

# Is America #TornadoStrong?

## 2022 Consumer Survey Topline Report

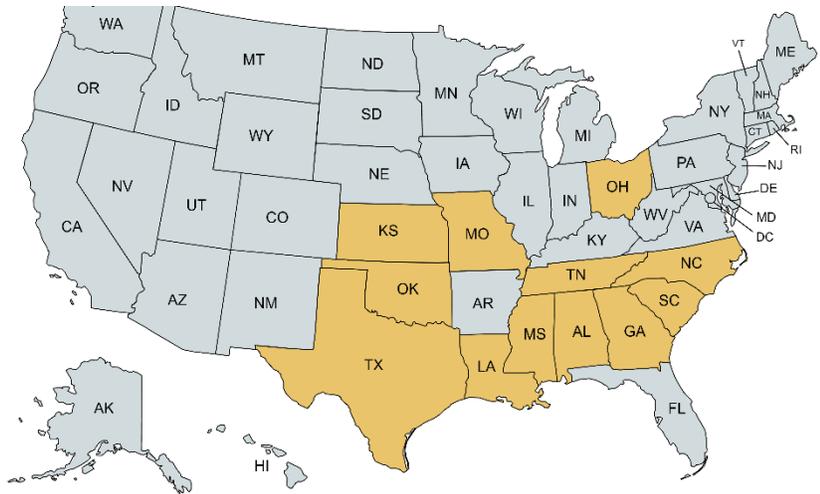
### Background

The Federal Alliance for Safe Homes (FLASH®) surveyed consumers in April 2022 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 safe rooms and storm shelters.

### Methodology

The survey sampled 500 respondents ranging in age from 18-24 (13.4%), 25-34 (24.60%), 35-44 (26.40%), 45-54 (16.40%), and >54 (19.20%). The respondents were 58.2% female and 41.8% male and resided in tornado-prone states.

Alabama	4.06%
Georgia	13.40%
Kansas	1.80%
Louisiana	3.00%
Mississippi	1.60%
Missouri	6.40%
North Carolina	10.60%
Ohio	13.20%
Oklahoma	4.00%
South Carolina	4.40%
Tennessee	6.80%
Texas	30.20%



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

# Understanding the Difference Between Tornado Watch and Tornado Warning

1. The National Weather Service weather alert “tornadoes are possible in and near your 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:

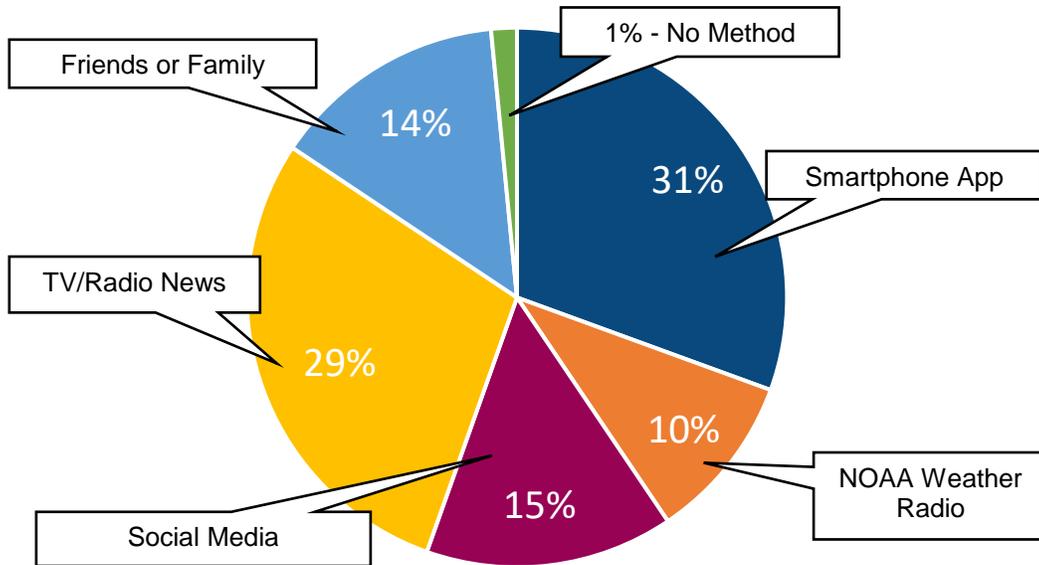


*Respondents in the survey were confident that they knew the difference between a tornado watch and a tornado warning; when provided specific definitions, 57.6% correctly identified a watch, and 66% correctly identified a warning.*

*Respondents' ability to identify the difference between a tornado watch and a tornado warning remained similar to the [2021 survey](#).*

