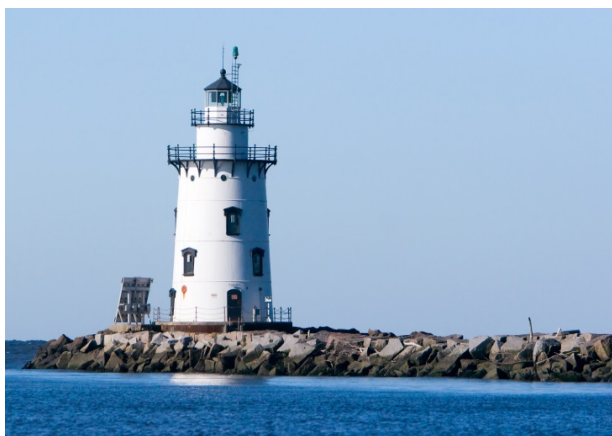


# Hurricane Perceptions of Coastal Connecticut Residents



*March 20, 2015*

Study Conducted By:



Study Sponsored By:



# Table of Contents

Introduction .....	4
Key Findings.....	5
Acknowledgements .....	5
Sample Design .....	6
Data Collection .....	6
Sample Demographics .....	7
Housing.....	8
Personal Experience With Coastal Storms .....	9
Storm Experience .....	9
Superstorm Sandy Experience.....	10
Superstorm Sandy Evacuation .....	11
Timing of Evacuation .....	12
General Knowledge.....	13
Evacuation Zone Awareness .....	13
Evacuation Route Awareness .....	14
Estimated Likelihood of Storm Occurrence .....	15
Information-Seeking Behavior .....	16
Storm Hazards Awareness .....	18
Attitudes and Risk Perceptions .....	19
Level of Worry When Storm is Approaching.....	19
Likelihood of Damages .....	20
Perceived Safety.....	21
Confidence in Ability to Stay Safe.....	22
Expectations About Damage .....	23
Evacuation Behavior.....	24
Prior Evacuation Experience.....	24
Evacuation Likelihood .....	25
Evacuation Likelihood by Communicator Type.....	26
Evacuation Likelihood if Advised/Not Advised.....	27
Barriers to Evacuation.....	28
Preparedness .....	29
Perceived Preparedness .....	29
Actual Preparations.....	29
APPENDIX A: Topline Results .....	31

***Principal Investigators:***

**Jennifer Marlon, Ph.D.**

Yale Project on Climate Change Communication  
School of Forestry & Environmental Studies  
Yale University  
(203) 436-2598  
[jennifer.marlon@yale.edu](mailto:jennifer.marlon@yale.edu)

**Anthony Leiserowitz, Ph.D.**

Yale Project on Climate Change Communication  
School of Forestry & Environmental Studies  
Yale University  
(203) 432-4865  
[anthony.leiserowitz@yale.edu](mailto:anthony.leiserowitz@yale.edu)

***Co-authors:***

**Seth Rosenthal, Ph.D.**

Yale Project on Climate Change Communication  
School of Forestry & Environmental Studies  
Yale University  
[seth.rosenthal@yale.edu](mailto:seth.rosenthal@yale.edu)

**Geoff Feinberg**

Yale Project on Climate Change Communication  
School of Forestry & Environmental Studies  
Yale University  
(203) 432-7438  
[geoffrey.feinberg@yale.edu](mailto:geoffrey.feinberg@yale.edu)

**Sujata Pal**

Abt SRBI  
275 Seventh Avenue  
Suite 2700  
New York, NY 10001 USA  
[s.pal@srbi.com](mailto:s.pal@srbi.com)

*Cite as:* Marlon, J., Rosenthal, S., Feinberg, G., Pal, S. and Leiserowitz, A. (2015). Hurricane Perceptions of Coastal Connecticut Residents: October, 2014. Yale University. New Haven, CT: Yale Project on Climate Change Communication.

# Introduction

Despite the enormous threat, advance notice, and remarkably accurate surge forecasts for Superstorm Sandy, the public response included many instances of confusion and poor decision-making. One of the primary conclusions from the post-storm National Weather Service Assessment was that providing the public with accurate forecasts alone is not enough to improve storm preparedness – effective communication about the risks and appropriate ways to respond is also necessary. Decades of communication research has demonstrated that effective messages require an in-depth understanding of the intended audience and a focus on the needs of that audience, rather than those of the communicator. This project assessed the coastal storm knowledge, risk perceptions, experiences, and behaviors of Connecticut's coastal residents with a primary goal of providing emergency planners and responders a better understanding of their target audiences.

This report is based on results from a 12-page mail-out/mail-back representative survey of households located in Connecticut coastal evacuation zones A and B (as defined by the U.S. Army Corps of Engineers). The survey was conducted in October, 2014 among 1,130 adults (18+) by Abt SRBI and the Yale Project on Climate Change Communication (<http://environment.yale.edu/climate-communication>). The survey completion rate was 31.4%. Of the 1,130 surveys completed, 684 were in Zone A (38.0% completion rate) and 446 in Zone B (24.8%). The difference in completion rates are likely due to topic salience for respondents who live in Zone A, who are more likely to be directly affected by hurricanes. The average margin of error for the total sample is +/- 3 percentage points at the 95% confidence level.

The project was funded by NOAA under the Coastal Storm Awareness Program (NOAA awards NA13OAR4830227, NA13OAR4830228, NA13OAR4830229) from the National Sea Grant College Program, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The Federal funds were provided via appropriations under the Disaster Relief Appropriations Act of 2013 (P.L. 113-2) and the Sea Grant Act (33 U.S.C. 1121 et seq.). Funding was awarded to the financial hosts of the Sea Grant College Programs in Connecticut, New Jersey, and New York via their financial host institutions, the University of Connecticut, the New Jersey Sea Grant Consortium, and the Research Foundation of State University of New York, respectively. The statements, findings, conclusions, and recommendations are those of the author(s) do not necessarily reflect the views of the National Sea Grant College Program, National Oceanic and Atmospheric Administration, the U.S. Department of Commerce, or any of the other listed organizations.

## *Key Findings*

We find that most Connecticut (CT) coastal residents are ill-prepared for the significant safety and economic threats posed by severe coastal storms. Highlights include:

- Only 21% of coastal CT residents in Zone A say they would evacuate in the event of a Category 2 hurricane if they did NOT receive an official notice; about six in ten (58%) say they would evacuate if advised to by an official.
- About one third (34%) of coastal CT residents believe it would be safer to stay at home during a Category 2 hurricane; slightly less (31%) believe it would be safer to evacuate, and a final third (35%) say it's about 50/50.
- Coastal CT residents generally underestimate storm impacts: about half (52%) say damage from past storms was more than they had expected, whereas 19% say past damage was less than they had expected.
- Only about one third (31%) of coastal CT residents have evacuated at least once to avoid a storm in the past six years (since the beginning of 2009).
- About 22% of coastal CT residents evacuated for Superstorm Sandy. In Zone A (closest to the shoreline), 27% of coastal CT residents evacuated, whereas 11% in Zone B did so. Of the Zone A evacuees, 82% left before the storm arrived or just as it was arriving.
- Zone A residents, on average, tend to be older, Caucasian, have higher household incomes, higher educational attainment levels, and have made more storm preparations than Zone B residents.
- 70% of coastal CT residents are either unsure or unaware that their home is in an evacuation zone (as defined by the Army Corps of Engineers).
- Three quarters of coastal CT residents (74%) have never seen a local evacuation map.

## *Acknowledgements*

We are grateful to our NOAA and Sea Grant collaborators as well as the YPCCC staff, including Lisa Fernandez, Bessie Schwarz, and Laurie Bozzuto for their assistance with the project. We would like to thank Peg Van Patten at Connecticut Sea Grant in particular for her efforts in developing the project. We also greatly appreciate the support from Governor Dannel Malloy for this project. Many people in the CT State Government spoke with us and improved the survey instrument, including William P. Shea, Deputy Commissioner, Department of Emergency Services & Public Protection; John Gustafson, Emergency Telecommunications Manager, Division of Emergency Management and Homeland Security and Department of Emergency Services and Public Protection; William J. Hackett, State Emergency Management Director, State of Connecticut, Division of Emergency Management and Homeland Security, Department of Emergency Services and Public Protection; Robert F. Kenny, Jr., Emergency Management Area Coordinator, Connecticut Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security, Region 1 Office. Conversations with Scott Devico, DEMHS Public Information Officer, Peter Sandgren, Radiological Emergency Preparedness, DESPP Division of Emergency Management and Homeland Security, Matthew Walsh of the Army Corps of Engineers, and Elizabeth Ban, Director of Communication, NOAA Sea Grant College Program, were extremely helpful. Jay Baker provided valuable information about a recent survey on hurricane evacuation behavior that greatly improved this study.

## *Sample Design*

The population for this study was defined as CT residents who live in coastal evacuation zones. Maps delineating evacuation zones A and B designed by the Army Corps of Engineers based on the “Sea, Lake, and Overland Surges from Hurricanes”, or SLOSH model, were used to identify census block groups that overlap with the hurricane evacuation zones (Figure 1). More information about the SLOSH model see: <http://www.nae.usace.army.mil/Portals/74/docs/topics/HurricaneStudies/CT/DescriptionCTInundation2012.pdf>.

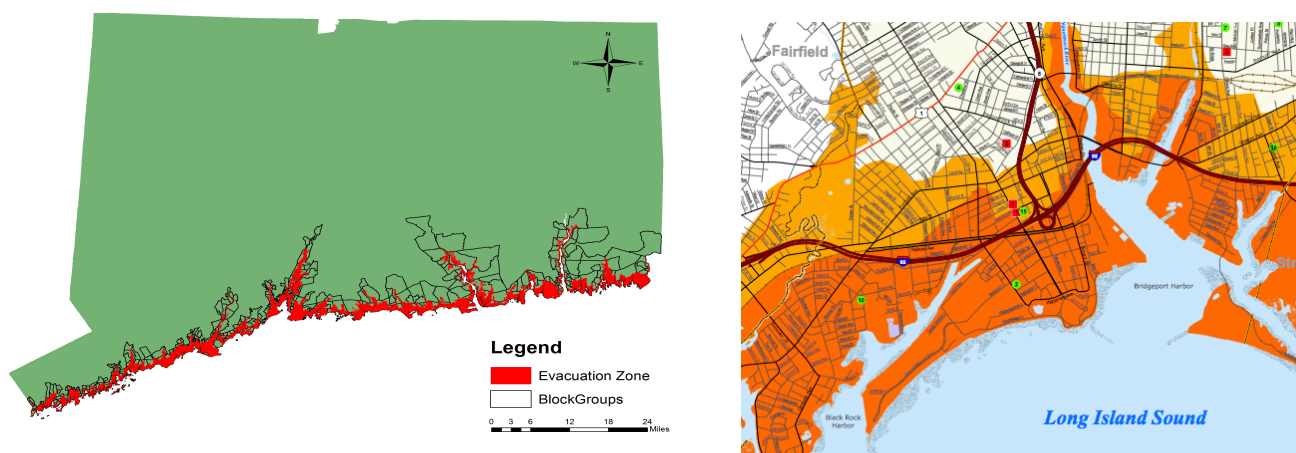


Figure 1. Sampling area (left) and example map (right) of evacuation Zone A (orange) and Zone B (yellow).

Using the list of block groups identified by GIS analysis, a random address-based sample of residences located in these block groups was identified. Block groups that had 20% or more land area within either of the evacuation zones were included in the sample. Based on this sample, each address was geocoded to identify households that were located within the hurricane evacuation zones as defined by the maps. The final sample included addresses located within the boundaries of either of the evacuation zones. The sample was stratified by evacuation zone A and evacuation zone B. A random sample of 1,800 addresses was selected for each stratum for a total sample size of 3,600 addresses. Instructions in the questionnaire requested that the survey “be filled out by an adult (18 years old or older) in your household who is a primary decision maker regarding safety in an emergency situation. If you are not that person, please give this questionnaire to an adult decision maker and have them fill it out.”

## *Data Collection*

The survey was conducted using a self-administered mail questionnaire. The mailing protocol included four contacts – a pre-notification postcard, a survey packet mailed one week later, and a reminder/thank you postcard mailed two weeks after the first contact. A second follow-up survey packet was mailed to non-respondents two weeks after the reminder notification. All materials were sent using first class mail. The survey packets included a postage paid business reply envelope and a cover letter explaining the purpose of the study. A pre-paid cash incentive of \$2.00 was included with the first survey mailing. The pre-alert and reminder postcards included Spanish language text. Respondents who preferred to receive a Spanish language survey were instructed to call a toll free number and leave a message requesting the survey in Spanish.

## Sample Demographics

	Total	Zone A	Zone B
(Unweighted base)	(1,130)	(684)	(446)
	%	%	%
<b>Sex</b>			
Male	41	41	42
Female	57	57	56
<b>Age</b>			
18-29	6	5	8
30-44	18	15	24
45-59	33	33	32
60 or older	44	48	36
<b>Ethnicity/Race</b>			
White, non-Hispanic	72	77	60
Black/African-American, non-Hispanic	12	9	18
Asian, non-Hispanic	3	2	5
Mixed, non-Hispanic	3	4	2
Hispanic	14	10	22
<b>Household Income</b>			
<\$15K	13	11	15
\$15K - \$39.9K	22	20	26
\$40K - \$69.9K	20	21	18
\$70K - \$99.9K	14	15	13
\$100K - \$199.9K	15	14	16
\$200K or more	10	11	8
<b>Education</b>			
< High school diploma	5	4	8
High school graduate/GED	17	17	17
Some college, no degree	18	16	23
Associates degree	8	9	7
College degree	26	27	22
Masters degree	14	14	14
Ph.D./Professional degree	9	10	7

Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).  
Data collected Sept. – Oct., 2014.

Zone A residents, on average, tend to be older, Caucasian, have higher household incomes, and have higher educational attainment levels than Zone B residents.

