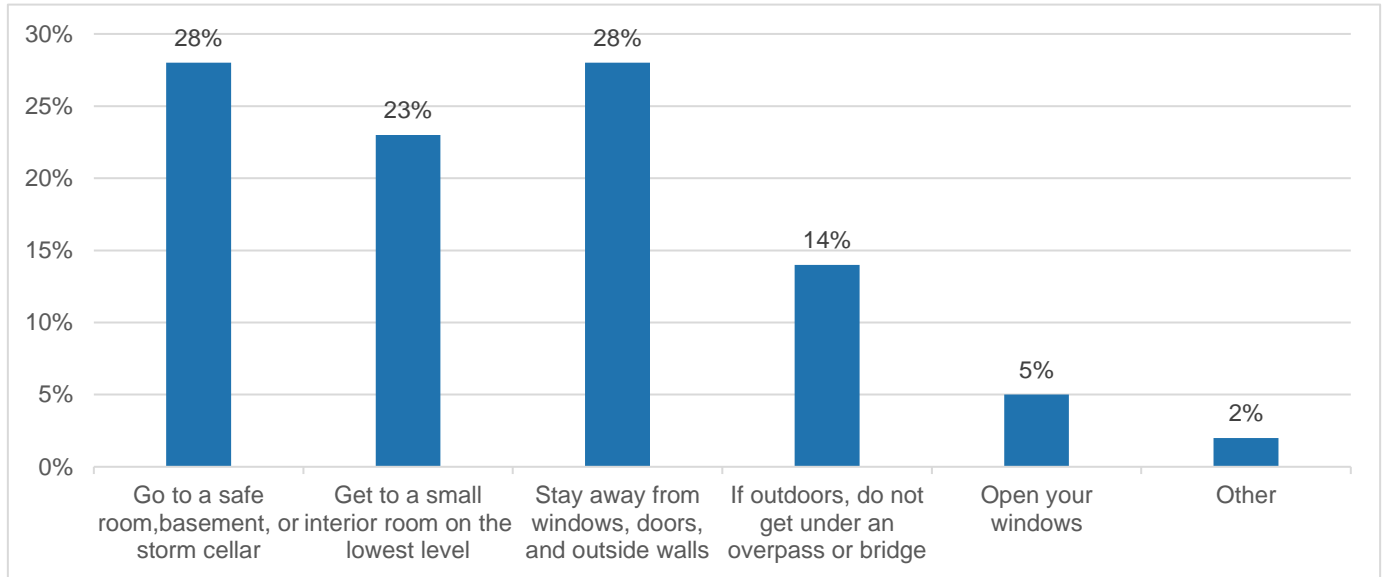


Most survey respondents reported using smartphone apps or TV or radio news channels to receive tornado watches or warnings. The reported 12% NOAA Weather Radio usage represents a 2% increase over the [2022 survey](#). This increase is important because it shows consumers are prioritizing the need to receive information from a source that does not need power or cell service to provide life-safety information.