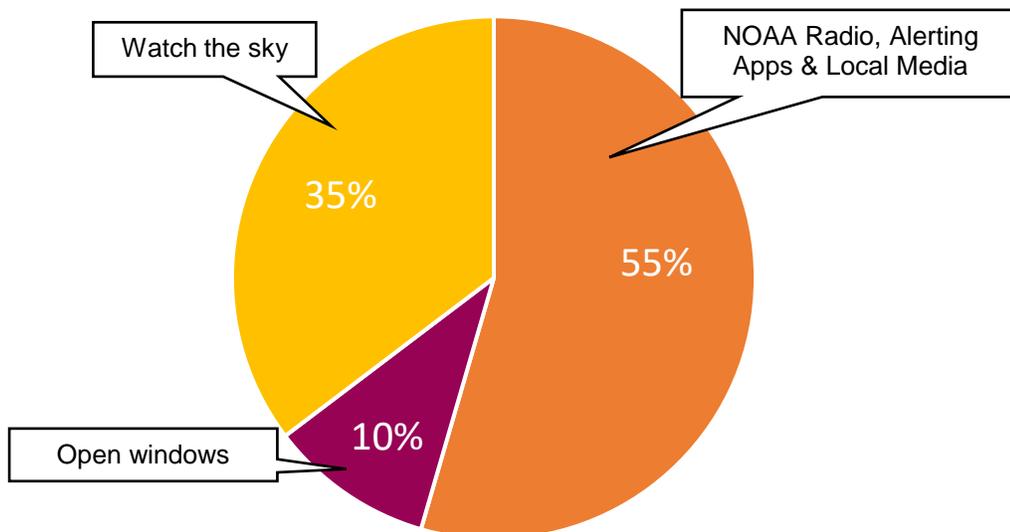
## Receiving Tornado Alerts, Watches, and Warnings

### 3. How do you receive Tornado Watches or Warnings?



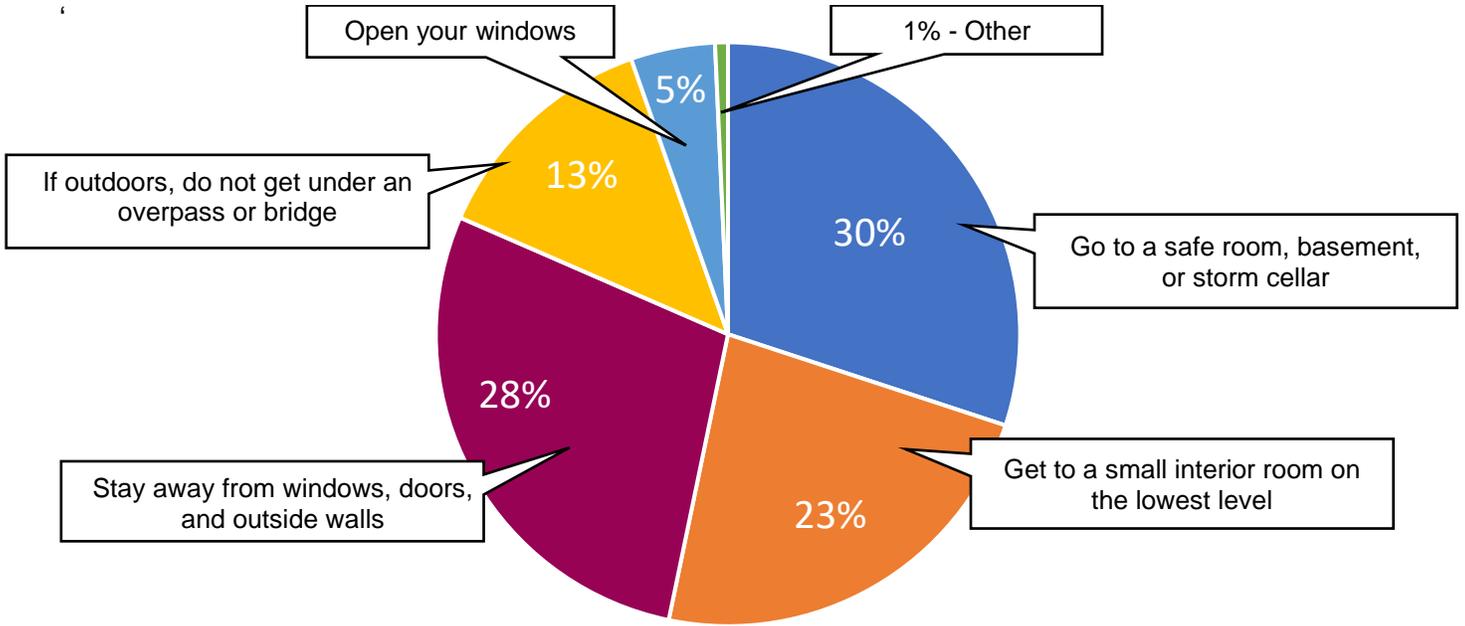
Most survey respondents reported using smartphone apps or broadcast news channels to receive severe weather updates. The reported 31% smartphone apps usage represents a 5.6% increase over the [2021 survey](#).