## Housing

	Total	Zone A	Zone B
(Unweighted base)	(1,130)	(684)	(446)
	%	%	%
Zone	--	61	39
Year-round resident	96	95	97
(If not a year-round resident) Summer and/or Fall resident	96	100	80
Years have lived on Connecticut coast (mean)	25 yrs	26	22
Years have lived in present home (mean)	15 yrs	16	12
<b>Type of housing</b>			
One-family detached house	48	56	31
Condo or apartment building	40	33	56
One-family house attached to one or more houses	8	8	9
Two- or three-family house	3	3	4
Mobile home	-	-	-

**Questions:** Do you live at this resident year round? Do you live here at least part of the time during the Summer or Fall? How long have you lived on or near the Connecticut coast? How long have you lived in your present home? Which best describes the building where you live?

*Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).  
Data collected Sept. – Oct., 2014.*

On average, Coastal CT residents have lived in their present home for more than a decade, and they have lived somewhere along the coast for more than two decades. As a result, many residents have experienced several storms, and draw on these experiences in making decisions about storm preparedness.



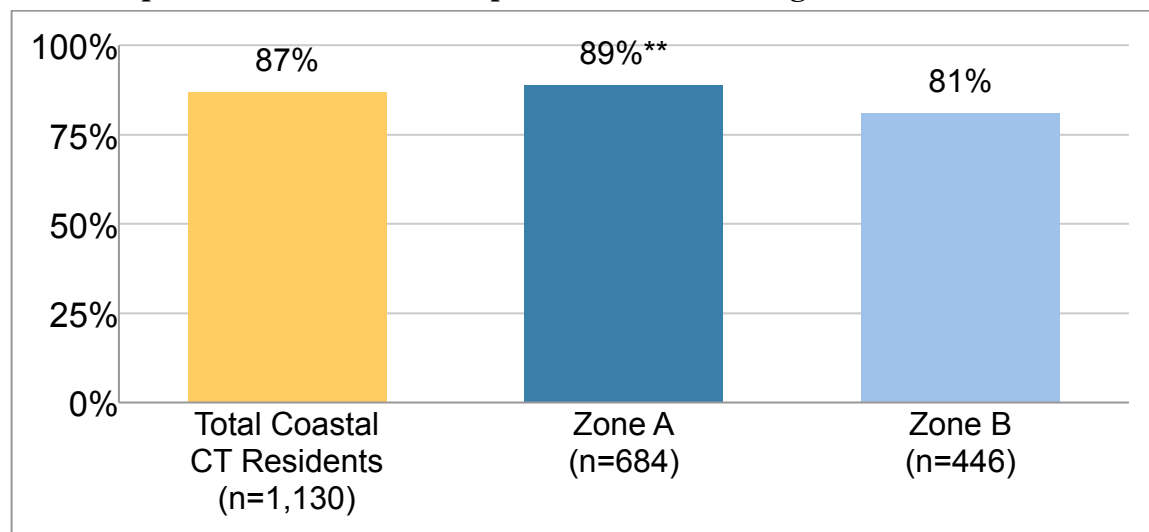
# Personal Experience With Coastal Storms

Experience with past storms can play an important role when deciding how to prepare for a future storm and whether to stay or leave for someplace safer. Research on natural hazard risk perceptions, experience, and behaviors suggests that in some cases, prior storm experience can exert a stronger influence on decision making and behavior than abstract knowledge, such as information about forecasts. Yet the relationship between experience and behavior is not straightforward. In some cases, prior hazard experience can increase the perceived seriousness of a future hazard, making some people more likely to prepare for or evacuate during the next hazard. In other cases, however, surviving a prior hazard can decrease the perceived seriousness of future hazards, making some people less likely to prepare for or evacuate during the next hazard. To assess past storm experience, we measured the percentage of respondents in Zone A and B that had experienced a hurricane or tropical storm as well as the number of storms they remembered.

## *Storm Experience*

Almost all coastal CT residents have experienced a hurricane or tropical storm while living on the coast, although 9% more Zone A residents report this than Zone B. Regardless of Zone, residents say they experienced two storms (median) since the beginning of 2009. The two storms recalled by most residents are likely Hurricane/Post-Tropical Cyclone Sandy (October 29-30, 2012) and Hurricane/Tropical Storm Irene (August 28, 2011), which both severely impacted Connecticut. Other storms recalled may have included Hurricane Earl (September 4, 2010) and Hurricane Ida (November 12, 2009).

% who experienced a hurricane/tropical storm while living on CT coast



\*  $p < 0.05$

\*\*  $p < 0.01$

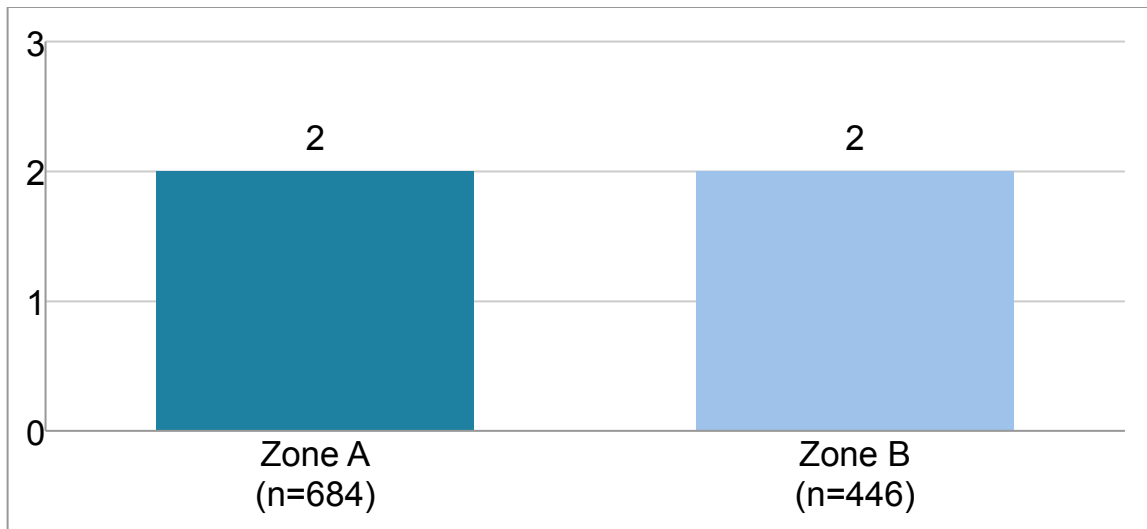
\*\*\*  $p < 0.001$

**Question:** Hurricanes and tropical storms affect residents living along the coast in different ways, causing substantial damage in some areas and less in others. Have you ever experienced a hurricane or tropical storm while living on or near the Connecticut coast?

Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).

Data collected Sept. – Oct., 2014.

### Median number of hurricane/tropical storms experienced since 2009, while living on the CT coast



**Question:** Since the beginning of 2009, how many hurricanes and tropical storms, if any, hit your city or town on or near the Connecticut coast while you were at home; that is, not out of town? If none, please enter “0” in the box below. If you’re not sure, your best estimate is fine.

*Base: Connecticut residents in Coastal Flood Zones A and B who have ever experienced a hurricane/tropical storm while living on CT coast (n=996). Data collected Sept. – Oct., 2014.*

### *Superstorm Sandy Experience*

	Total	Zone A	Zone B
(Unweighted base)	(996)	(622)	(374)
	%	%	%
At home	87	87	87
Another location on or near the CT coast	8	7	9
Somewhere else	5	6	3

**Questions:** This question is about your experience during Superstorm Sandy, which affected the U.S. in October 2012. In the days immediately before Superstorm Sandy, were you...In another location on or near the Connecticut coast?

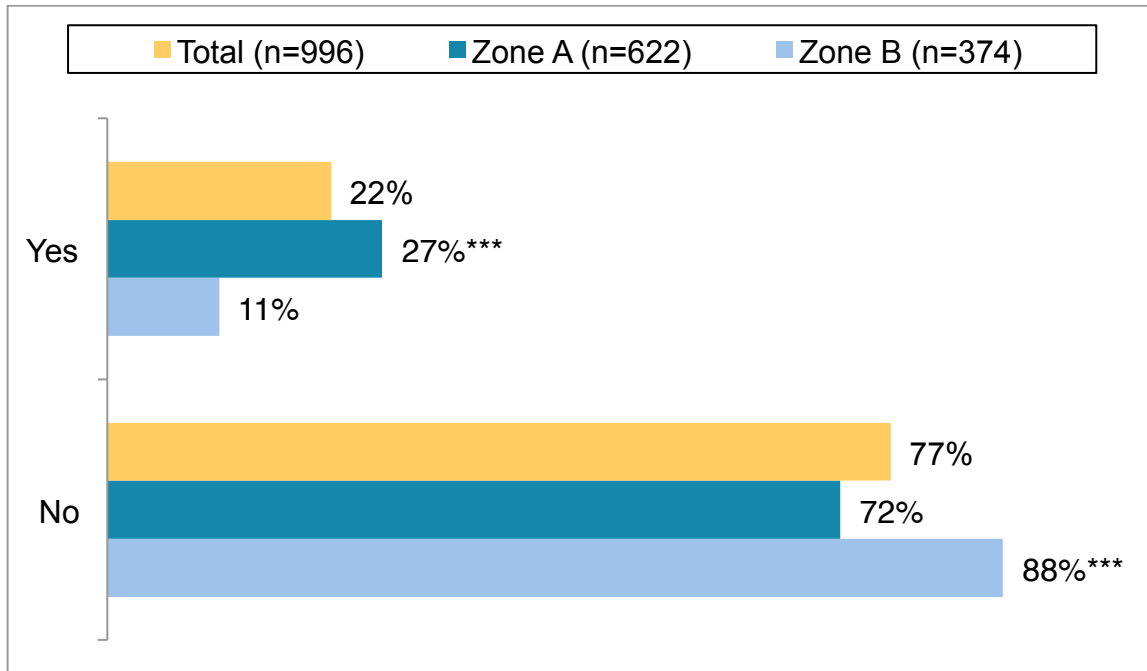
*Base: Connecticut residents in Coastal Flood Zones A and B who have experienced a storm (n=996). Data collected Sept. – Oct., 2014.*

Most coastal CT residents (95%) who say they had experienced a storm were either at home in their current residence or at another location on or near the CT coast during Superstorm Sandy. About 5% of the respondents were not on or near the coast during the storm.

## *Superstorm Sandy Evacuation*

Of the residents who were at home during Superstorm Sandy, 22% say they evacuated. Significantly more people evacuated from Zone A (27%) than Zone B (11%).

**Did you evacuate?**



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Questions:** Before Superstorm Sandy hit your area, did you leave your home to go someplace safer; that is, did you evacuate?

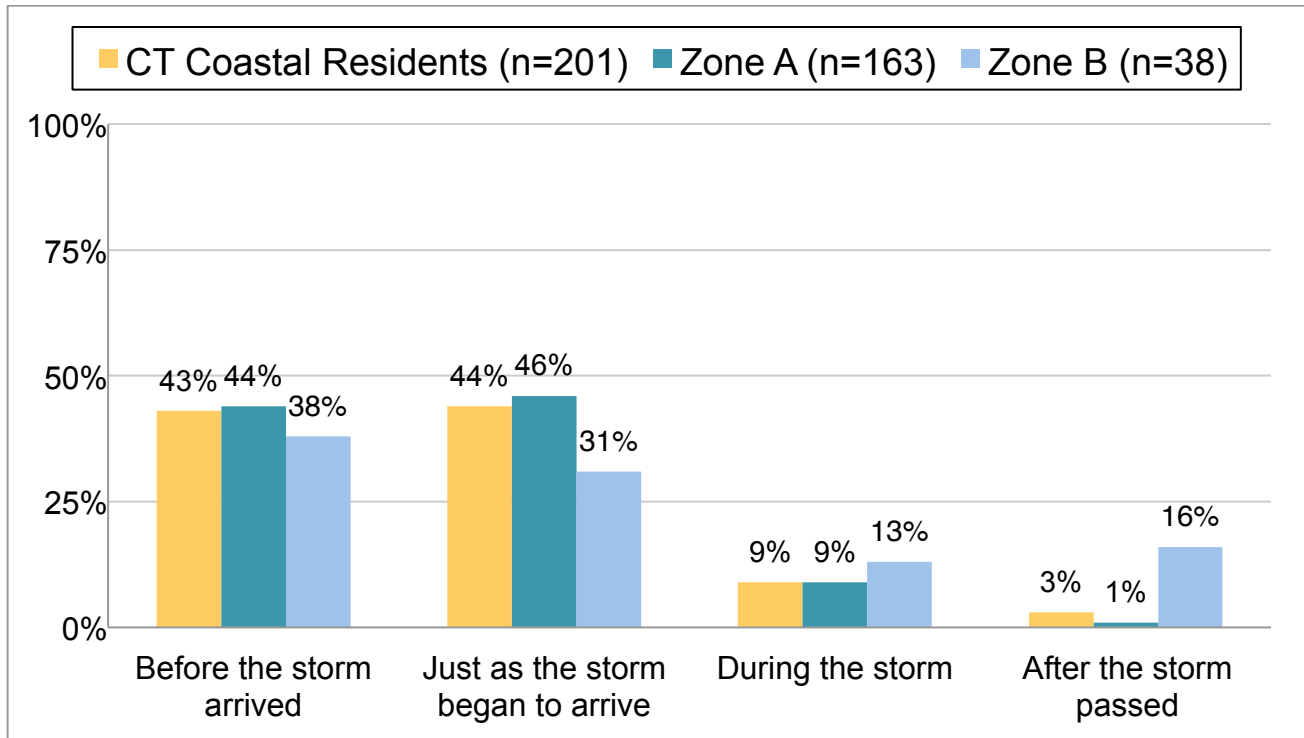
*Base: Connecticut residents in Coastal Flood Zones A and B who have experienced a storm (n=996).*

*Data collected Sept. – Oct., 2014.*

## Timing of Evacuation

Of the 22% of CT coastal residents who evacuated during Superstorm Sandy, 43% did so before the storm arrived and 44% left as the storm was arriving. One in ten (12%) left during or after the storm. Zone B residents appear to have evacuated later than Zone A residents, but the differences are not statistically significant due to the small number of Zone B residents who evacuated.

% of residents who say they left to go someplace safer...



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question:** When did you leave your home to go someplace safer during Superstorm Sandy?