4. Please select the precautions you would take if you came under a Tornado Watch. Check all that apply.

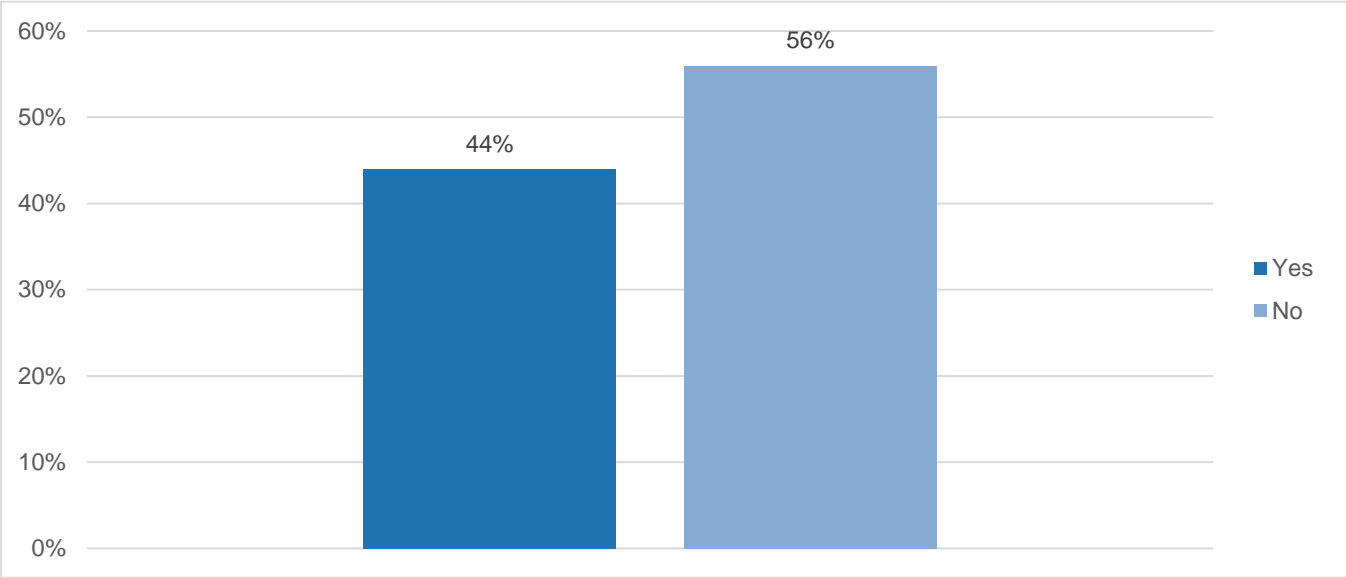


5. Please select the steps that you would take if you came under a tornado warning. Check all that apply.



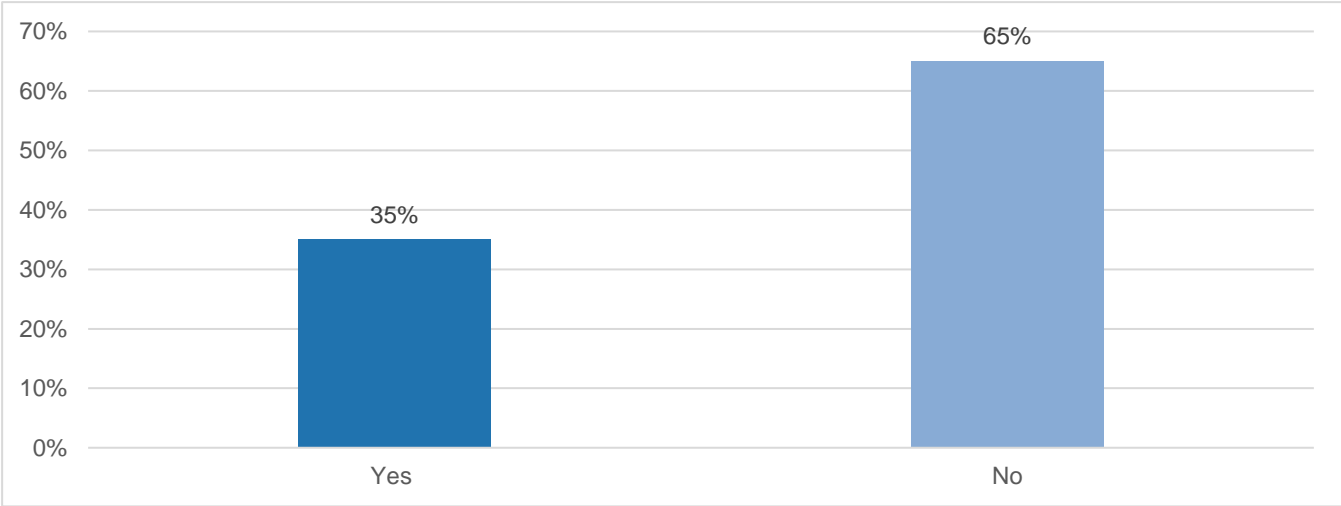
Respondents reported high levels of confidence in their understanding of protective actions to take during a tornado warning, such as taking shelter on the lowest level of the home. However, some (5%) reported interest in opening or cracking windows when under “warning” conditions. While minimal, any support for opening windows indicates a need for continued education. Cracking or opening windows allows wind pressurization inside a home that can lead to building damage and often complete destruction as well as life-safety issues from debris.