### 4. Please select the precautions you would take if you came under a Tornado Watch.



# Knowing What to do When Under a Tornado Threat

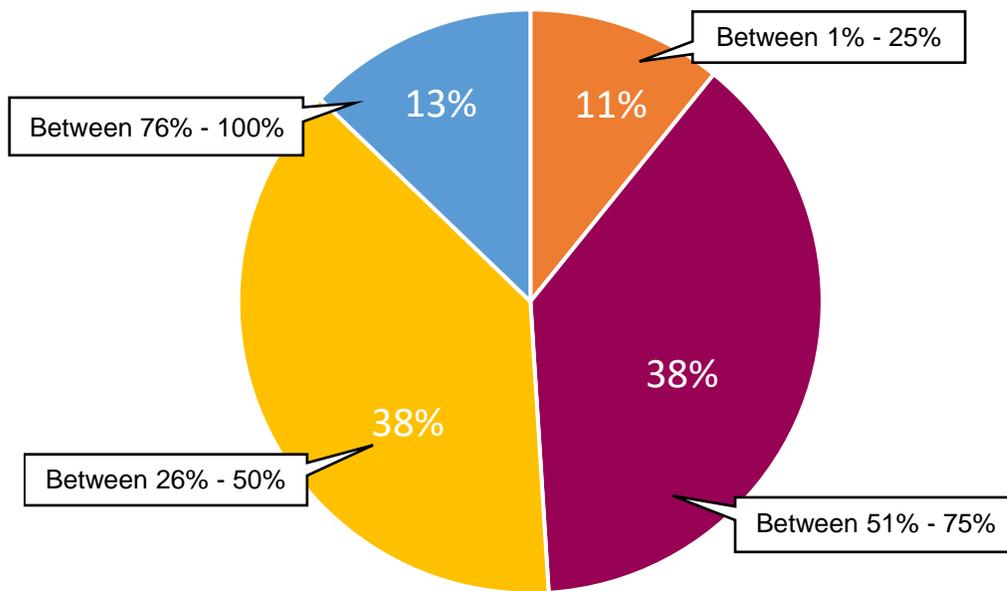
5. Please select the steps that you would take if you came under a Tornado Warning.



*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.*

# Aligning Perceived Level of Tornado Risk with Actual Tornado Frequency

6. How many U.S. counties do you believe have been under a Tornado Watch during the past five years?



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



*Most respondents underestimated the frequency of tornadoes. According to the NOAA Storm Prediction Center, 88% of the counties in the lower U.S. were under a tornado watch at some point between 2015 and 2020.*

8. 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?



9. 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?

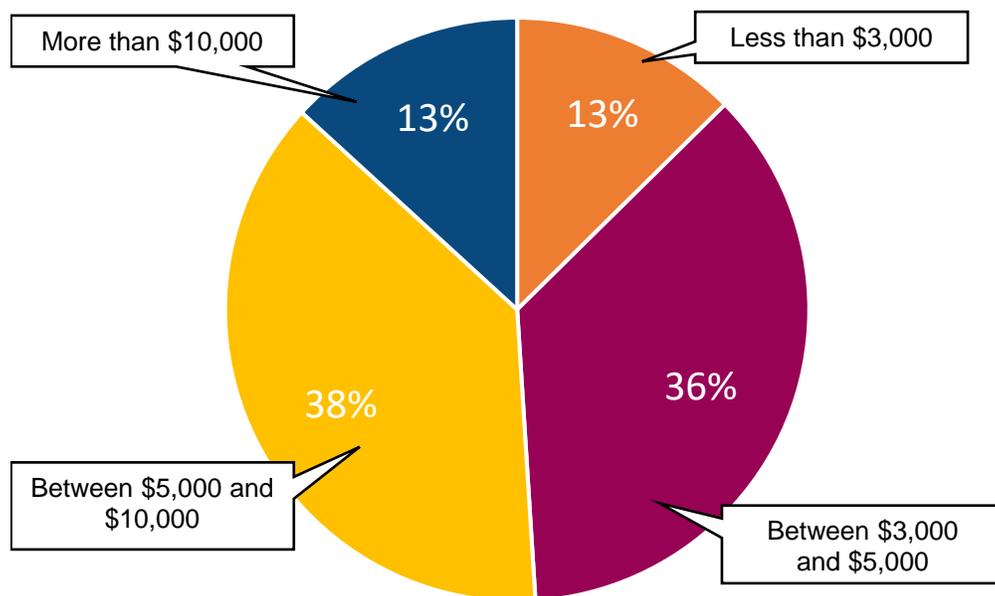


*The majority (70%) of respondents acknowledge not having a FEMA safe room and shelter that meet the national technical criteria and standards. Only half (52%) of respondents reported awareness of the most effective life safety protection options.*

*This finding suggests that many do not have the ultimate tornado life safety protection method and indicates the need for increased awareness.*

## Understanding the Cost of Safe Rooms and Shelters

**10.** 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 (51%) 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.*

# Understanding the Affordability of Tornado-Resilient Home Construction

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



Half (50%) of the survey respondents recognize that homes can be built to withstand a tornado. This represents a slight decrease in awareness compared to the [2021 results](#) (58%), indicating a need for more awareness regarding high-wind construction practices.

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