*Base: The 22% of Connecticut residents in Coastal Flood Zones A and B who evacuated (n=201).*

*Data collected Sept. – Oct., 2014.*

# General Knowledge

Prior experience often influences decision-making and behavior during a storm. Other factors, however, including knowledge and information, can also be important, depending on one's unique situation and the details of the particular event. Several survey questions measured whether residents understand that their home is located in an evacuation zone, expectations of future storms, information-seeking behavior during storms, and knowledge of the most dangerous storm risks.

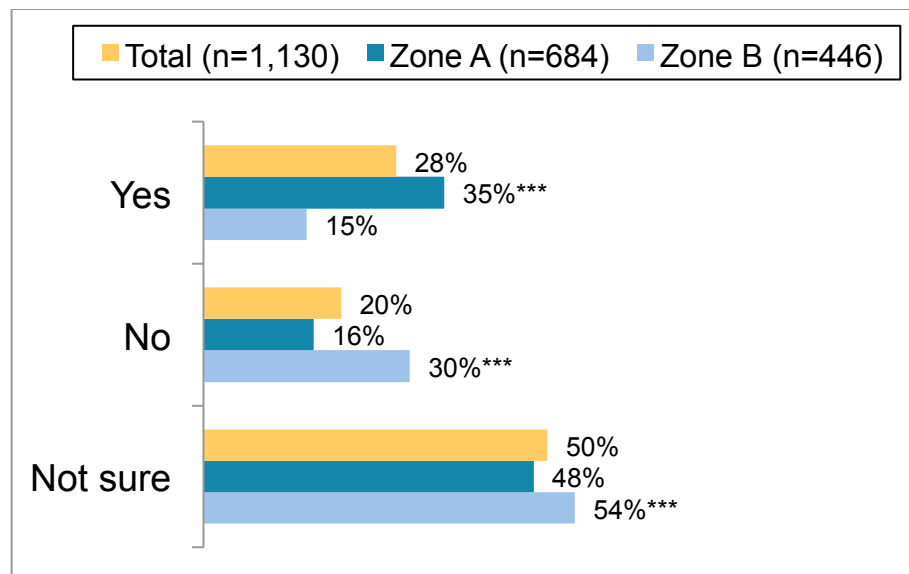
## *Evacuation Zone Awareness*

Only 35% of Zone A and 15% of Zone B respondents know that their household is located in an evacuation zone (*all* residences contacted for the survey are in an evacuation zone as defined by the Army Corps of Engineers). In total, 70% of CT coastal residents are either unsure or believe that they are not in an evacuation zone.

### **How did you learn that your home is in evacuation zone?**

Of those residents who know that their home is in an evacuation zone, about a third say they learned this because they received a phone call or notice to evacuate during a past storm (31%), while another third saw physical markers (31%). Over a quarter (28%) say they learned this because of conversations with friends or neighbors. Fewer residents cited websites, notices from insurance companies, printed brochures, or letters from their town as ways by which they learned that their residence is in an evacuation zone for coastal storms.

### **Is your home located an evacuation zone?**



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Questions: Is your home located in a hurricane evacuation zone, or not?\***  
**How did you learn whether or not your home is in a hurricane evacuation zone?\*\*\***

Base: \*Connecticut residents in Coastal Flood Zones A and B (n=1,130).

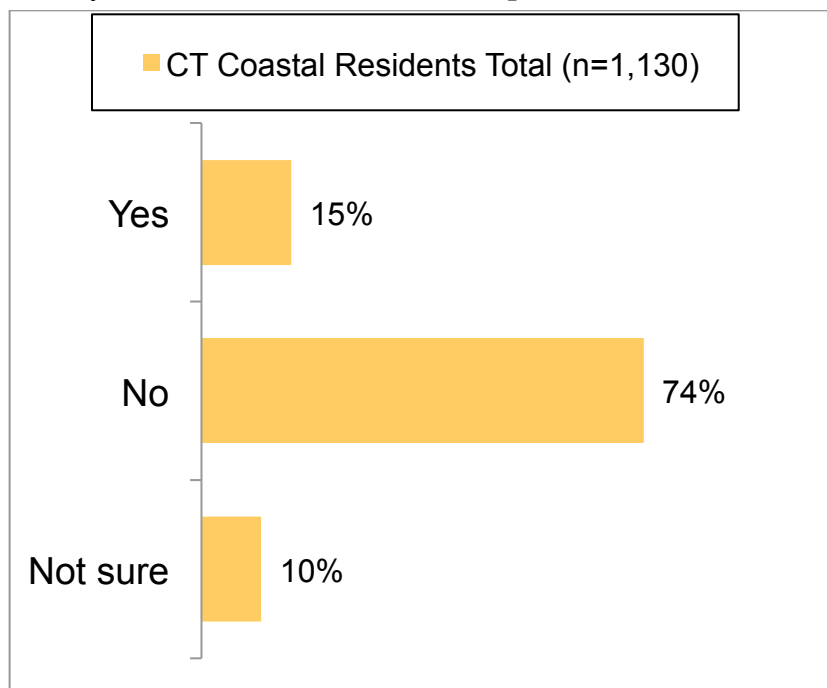
Base: \*\*who say their home is or is not located in a flood evacuation zone (n=558).

Data collected Sept. – Oct., 2014.

## *Evacuation Route Awareness*

Only 15% of CT coastal residents have seen a local evacuation map. The few who have seen local evacuation route information before describe a variety of ways. The most common methods were through printed brochures or mailers (48%); websites (40%); government offices (34%), or local meetings or conversations with friends and neighbors (25%).

**Have you seen a local evacuation map?**



**Questions: Have you ever seen an evacuation map of your local area, or not?\***  
**Do you know where you saw an evacuation map of your local area?\*\*\***

Base: \*Connecticut residents in Coastal Flood Zones A and B (n=1,130).

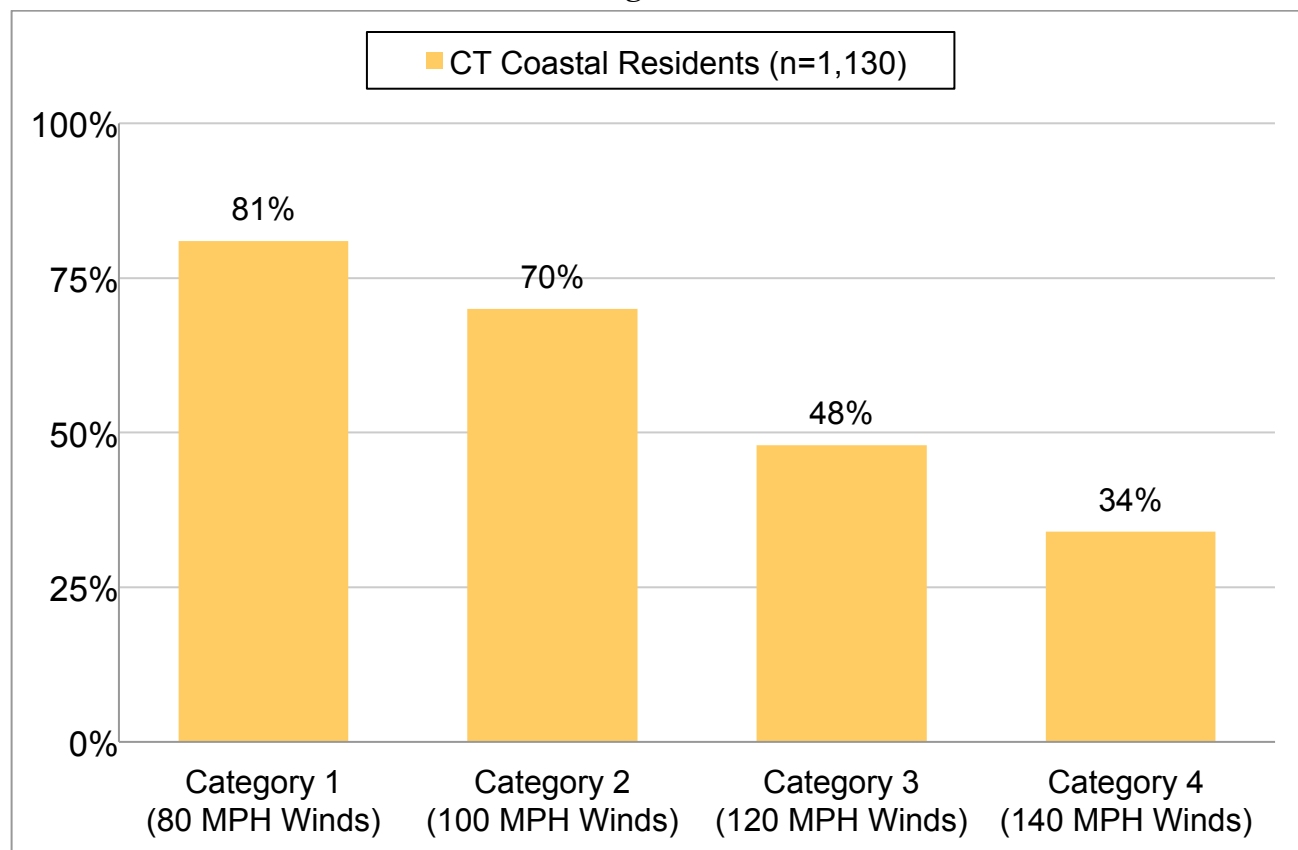
Base: \*\*who have seen an evacuation map of their local area (n=169).

Data collected Sept. – Oct., 2014.

## *Estimated Likelihood of Storm Occurrence*

When asked to estimate the chance that a Category 1 hurricane will hit the CT coast in the next 50 years, coastal residents on average (mean) predict the likelihood at 81% (the median estimate is 100%). For a Category 2 hurricane, the average predicted likelihood is 70% (median is 80%); for a Category 3 storm, the average predicted likelihood is 48% (median is 50%); and for a Category 4 hurricane, the average predicted likelihood is 34% (median is 25%). Statistical estimates calculated for the CT coast put the chances of a Category 1 storm occurring in the next 50 years at 86% and a Category 3 storm at 45%. So the average of the public's responses were quite accurate, slightly underestimating the chance of a Category 1, and slightly overestimating the chance of a Category 3 hurricane.

### Mean estimated chance of hurricane occurring



**Question:** On a scale of 0%-100%, with 0% being it definitely will NOT happen and 100% being it definitely WILL happen, how likely do you think it is that each of the following types of hurricane will hit somewhere along the Connecticut coast in the next 50 years?

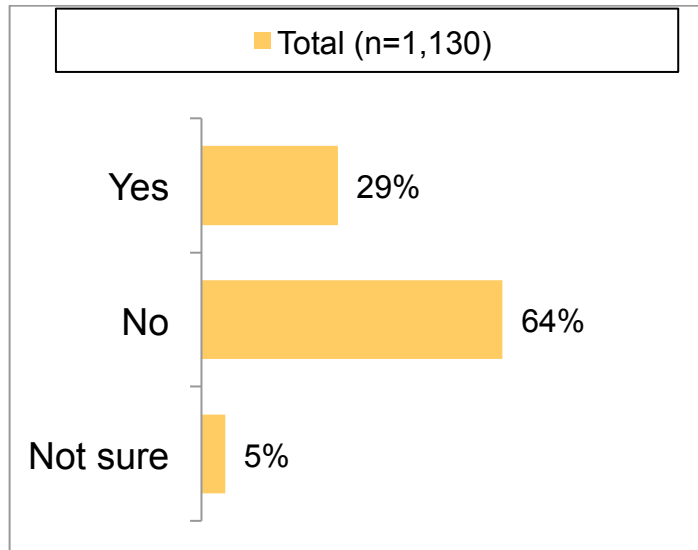
*Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).*

*Data collected Sept. – Oct., 2014.*

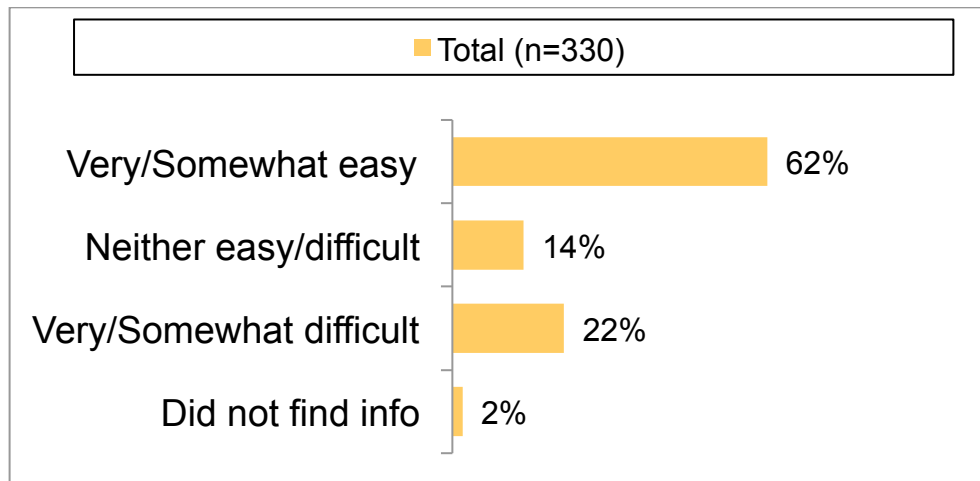
## Information-Seeking Behavior

Only about one quarter of CT coastal residents (29%) have searched for local flood information. Of those who looked for flood information, 62% say it was very or somewhat easy to find.

**Have you ever searched for flood info in city/town?**



**How easy or difficult was it to find flood information?**



**Questions: Have you ever searched for flood information for your city or town, or not?\***  
**How easy or difficult was it to find flood information about your city or town?\***

Base: \*Connecticut residents in Coastal Flood Zones A and B (n=1,130).