6. Has your home or community experienced damage from a tornado?

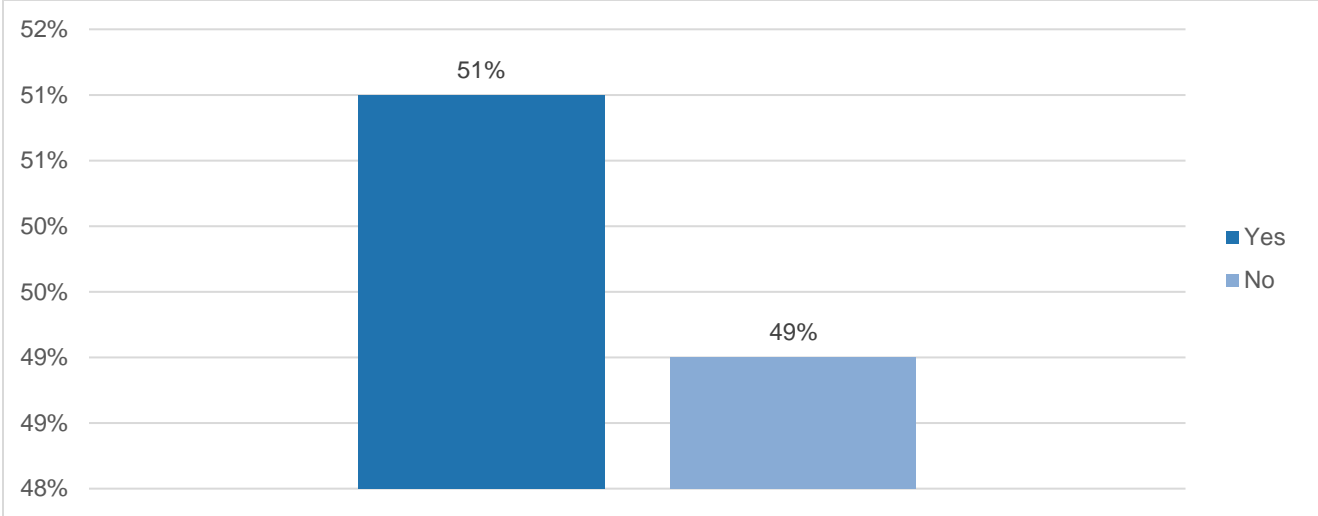


Understanding Certified Shelters and FEMA Safe Rooms Provide “Near-Absolute” Protection

7. Do you have a tornado safe room constructed consistent with FEMA guidance or a shelter tested and approved to meet the International Code Council/National Storm Shelter Association 500 standard?