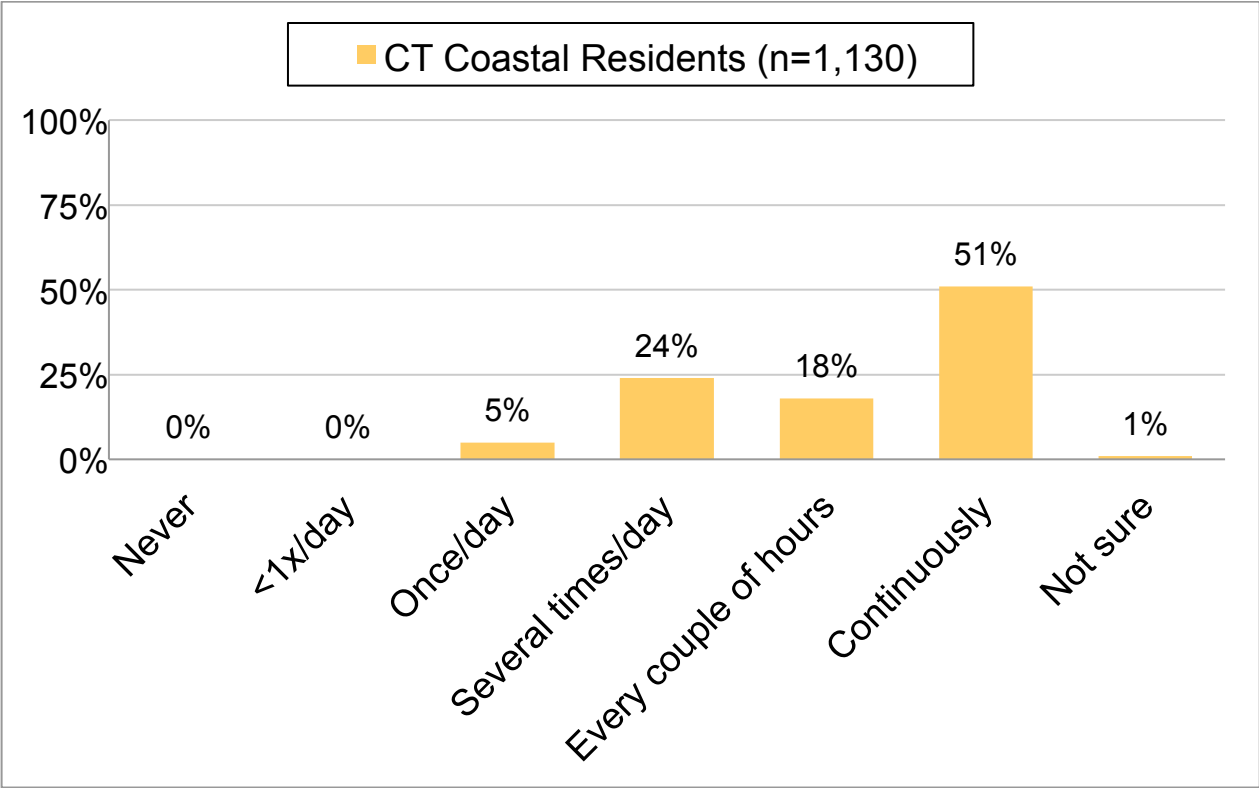
\*\*who say they have searched for flood information in their city/town (n=330).

Data collected Sept. – Oct., 2014.



When a storm approaches, approximately half of coastal residents (51%) say they keep the TV or radio on continuously throughout the day for news and updates about the storm. About one in five (18%) check the forecast every couple of hours, and about one quarter (24%) check at least a few times a day.

% of residents who say they check storm forecasts when a storm is approaching...



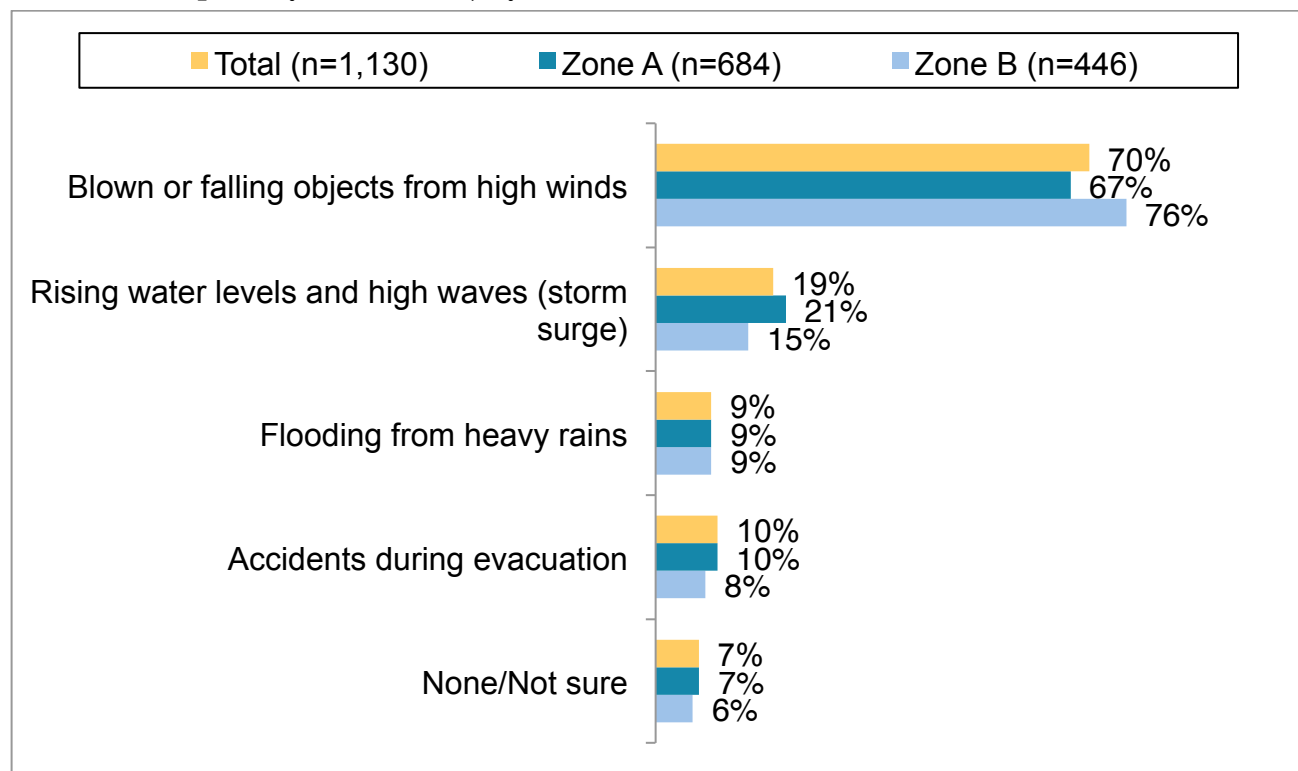
**Question:** When a hurricane or tropical storm approaches your local area, how frequently, if ever, do you check the forecasts on TV, radio, and/or on the Internet?

*Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).  
Data collected Sept. – Oct., 2014.*

## Storm Hazards Awareness

Most fatalities during severe coastal storms are from drowning, yet coastal residents overwhelmingly believe that high winds and associated impacts are the primary cause of injury and death during a storm. Only one in five (19%) of coastal residents understand that storm surge – leading to drowning – is a primary cause of death and injury during a tropical storm or hurricane. Many respondents chose wind plus one or more other categories in response to this question.

### Awareness of primary causes of injury or death from coastal storms



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question:** To the best of your knowledge, which one of the following is the most likely cause of injury or death during a hurricane? **Note:** Many respondents chose more than one response for this question. As a result, the total across categories sums to more than 100%.

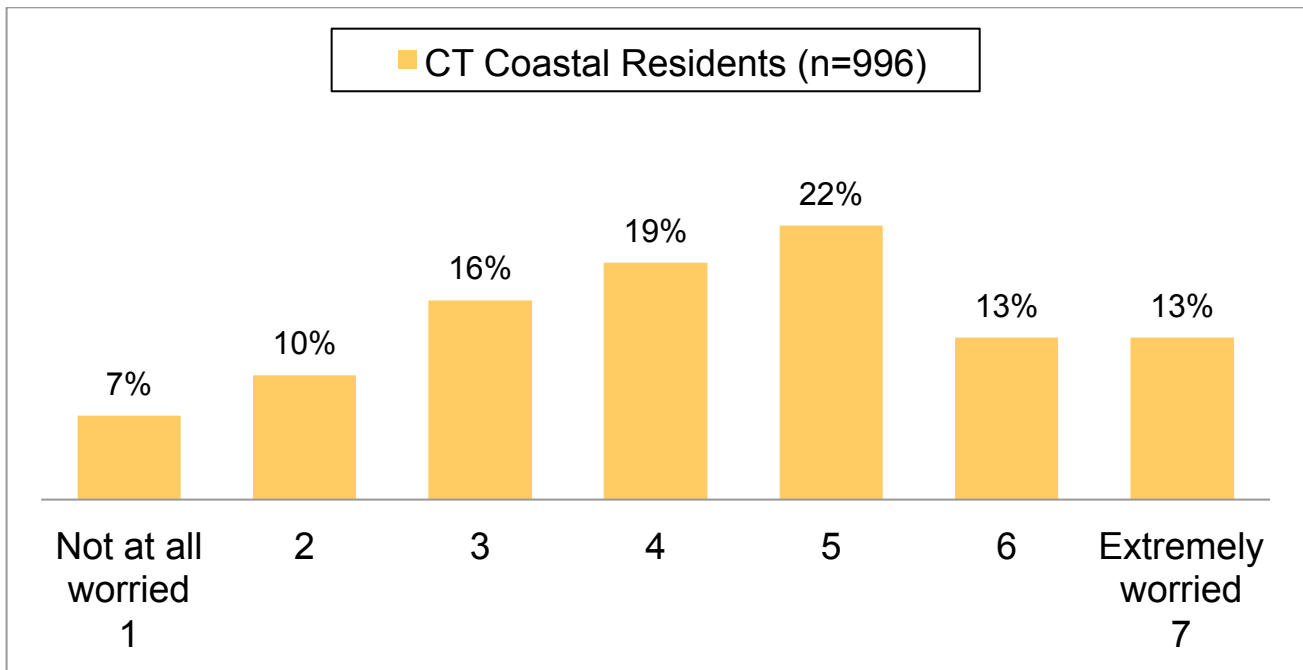
**Base:** Connecticut residents in Coastal Flood Zones A and B (n=1,130).  
Data collected Sept. – Oct., 2014.

## Attitudes and Risk Perceptions

The public's risk perceptions are a significant determinant of their response to an impending hurricane. The public often perceives lower risk, however, than is actually present, and this is particularly true for storm surge.

Coastal CT residents experience different levels of worry when a storm is approaching. About 7% are not worried at all, whereas 13% become extremely worried. Most residents (80%) expressed more moderate amounts of worry – somewhere between “Not at all” and “Extremely” worried, with 48% selecting a value above the mid-point (i.e., a value of 5 or higher on a 7-point scale).

### *Level of Worry When Storm is Approaching*



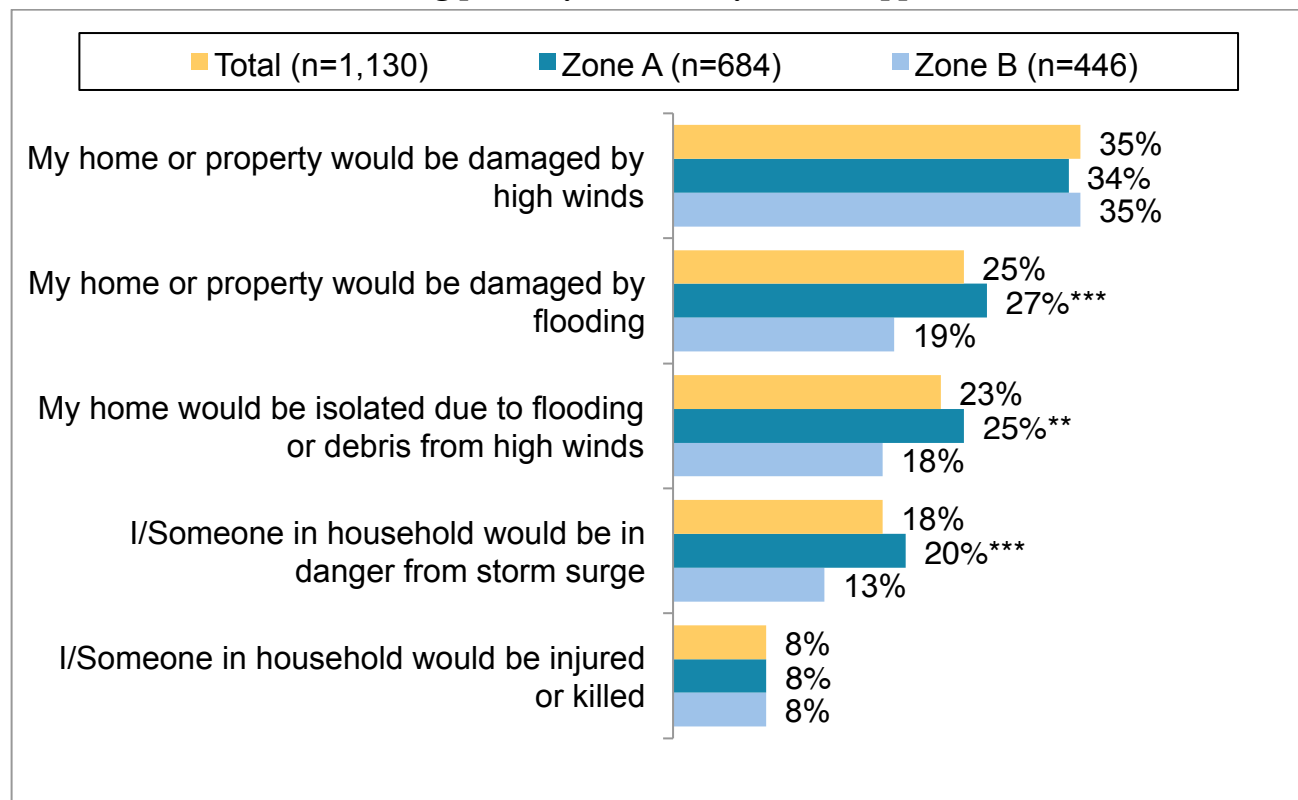
**Question:** Generally speaking, when a hurricane or tropical storm is approaching your city or town, how worried do you feel? Please answer using the following scale ranging from 1 (not at all worried) to 7 (extremely worried).

*Base: Connecticut residents in Coastal Flood Zones A and B who have experienced a storm (n=996).  
Data collected Sept. – Oct., 2014.*

## Likelihood of Damages

About one third of all coastal CT residents (35%) think their home or property probably or definitely would be damaged by high winds if a Category 2 hurricane hit their local area, whereas one quarter (25%) believe flooding would damage their home or property. Residents in Zone A are more likely than those in Zone B to believe that flooding would cause damage. Less than one quarter (23%) of CT coastal residents believe that their home probably or definitely would become isolated during a Category 2 storm; 18% believe that someone in their household would be in danger from storm surge, and 8% believe that someone in their household would probably or definitely be injured or killed (8%) during such a storm.

% who believe that the following probably or definitely would happen...



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question: If a Category 2 hurricane (100 MPH winds) were going to hit your local area, how likely do you think it is that each of the following would happen?**

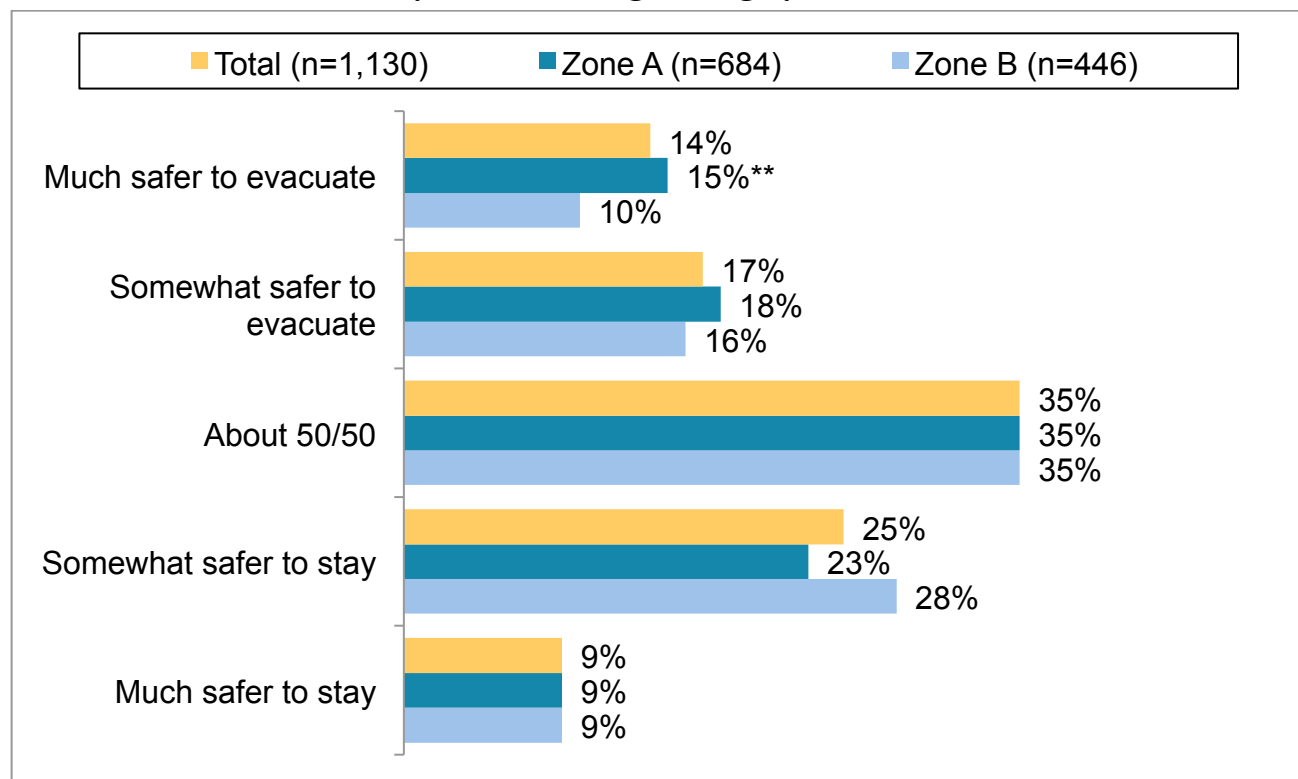
Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).

Data collected Sept. – Oct., 2014.

## Perceived Safety

Coastal CT residents are divided roughly into thirds when it comes to the perceived safety of evacuating or staying at home during a Category 2 storm. Slightly fewer (31%) believe it would be somewhat or much safer to evacuate than to stay at home (34%); the remaining 35% think it is about 50-50. Zone A residents (closer to the coast), however, are more likely than residents in Zone B to say it would be somewhat or much safer to evacuate for a Category 2 hurricane.

**Is it safer to evacuate or to stay at home during a Category 2 hurricane?**



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question: During a Category 2 hurricane (100 MPH winds), do you think it would be safer to evacuate or to stay in your home or building? If you're not sure, please give your best estimate.**

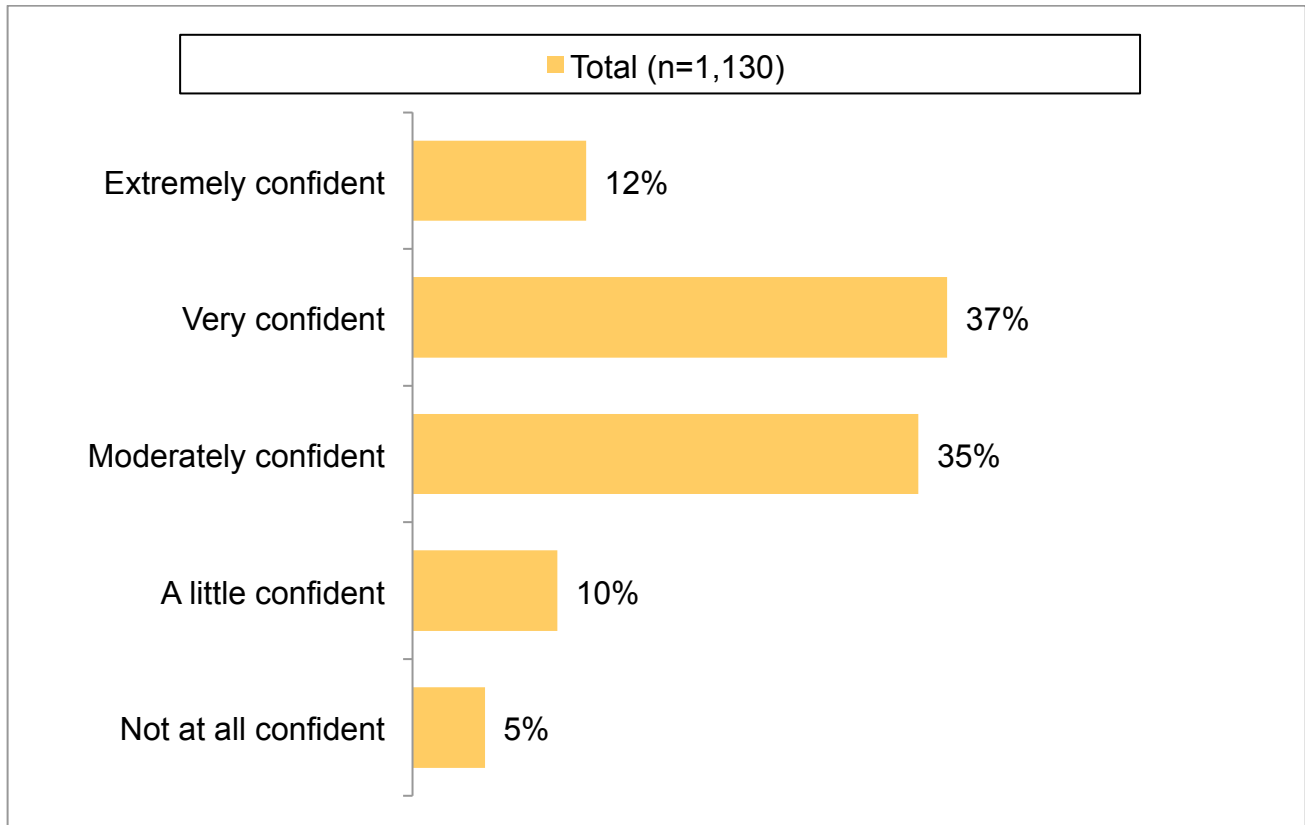
Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).

Data collected Sept. – Oct., 2014.

## *Confidence in Ability to Stay Safe*

About half (49%) of coastal CT residents are very or extremely confident that they can keep themselves and the members of their household safe during a hurricane; an additional 35% are moderately confident. About 15% say they are only a little or not at all confident that they can keep themselves or their family safe during a storm.

**How confident do you feel about your ability to stay safe during a hurricane?**



**Question:** How confident do you feel about your ability to keep yourself and the people in your household safe during a hurricane or tropical storm? Please choose one.

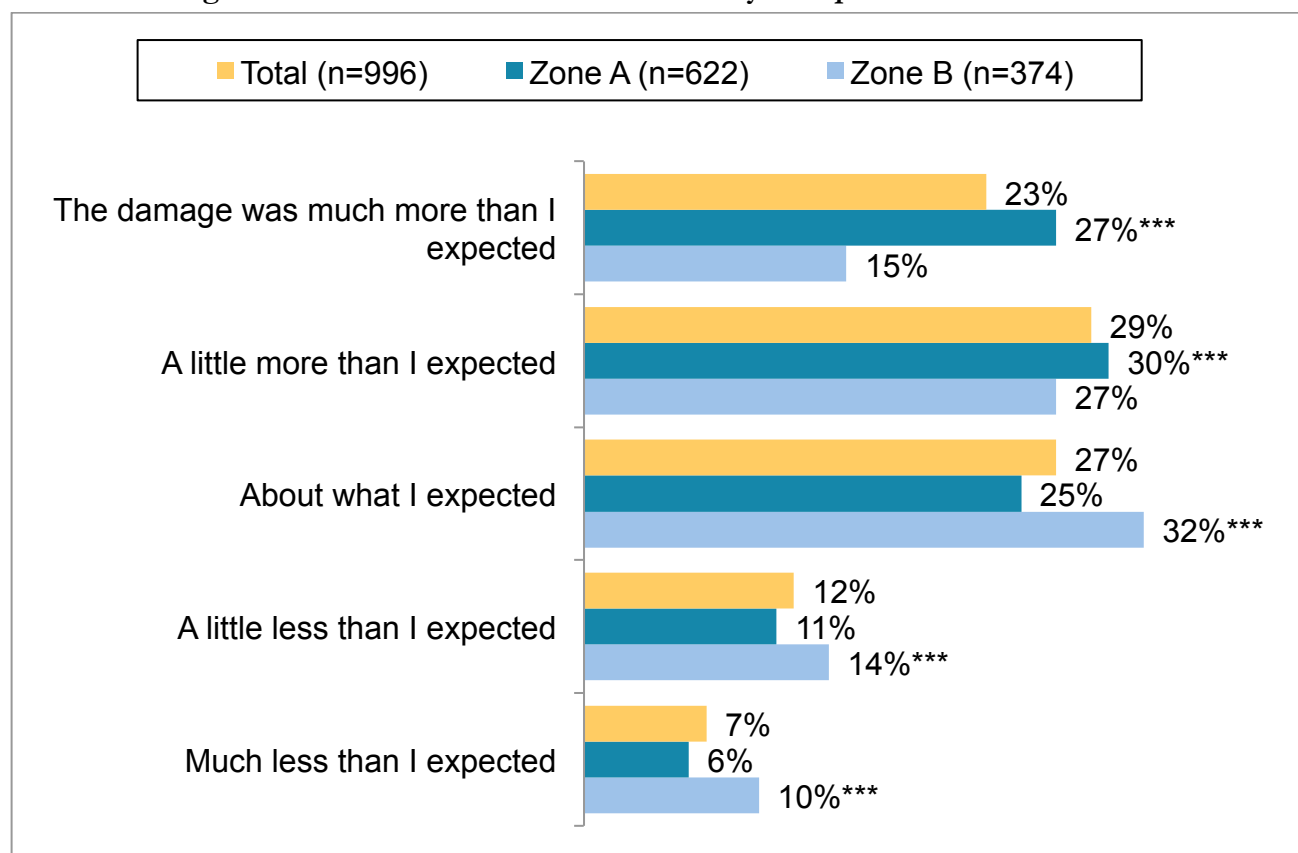
*Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).*

*Data collected Sept. – Oct., 2014.*

## Expectations About Damage

Coastal residents living in Zone A were significantly more surprised by recent storm damage than those living in Zone B. Over half (57%) of Zone A residents versus 42% of Zone B residents say that recent storm damage was a little or much more than they expected. Only 19% of CT coastal residents say damage from recent storms was a little or much less than expected.

**Was the damage from recent storms more or less than you expected?**



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question:** Generally speaking, was the damage, if any, caused by the storm(s) in your local area ...