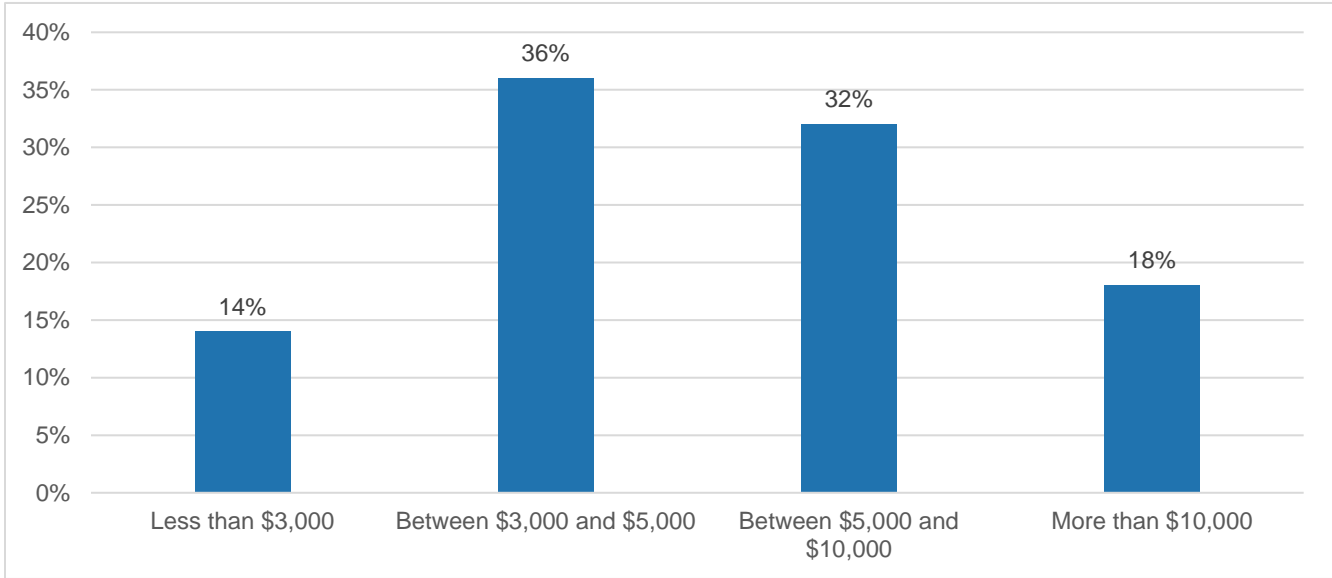


8. Are you aware that a tornado safe room constructed consistent with FEMA guidance, or a shelter tested and approved to meet the International Code Council/National Storm Shelter Association 500 standard can provide near-absolute protection in tornadoes up to 250 miles per hour?



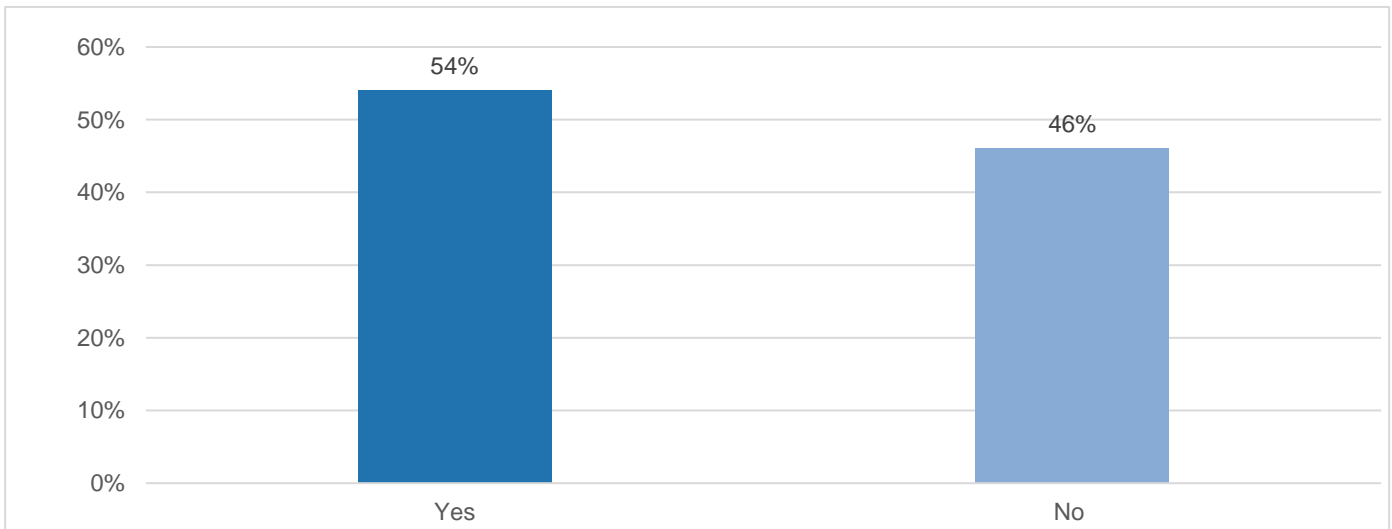
The majority (65%) of respondents acknowledge not having a FEMA safe room and shelter that meet the national technical criteria and standards. Only half (51%) of respondents reported awareness of the most effective life safety protection options. This finding suggests that many do not have the ultimate tornado life safety protection method and indicates the need for increased awareness.

9. How much does a tornado safe room constructed consistent with FEMA guidance or a shelter tested and approved to meet the International Code Council/National Storm Shelter Association 500 standard typically cost?



Half (50%) of respondents overestimated the cost of safe rooms and shelters. FEMA P-320 safe rooms included during new construction often cost less than \$3,000. Many different types of tornado shelters, such as prefabricated steel, cost between \$3,000 to \$5,000 for purchase and installation.

10. Are you aware that single-family homes can be affordably built to withstand most tornadoes?



11. If you were remodeling your home to include a tornado safe room or shelter, which location would you choose?