*Base: Connecticut residents in Coastal Flood Zones A and B who have experienced a storm (n=996).*

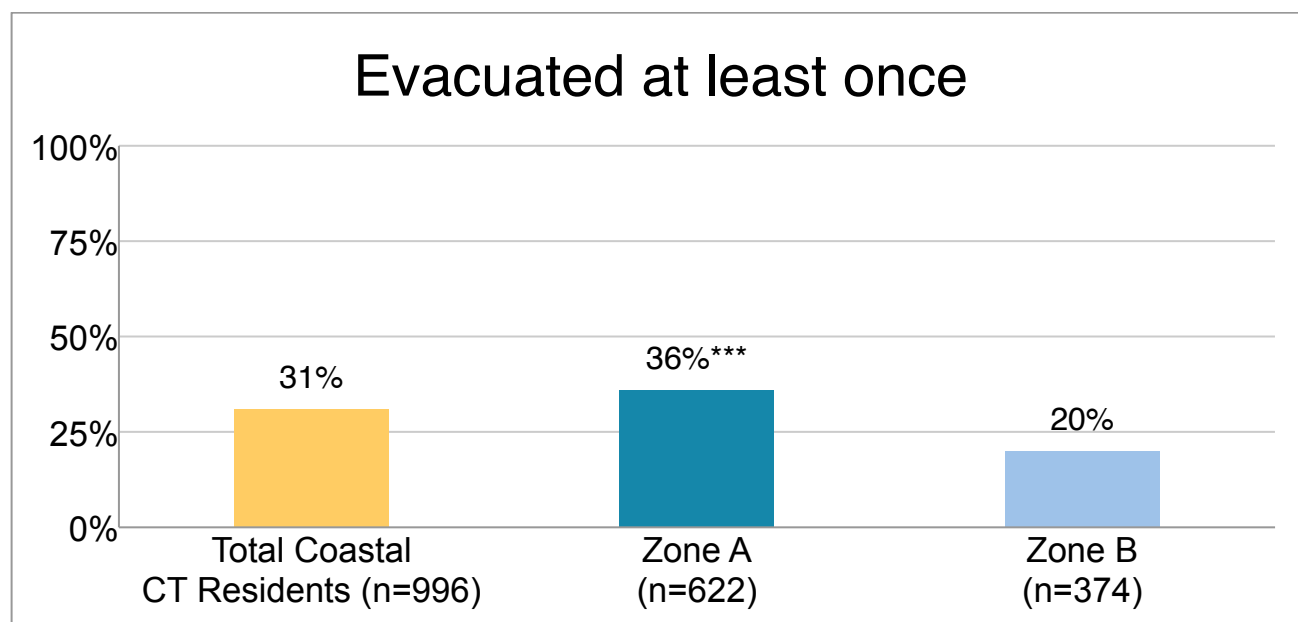
*Data collected Sept. – Oct., 2014.*

## Evacuation Behavior

Past evacuation behavior during a storm is not necessarily a strong predictor of intended future evacuation behavior, because each storm is different and many factors influence individual decisions. Residents may have evacuated in the past only to find that the storm they avoided was much less severe or serious than forecasted, or they may have felt that they would have been able to prevent damage to their home or property if they had stayed. Changes in one's living situation, financial or transportation considerations, or the presence or poor health of other family members can also affect decisions about whether or not to evacuate. We asked about past as well as intended evacuation behaviors to better understand residents' experiences, attitudes, and perceived barriers to storm-related evacuations.

### *Prior Evacuation Experience*

Of the coastal CT residents who have experienced a storm, nearly one third (31%) have evacuated at least once. Residents in Zone A are significantly more likely to have evacuated than residents in Zone B (36% versus 20% in Zones A and B, respectively).



**Question:** Since the beginning of 2009, how many times, if ever, did you leave your home for someplace safer to avoid a hurricane or tropical storm; that is, how many times did you evacuate?

*Base: Connecticut residents in Coastal Flood Zones A and B who have experienced a storm (n=996).*

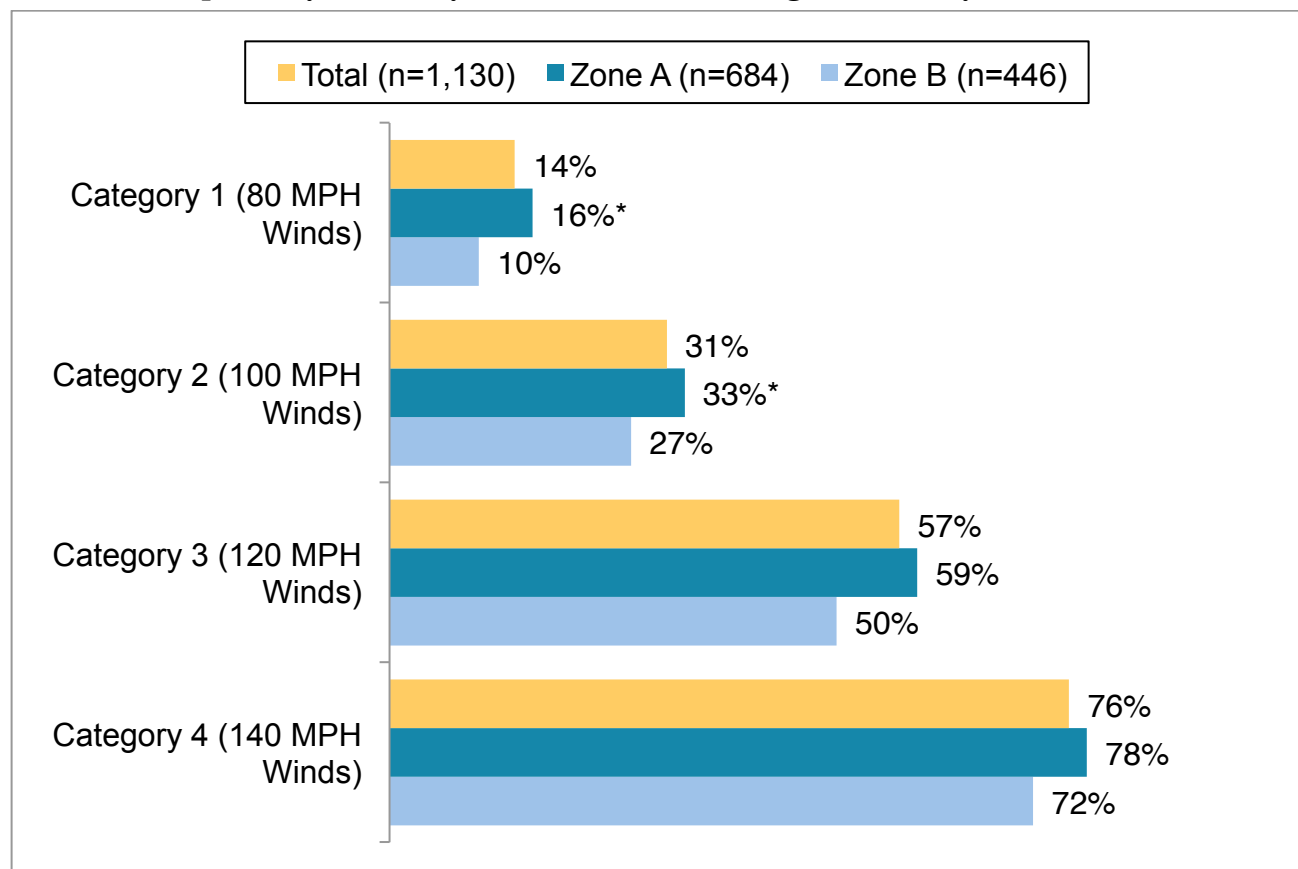
*Data collected Sept. – Oct., 2014.*



## Evacuation Likelihood

Evacuation likelihood among coastal residents increases with expected storm severity. Only 14% of residents say they would definitely or probably evacuate in the event of a Category 1 hurricane. In contrast, 76% say they would definitely/probably evacuate for a Category 4 hurricane. There were significant differences between Zone A and Zone B residents in their anticipated evacuation behaviors, with Zone A residents more likely to say they would evacuate than Zone B residents for a Category 1 or 2 hurricane.

% who would probably/definitely evacuate if the following were to hit your area...



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question:** How likely is it that you would evacuate if the following were forecast to hit your local area?

Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).

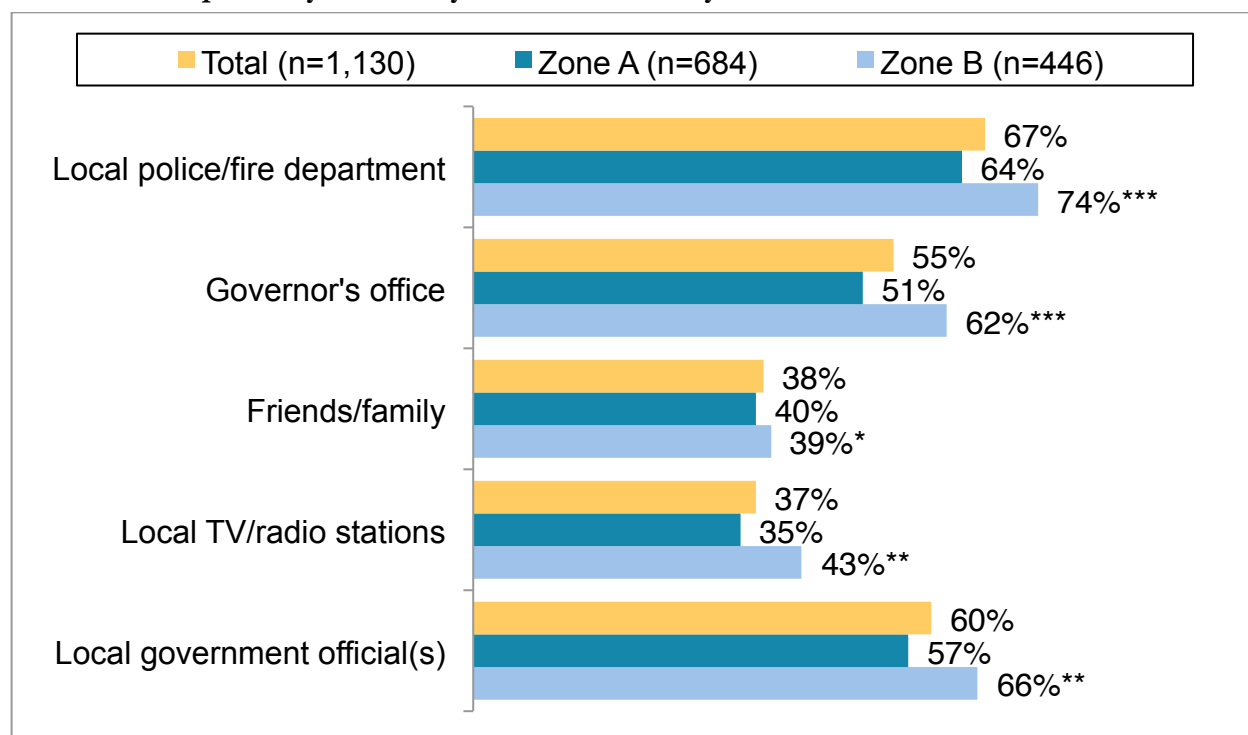
Data collected Sept. – Oct., 2014.

## Evacuation Likelihood by Communicator Type

There is strong scientific evidence that information coming from a trusted, official source has a stronger influence on risk perceptions than information from other sources. As a result, when NYC Mayor Bloomberg, a trusted official, played down the threat of Sandy with less than 48 hours to landfall, many New York residents may have downgraded their own perceptions of the risks. The messenger is often as important, if not more important, than the message itself.

Most CT coastal residents say they would definitely or probably evacuate if advised by the local police or fire department (67%). Zone B residents were more likely than Zone A residents to say they would evacuate if told to do so, particularly if told by local police/fire department or by local or state government officials.

% who would probably/definitely evacuate if told by...



\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question:** When a hurricane or tropical storm approaches your local area, different people and organizations might ask you to evacuate your home or building. How likely would you be to evacuate if each of the following asked or told you to?

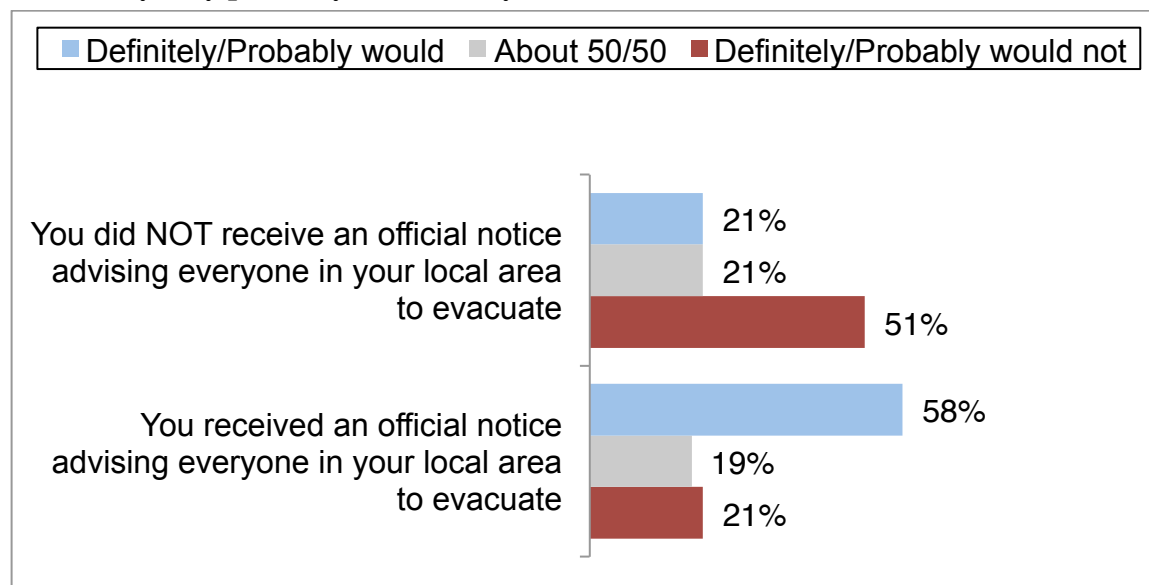
Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).

Data collected Sept. – Oct., 2014.

## *Evacuation Likelihood if Advised/Not Advised*

In the event of a Category 2 hurricane, many Zone A residents are likely to be asked to evacuate, whereas Zone B residents are more likely to be asked only in the event of a Category 3 or 4 (major) hurricane. Approximately six in ten (58%) of coastal CT residents in Zone A would definitely or probably evacuate if advised to by an official. In contrast, only 21% say they would evacuate for a Category 2 hurricane if they did NOT receive official notice.

% who say they probably or definitely would evacuate if...



**Question:** If a Category 2 hurricane (100 MPH winds) were going to hit your local area, how likely would you be to evacuate if...?

*Base: Connecticut residents in Coastal Flood Zone A (n=684).*

*Data collected Sept. – Oct., 2014.*

## *Barriers to Evacuation*

While many potential barriers to evacuation exist for coastal residents, most residents do not perceive major obstacles preventing them from evacuating if necessary. Among coastal CT residents as a whole, pets, protecting one's home or business, poor health or disability, and lack of money were cited about equally (17%-18%) as factors that would probably or definitely make evacuation difficult.

There are significant differences in perceived barriers among Zone A versus Zone B residents. Protecting one's home or business (20%) is the most common barrier for Zone A residents, whereas lack of money (24%) and poor health or disability (22%) are the most common barriers for Zone B residents. Lack of knowledge about how to evacuate was also a barrier for Zone B residents (20%).

<b>Barrier (Definitely/Probably)</b>	<b>Total %</b>	<b>Zone A %</b>	<b>Zone B %</b>
(Unweighted base)	(1,130)	(684)	(446)
Pet(s) or animals would make it difficult to evacuate	17	17	17
If asked to evacuate, I would instead stay to protect home/business	18	20***	13
I would not evacuate so I could stay to watch the storm	9	11**	6
I would not have enough money to evacuate to a safer location	17	14	24***
Poor health or disability would make evacuation difficult for me	18	15	22**
I do not know how to evacuate to a safer location	14	11	20***
I would not have transportation to evacuate to a safer location	9	6	13***

\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Question: Please answer each of the following questions...**

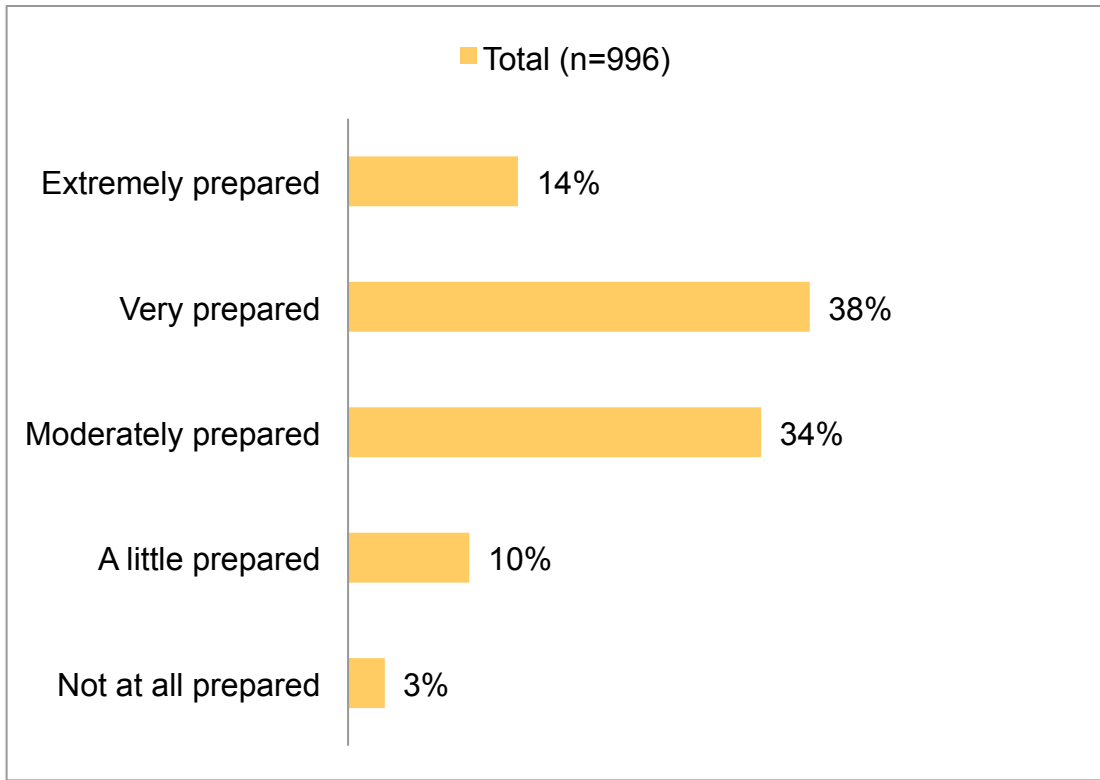
*Base: Connecticut residents in Coastal Flood Zones A and B (n=1,130).*

*Data collected Sept. – Oct., 2014.*

## Preparedness

Most coastal CT residents (86%) who have experienced a storm say they were at least moderately prepared for it. Over half (52%) felt very or extremely prepared. Less than one in ten (13%) of coastal CT residents felt only a little or not at all prepared for past storms (differences between Zone A and B residents were not significant).

### *Perceived Preparedness*



**Question:** Generally speaking, how prepared were you for the storm(s) you experienced?

*Base: Connecticut residents in Coastal Flood Zones A and B who have experienced a storm (n=996).  
Data collected Sept. – Oct., 2014.*

### *Actual Preparations*

When asked about specific emergency supplies, most CT coastal residents report having a cellphone (95%), a flashlight with extra batteries (88%), a three-day supply of food (73%), and a first aid kit (72%). Only half of respondents report having a hand-crank or portable radio, or 3+ gallons of water for each household member. About one third report having an emergency disaster plan that all household members know about, and 9% (excluding people residing in apartment buildings) report living in a residence raised or on stilts to avoid flooding. Zone A residents are more likely to have a variety of emergency supplies than Zone B residents, including a flashlight, first aid kit, a potable radio, and a backup power generator.

	Total	Zone A	Zone B
(Unweighted base)	(1,130)	(684)	(446)
	%	%	%
Have disaster emergency plan all household members know about	32	34	28
Have in home:			
Cell phone	95	95	95
Flashlight and extra batteries	88	90***	83
3-day supply of non-perishable, ready-to-eat food	73	74	72
First aid kit	72	74**	67
3+ gallons of water for each member of household	50	52	47
Handcrank portable radio or battery-powered radio + extra batteries	50	52*	45
Backup power generator	19	22**	14
None of the above	2	2	2
Have replaced emergency supplies in past 6 months	28	28	30
Residence raised to avoid flooding	9	9	10

\*  $p < 0.05$

\*\*  $p < 0.01$

\*\*\*  $p < 0.001$

**Questions:** Do you have a disaster emergency plan that other members of your household know about, or not? In case of an emergency, do you have the following supplies in your home, or not? Have you updated or replaced your emergency supplies in the past 6 months, or not? Is your residence raised or on stilts to avoid flooding, or not?

Base: Connecticut residents in Coastal Flood Zones A and B ( $n=1,130$ ).

Data collected Sept. – Oct., 2014.

## APPENDIX A: Topline Results

- 1) Do you live at this residence year-round?

Yes	96%
No	4%

- 2) (If not a year-round resident) Do you live here at least part of the time during the summer or fall?

Yes	96%
No	4%

- 3) Hurricanes and tropical storms affect residents living along the coast in different ways, causing substantial damage in some areas and less in others. Have you ever experienced a hurricane or tropical storm while living on or near the Connecticut coast?

Yes	87%
No → Skip to Question 20.	10%
Not Sure → Skip to Question 20.	3%
Refused	1%

- 4) Since the beginning of 2009, how many hurricanes and tropical storms, if any, hit your city or town on or near the Connecticut coast while you were at home; that is, not out of town? If none, please enter “0” in the box below. If you’re not sure, your best estimate is fine. (Base = 996)

0	3%
1	16%
2	41%
3	21%
4	7%
5	5%
6	1%
7	0%
8	1%
9	0%
10 or more	2%
Refused	3%

- 5) Generally speaking, when a hurricane or tropical storm is approaching your city or town, how worried do you feel? Please answer using the following scale ranging from 1 (not at all worried) to 7 (extremely worried). (Base = 996)

Not worried at all	7%
2	10%
3	16%
4	19%
5	22%
6	13%
Extremely worried	13%
Refused	1%

- 6) Since the beginning of 2009, how many times, if ever, did you leave your home for someplace safer to avoid a hurricane or tropical storm; that is, how many times did you evacuate? Please enter the number in the boxes below. (Base = 996)

0	68%
1	19%
2	10%
3	2%
4	0%
Refused	1%

- 7) Generally speaking, how prepared were you for the storm(s) you experienced? Please choose one. (Base = 996)

Extremely prepared	8%
Very prepared	30%
Moderately prepared	42%
A little prepared	15%
Not at all prepared	3%
Refused	1%

- 8) Generally speaking, was the damage, if any, caused by the storm(s) in your local area... Please choose one. (Base = 996)

Much less than you expected	7%
A little less than you expected	12%
About what you expected	27%
A little more than you expected	29%
Much more than you expected	23%
Refused	2%



- 9) This question is about your experience during Superstorm Sandy, which affected the U.S. in October 2012. In the days immediately before Superstorm Sandy, were you...?

At your current home on or near the Connecticut coast	87%
In another location on or near the Connecticut coast	8%
Somewhere else	5%
Refused	1%

For questions 10 - 19 below, please think about your experience during Superstorm Sandy. If you were NOT on or near the Connecticut coast during Superstorm Sandy, please think about the most recent hurricane or tropical storm, other than Sandy, that you experienced while living on or near the Connecticut coast.

- 10) Before Superstorm Sandy hit your area, did you leave your home to go someplace safer; that is, did you evacuate? (Base = 996)

Yes	22%
No	77%
Refused	1%

- 11) When did you leave your home to go someplace safer during Superstorm Sandy? Please choose one. (Base = 201)

Before the storm arrived	43%
Just as the storm began to arrive	44%
During the storm	9%
After the storm passed	3%

- 12) How much, if at all, did each of the following factors influence your decision to evacuate your home during Superstorm Sandy? For each factor, please use the following scale, ranging from “very strong influence” to “no influence.” **When finished, please skip to question 14.** (Base = 201)

a) High winds and blown objects could cause personal injury or damage my home	Very strong influence	35%
	Strong influence	26%
	Moderate influence	13%
	A little influence	13%
	No influence	8%
	Refused	4%
b) Flooding from the ocean/Long Island Sound could cause personal injury or damage my home	Very strong influence	44%
	Strong influence	20%
	Moderate influence	6%
	A little influence	12%
	No influence	12%
	Refused	7%
c) River flooding could cause personal injury or damage my home	Very strong influence	17%
	Strong influence	14%
	Moderate influence	8%
	A little influence	14%
	No influence	40%
	Refused	8%
d) My home could lose electricity	Very strong influence	51%
	Strong influence	16%
	Moderate influence	11%
	A little influence	11%
	No influence	7%
	Refused	4%
e) My home could become isolated due to blocked roads	Very strong influence	43%
	Strong influence	18%
	Moderate influence	14%
	A little influence	8%
	No influence	10%
	Refused	7%
f) I received an official notice to evacuate	Very strong influence	54%
	Strong influence	15%
	Moderate influence	5%
	A little influence	7%
	No influence	8%
	Refused	10%

- 13) How much, if at all, did each of the following factors influence your decision to remain at home during Superstorm Sandy? For each factor, please use the following scale, ranging from “very strong influence” to “no influence. (Base = 781)

a) I did not expect a very strong storm	Very strong influence	9%
	Strong influence	14%
	Moderate influence	31%
	A little influence	13%
	No influence	23%
	Refused	10%
b) My home is very well built	Very strong influence	15%
	Strong influence	25%
	Moderate influence	25%
	A little influence	12%
	No influence	14%
	Refused	9%
c) My home is in a safe location	Very strong influence	19%
	Strong influence	28%
	Moderate influence	25%
	A little influence	10%
	No influence	10%
	Refused	8%
d) I did not receive a notice to evacuate	Very strong influence	29%
	Strong influence	12%
	Moderate influence	10%
	A little influence	7%
	No influence	31%
	Refused	11%
e) In my experience, it is better to stay home	Very strong influence	15%
	Strong influence	19%
	Moderate influence	26%
	A little influence	10%
	No influence	21%
	Refused	9%

- 14) During severe weather events, the authorities sometimes advise or order residents of an area to evacuate their homes. During Superstorm Sandy, were you advised or ordered to leave your home for someplace safer; that is, were you asked or told to evacuate? Please choose one. (Base = 996)

Yes	34%
No	59%
Not sure	6%
Refused	2%

15) How were you notified that you should evacuate? Please check all that apply. (Base = 311)

Someone making door-to-door visits (includes neighbors and apartment managers)	40%
Signs posted in my neighborhood	5%
A phone call	47%
Television broadcast	37%
Radio broadcast	19%
Internet website or smartphone app	16%
Other, verbatim (Primarily "Sirens", "PA system", "Bull horn", etc.)	11%
Not sure	2%

16) Who asked or ordered you to evacuate during Superstorm Sandy? Please check all that apply. (Base = 311)

Police department	39%
Fire department	39%
A local government official	39%
Governor Malloy	12%
Weather broadcaster	23%
Neighbor(s), friend(s), or family	17%
Not sure	9%
Other	5%

17) For you, how difficult was the decision to stay or go during Superstorm Sandy? Please choose one. (Base = 996)

Not difficult at all	55%
A little difficult	19%
Moderately difficult	15%
Very difficult	7%
Extremely difficult	3%
Refused	2%

18) Thinking back about your decision to stay or go, would you make the same choice again? Please choose one. (Base = 996)

Definitely would	51%
Probably would	29%
About 50/50	12%
Probably would not	4%
Definitely would not	3%
Refused	2%

- 19) Storm preparations include things like filling your car with gas, protecting windows, getting extra food and water, checking flashlight batteries, etc. How prepared were you before Superstorm Sandy hit your local area? Please choose one. (Base = 996)

Extremely prepared	14%
Very prepared	38%
Moderately prepared	34%
A Little prepared	10%
Not at all prepared	3%
Refused	1%

Questions 20-23 below ask how you might be affected by hurricanes. Hurricanes are put into categories ranging from 1 to 5, based on the strength of their winds. Category 1 is the weakest and Category 5 is the strongest. A Category 2 hurricane may hit the Connecticut coast in the next 50 years. The next set of questions focuses on Category 2 hurricanes.

- 20) If a Category 2 hurricane (100 MPH winds) were going to hit your local area, how likely would you be to evacuate if... ?

a) ...you received an official notice advising everyone in your local area to evacuate?

Definitely would not	5%
Probably would not	14%
About 50/50	19%
Probably would	24%
Definitely would	36%
Refused	2%

b) ...you did NOT receive an official notice advising everyone in your local area to evacuate?

Definitely would not	19%
Probably would not	34%
About 50/50	22%
Probably would	10%
Definitely would	8%
Refused	8%

- 21) If a Category 2 hurricane (100 MPH winds) were going to hit your local area, how likely do you think it is that each of the following would happen?

a) I or someone in my household would be in danger from storm surge (water from the ocean or Long Island Sound)

Definitely would not	24%
Probably would not	34%
About 50/50	22%
Probably would	12%
Definitely would	6%
Refused	2%

b) I or someone in my household would be injured or killed

Definitely would not	22%
Probably would not	53%
About 50/50	15%
Probably would	4%
Definitely would	4%
Refused	3%

c) My home or property would be damaged by flooding

Definitely would not	15%
Probably would not	35%
About 50/50	23%
Probably would	19%
Definitely would	6%
Refused	3%

d) My home or property would be damaged by high winds

Definitely would not	3%
Probably would not	17%
About 50/50	42%
Probably would	27%
Definitely would	8%
Refused	3%

e) My home would be isolated due to flooding or debris from high winds

Definitely would not	12%
Probably would not	33%
About 50/50	30%
Probably would	15%
Definitely would	8%
Refused	2%

22) Please answer each of the following questions.

a) Do you know how to evacuate to a safer location?

Yes, definitely	46%
Yes, probably	28%
About 50/50	11%
No, probably not	9%
No, definitely not	5%
Refused	1%

b) Would poor health or disability of you or a member of your household make evacuation difficult?

Yes, definitely	8%
Yes, probably	10%
About 50/50	8%
No, probably not	26%
No, definitely not	48%
Refused	1%

c) Is your home safe from flooding from the ocean or Long Island Sound?

Yes, definitely	26%
Yes, probably	31%
About 50/50	19%
No, probably not	12%
No, definitely not	11%
Refused	2%

d) Is your home safe from high winds and blowing objects?

Yes, definitely	4%
Yes, probably	14%
About 50/50	35%
No, probably not	31%
No, definitely not	15%
Refused	2%

e) Would you have transportation to evacuate to a safer location?

Yes, definitely	60%
Yes, probably	24%
About 50/50	7%
No, probably not	3%
No, definitely not	5%
Refused	1%

f) Would you have enough money to evacuate to a safer location?

Yes, definitely	45%
Yes, probably	23%
About 50/50	14%
No, probably not	11%
No, definitely not	6%
Refused	2%

g) If asked to evacuate, would you instead stay to protect your home or business?

Yes, definitely	6%
Yes, probably	12%
About 50/50	22%
No, probably not	30%
No, definitely not	29%
Refused	1%

h) Would you evacuate to avoid being stuck in your local area due to blocked roads after the storm?

Yes, definitely	16%
Yes, probably	21%
About 50/50	23%
No, probably not	29%
No, definitely not	9%
Refused	2%

i) Would you not evacuate so you could stay to watch the storm?

Yes, definitely	2%
Yes, probably	7%
About 50/50	12%
No, probably not	30%
No, definitely not	47%
Refused	2%

j) Would your pet(s) or animals make it difficult to evacuate?

Yes, definitely	8%
Yes, probably	9%
About 50/50	9%
No, probably not	15%
No, definitely not	51%
Refused	8%

23) On a scale of 0%-100%, with 0% being it definitely will NOT happen and 100% being it definitely WILL happen, how likely do you think it is that each of the following types of hurricane will hit somewhere along the Connecticut coast in the next 50 years? Enter your response in the box next to each. If you're not sure, just give your best estimate.

- a) A Category 1 hurricane (80 MPH winds)? Mean: 81%, Std Dev: 27.9
- b) A Category 2 hurricane (100 MPH winds)? Mean: 70%, Std Dev: 30.6
- c) A Category 3 hurricane (120 MPH winds)? Mean: 48%, Std Dev: 32.3
- d) A Category 4 hurricane (140 MPH winds)? Mean: 34%, Std Dev: 32.9



24) How likely is it that you would evacuate if the following were forecast to hit your local area...

a) Category 1 (80 MPH winds)?

Definitely would not	32%
Probably would not	35%
About 50/50	17%
Probably would	9%
Definitely would	5%
Refused	3%

b) Category 2 (100 MPH winds)?

Definitely would not	15%
Probably would not	30%
About 50/50	22%
Probably would	17%
Definitely would	14%
Refused	2%

c) A Category 3 hurricane (120 MPH winds)?

Definitely would not	4%
Probably would not	13%
About 50/50	23%
Probably would	23%
Definitely would	34%
Refused	4%

d) A Category 4 hurricane (140 MPH winds)?

Definitely would not	2%
Probably would not	6%
About 50/50	12%
Probably would	19%
Definitely would	57%
Refused	3%

25) During a Category 2 hurricane, do you think it would be safer to evacuate or to stay in your home or building? If you're not sure, please give your best estimate.

Much safer to evacuate	14%
Somewhat safer to evacuate	17%
About 50/50	35%
Somewhat safer to stay	25%
Much safer to stay	9%
Refused	1%

26) Do you have a disaster emergency plan that other members of your household know about, or not?

Yes	32%
No	57%
Not sure	10%
Refused	2%

27) In case of an emergency, do you have the following supplies in your home, or not? Check all that you have.

- a) A 3-day supply of non-perishable, ready-to-eat food for everyone in your household (73%)
- b) At least 3 gallons of water for each member of your household (50%)
- c) A flashlight and extra batteries (88%)
- d) A hand crank portable radio or battery-powered radio with extra batteries (50%)
- e) A first aid kit (72%)
- f) A cell phone (95%)
- g) A backup power generator (19%)
- h) None of the above (2%)

28) Have you updated or replaced your emergency supplies in the past 6 months, or not?

Yes	28%
No	64%
Not sure	7%
Refused	1%

29) How confident do you feel about your ability to keep yourself and the people in your household safe during a hurricane or tropical storm? Please choose one.

Extremely confident	12%
Very confident	37%
Moderately confident	35%
A Little confident	10%
Not at all confident	5%
Refused	1%

30) When a hurricane or tropical storm approaches your local area, how frequently, if ever, do you check the forecasts on TV, radio, and/or on the Internet?

Never	0%
Less than once a day	0%
About once a day	5%
Several times a day	24%
Every couple of hours	18%
On throughout the day	51%
Not sure	1%
Refused	1%

31) Is your home located in a hurricane evacuation zone, or not?

Yes	28%
No	20%
Not sure	50%
Refused	1%

32) How did you learn whether or not your home is in a hurricane evacuation zone? Check all that apply. From... (Base = 558)

Printed brochure	10%
Internet website	16%
Physical marker(s) (signs) in your neighborhood	31%
Community meeting(s)	9%
Telephone call(s) from local official	31%
Conversation(s) with friends or neighbors	28%
Other	8%
Not sure	14%

33) On most days, what is your PRIMARY source of information about the weather? Please choose one.

Newspapers	6%
Smart phone, tablet or computer app	28%
Television	61%
Internet	28%
Friends or family	11%
Radio	19%
Other	1%

34) Have you ever searched for flood information for your city or town, or not?

Yes	29%
No	64%
Not sure	5%
Refused	2%

35) How easy or difficult was it to find flood information about your city or town? (Base = 330)

Very easy	33%
Somewhat easy	29%
Neither easy nor difficult	14%
Somewhat difficult	18%
Very difficult	4%
I did not find the information	2%

36) How important are each of the following information sources to you during a weather-related emergency?

a) Television

Extremely important	60%
Very important	21%
Moderately important	8%
Not very important	2%
Not at all important	5%
Refused	4%

b) Radio

Extremely important	44%
Very important	20%
Moderately important	14%
Not very important	7%
Not at all important	5%
Refused	10%

c) Friends or Family

Extremely important	34%
Very important	17%
Moderately important	21%
Not very important	9%
Not at all important	6%
Refused	14%

d) Social media

Extremely important	13%
Very important	9%
Moderately important	13%
Not very important	15%
Not at all important	30%
Refused	20%

d) World wide web

Extremely important	36%
Very important	21%
Moderately important	10%
Not very important	5%
Not at all important	12%
Refused	16%

e) Smartphone, table, or computer apps

Extremely important	37%
Very important	15%
Moderately important	9%
Not very important	5%
Not at all important	16%
Refused	20%

37) When a hurricane or tropical storm approaches your local area, different people and organizations might ask you to evacuate your home or building. How likely would you be to evacuate if each of the following asked or told you to?

a) Governor's Office

Definitely would not	6%
Probably would not	12%
About 50/50	20%
Probably would	23%
Definitely would	32%
Not sure	3%
Refused	4%

b) Local Government Official(s)?

Definitely would not	5%
Probably would not	10%
About 50/50	19%
Probably would	26%
Definitely would	34%
Not sure	3%
Refused	4%

c) Local Police/Fire Department?

Definitely would not	4%
Probably would not	7%
About 50/50	17%
Probably would	26%
Definitely would	41%
Not sure	1%
Refused	3%

d) Local TV and Radio Stations?

Definitely would not	6%
Probably would not	18%
About 50/50	32%
Probably would	20%
Definitely would	17%
Not sure	3%
Refused	4%

e) Friends and Family?

Definitely would not	5%
Probably would not	18%
About 50/50	31%
Probably would	20%
Definitely would	18%
Not sure	4%
Refused	5%

38) In general, how accurate do you think weather forecasts are about the following?

a) The daily weather forecast?

Extremely accurate	9%
Mostly accurate	51%
Moderately accurate	32%
Not very accurate	6%
Not at all accurate	1%
Not sure	1%
Refused	2%

b) The extended 7-day forecast?

Extremely accurate	3%
Mostly accurate	18%
Moderately accurate	52%
Not very accurate	22%
Not at all accurate	3%
Not sure	1%
Refused	3%

c) A hurricane forecast when the storm is 4 to 6 days away?

Extremely accurate	4%
Mostly accurate	18%
Moderately accurate	51%
Not very accurate	19%
Not at all accurate	3%
Not sure	2%
Refused	3%

d) A hurricane forecast when the storm is 1 to 3 days away?

Extremely accurate	13%
Mostly accurate	47%
Moderately accurate	29%
Not very accurate	4%
Not at all accurate	1%
Not sure	2%
Refused	4%

39) Have you ever seen an evacuation map of your local area, or not?

Yes	15%
No	74%
Not sure	10%
Refused	2%

40) Do you know where you saw an evacuation map of your local area? Please check all that apply.  
(Base = 169)

A mailer from your local utility company	20%
Community meeting	11%
A printed brochure	29%
A local government office	34%
Friends or family	14%
Internet website	40%
Other	6%
Not sure	7%

- 41) To the best of your knowledge, which one of the following is the most likely cause of injury or death during a hurricane?  
 Note: Many respondents chose more than one response for this question. As a result, the total across categories sums to more than 100%.

Blown or falling objects from high winds	70%
Rising water levels and high waves (storm surge)	19%
Flooding from heavy rains	9%
Accidents during evacuation	10%
Other	2%
Not sure	7%

- 42) How long have you lived on or near (within about 5 miles of) the Connecticut coast?

0 – 1 years	6%
2 – 9 years	21%
10 – 19 years	21%
20 – 29 years	13%
30 – 39 years	10%
40+ years	26%
Refused	2%

- 43) How long have you lived **in your present home** on or near the Connecticut coast?

0 – 1 years	12%
2 – 4 years	20%
5 – 9 years	15%
10 – 19 years	25%
20 – 29 years	11%
30+ years	16%
Refused	1%

- 44) How many people live in your household, including yourself? Please enter your response to the right. If you live alone, enter “1” and skip to question 47.

1	33%
2	30%
3	15%
4	11%
5	6%
6 or more	4%
Refused	1%

- 45) How many of the people in your household are age 17 or younger (Base = 786)?

0	57%
1	19%
2	17%
3 or more	7%



46) How many of the people in your household, including yourself, are 80 years or older? (Base = 786)?

0	87%
1	8%
2	4%
3 or more	1%

47) Which best describes the building where you live? Please choose one.

A one-family house detached from any other house	48%
A one-family house attached to one or more houses	8%
A condo or apartment building	40%
A mobile home	0%
A two or three family house	3%
Refused	1%

48) Is your residence raised or on stilts to avoid flooding, or not?

Yes	9%
No	83%
Refused	1%

49) Is your residence...

Owned by you or someone in your household?	55%
Rented	44%
Occupied without payment of rent	1%

50) In what year were you born? (Age computed)

18 – 29	6%
30 – 44	18%
45 – 59	33%
60 or Over	44%

51) Are you...?

Male	41%
Female	57%
Refused	2%

52) Do you have any children, 18 years old or older, living outside your household?

Yes	51%
No	47%
Refused	2%

53) Do you have any pets or animals?

Yes	45%
No	53%
Refused	2%

54) Do you own a motor or sail boat?

Yes	10%
No	88%
Refused	2%

55) Are you of Spanish, Hispanic, or Latino descent?

Yes	14%
No	84%
Refused	2%

56) Which race or ethnic background best describes you? Please choose one.

African-American or Black	12%
Asian	3%
White or Caucasian	72%
Two or more races	3%
Other	2%
Not sure	1%
Prefer not to answer	9%

57) Is English your primary language, or not?

Yes	88%
No	8%
Prefer not to answer	4%

58) What is the highest level of school you have completed?

No formal education	0%
Less than high school	2%
Some high school, NO DIPLOMA	2%
High school graduate – high school diploma or the equivalent (GED)	17%
Some college, no degree	18%
Associates degree	8%
College degree	26%
Masters degree	14%
Professional or Doctorate degree	9%
Prefer not to answer	3%

- 59) Last year (in 2013), what was your total HOUSEHOLD income from all sources? Information about your household income is very important. We greatly appreciate your response and will keep your answer confidential.

Less than \$15,000	13%
\$15,000 - \$39,000	22%
\$40,000 - \$69,000	20%
\$70,000 - \$99,000	14%
\$100,000 - \$199,000	15%
Over \$200,000	10%
Refused	6%

- 60) How many members of your extended family, not including those who live with you in your house, live nearby (in your town or in a nearby town)?

0	28%
1	13%
2	14%
3	9%
4	7%
5	4%
6 - 10	11%
11 - 20	8%
Over 20	3%
Refused	4%

- 61) Regardless of how you might have voted in recent elections, in politics TODAY, do you consider yourself a Republican, Democrat, or Independent?

Republican	14%
Democrat	39%
Independent	25%
Other	1%
None	12%
Not Sure	6%
Refused	4%

- 62) In general, would you describe your political views as...

Very Liberal	7%
Liberal	20%
Moderate	46%
Conservative	17%
Very Conservative	3%
Refused	8%

- 63) Have you ever received messages from the Connecticut Emergency Alerting and Notification Systems, either through email or alerts to your cell phone?

Yes	55%
No	31%
Not sure	12%
Refused	2%