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84°

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***A FINAL REPORT OF THE HAWAII RCPG FY09  
PUBLIC AWARENESS PROJECT***



DECEMBER 2012

## Executive Summary

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The Hawaii Regional Catastrophic Grant Program (RCPG) was established in 2007 by all counties and the State of Hawaii. The RCPG receives funding from the Federal Emergency Management Agency (FEMA) under the auspices of the Regional Catastrophic Planning Grant Program (RCPGP). One objective of the RCPG is to understand, influence, and maximize public awareness and preparedness for disaster. The Hawaii RCPG FY09 Public Awareness Project was developed to help state and county governments improve public disaster awareness and preparedness, by answering the following questions:

- How aware is the public of potential disaster?
- How prepared is the public to respond to disaster impacts?
- What expectations does the public have for government response?
- How can governments facilitate better awareness and preparedness?

In September 2011, the City and County of Honolulu's Department of Emergency Management (DEM), on behalf of the RCPG, entered into a 16-month contract with a team of consulting firms led by Tetra Tech, Inc. (Tetra Tech) to conduct the RCPG FY09 Public Awareness Project (Project). The Tetra Tech project team worked with a Project Working Group to establish the following objectives for the Project:

- Assess the level of public disaster awareness and preparedness
- Explore alternative strategies to increase public disaster awareness and preparedness
- Design and implement a pilot campaign designed to evaluate alternative strategies
- Assess the effectiveness of alternative strategies
- Recommend and guide government actions that may have the most positive effect on public disaster awareness and preparedness

Because of time and budget constraints, the project team recommended designing a pilot campaign to increase *awareness* and *commitment* to increasing disaster preparedness, rather than focusing on influencing disaster preparedness behavior. The latter goal of changing behaviors requires more time than the project schedule allowed.

In December 2011, a survey of households within the following four counties, Oahu (400 households), Kauai (200 households), Maui (200 households), and Hawaii (200 households), was conducted to assist in designing the pilot campaign. Key findings from the pre-campaign survey included:

- Nearly 90% of respondents indicated they had experienced a major disaster.
- Most respondents believed that government is primarily responsible for disaster preparedness.
- Eight out of 10 respondents recalled seeing or hearing disaster preparedness information within the previous 3 months.
- Hurricanes, tsunamis, and earthquakes were the disasters eliciting the most concern.
- Respondents were twice as much concerned about property loss than any other disaster loss.
- Approximately half of the respondents not prepared for disaster indicated that they had not thought about preparing.

Based on the pre-campaign survey, a three-part pilot disaster preparedness campaign was designed:

1. A project website was developed to establish a single source of all disaster awareness and preparedness information. The site was developed to complement the national [www.Ready.gov](http://www.Ready.gov) preparedness campaign, but also was designed with a "look and feel" familiar and appealing to Hawaii residents.

2. Advertisements and public service announcements (PSA) including one 30-second television advertisement and four different radio PSAs were designed for broadcast, supported by in-kind project match contributions and donated airtime.
3. Social media websites such as Facebook, Twitter, and YouTube were used to share information about the pilot campaign and direct those seeking information toward the main project website.

The pilot campaign, conducted only on the Island of Oahu, began on May 2, 2012, and continued through May 31, 2012.

A post-pilot campaign assessment occurred in early July 2012. A total of 400 households on the Island of Oahu were interviewed by telephone. In addition, detailed statistics on use of the project website were compiled. Key findings from post-pilot assessment included:

- In just one month, 15% of respondents recalled having seen or heard specific information about [www.GetReadyHawaii.org](http://www.GetReadyHawaii.org).
- Residents continue to feel the most confidence in the State's ability to handle natural disasters and the least confidence in the State's ability to handle public health disasters.
- Respondents were significantly more likely to respond that their household was most responsible for preparing for disaster than in the pre-campaign survey.
- Most respondents (81%) felt that they were at least somewhat prepared and 70% indicated they had stored enough food and water to last 7 days.
- Only 6% of respondents had prepared a disaster plan; however, 70% of respondents indicated they are likely to complete one.
- Only 9% of respondents had prepared a disaster kit; however, 70% of respondents indicated they are likely to complete one.
- From May 2 to December 17, 2012, 9,510 visits to the website were recorded. The data show that 1.1% of Hawaii households visited the website for an average of 3.5 minutes.

## Project Outcomes

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Both the pre- and post-campaign surveys revealed that public awareness of disaster risk is already high (80%). The project challenged and somewhat changed the misconception that individual and family preparedness is the responsibility of government and was successful in moving that needle toward individual responsibility for preparedness.

Although fewer than 30 days of a campaign is not enough time to change public preparedness behavior, the project induced nearly 3,000 downloads of family emergency plan templates and disaster kit checklists. Several earned (voluntary, cost-free) media opportunities also showed thousands of television viewers what it means to be prepared.

The project established awareness and preparedness metrics and created benchmarks in 2011 and additional measurements in 2012, so that changes in disaster awareness can be identified and evaluated objectively from this point in time forward.

A brand of disaster preparedness, unique to Hawaii, was established with a website available to all public health and safety organizations. Under the "Get Ready Hawaii" brand, all government agencies and non-governmental organizations can collaborate to coordinate and share information.

Coordinating use of the project website with social media tools and targeting community organizations expanded awareness within several “hard-to-reach” demographic groups such as Native Hawaiians, elderly, and people with disabilities.

## The Path Forward

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Because research consistently shows that 80% of respondents are aware of the need for disaster preparedness, future campaigns are unlikely to increase awareness much more. Future efforts, then, should focus on moving residents from awareness to preparedness. Increasing preparedness will necessitate changing public behavior and especially increasing family emergency plan and disaster kit development above current levels, currently 6% and 9%, respectively.

Stressing relevant, simple, functional messages is a key to success. Future campaigns should continue to focus messaging on establishing the perception that individuals and households are responsible for their preparedness, rather than relying on government. Future campaigns need to carefully focus on desired outcome, message utility, and intended audience. Moreover, radio and television broadcasts may reach the most people, and earned media spots may be the most cost-efficient form of dissemination, but these methods alone will not reach a number of sizable and vulnerable communities.

Facebook, Twitter, and YouTube were perhaps the most underutilized campaign assets developed during the project because of policy constraints imposed by local government. Using social media in campaigns for the foreseeable future will be necessary to better reach the under 35 year-old demographic and an increasing number of people beginning to rely on these tools to stay informed and to communicate.

The success of this project resulted from engagement and support of many partners, such as broadcasters and publishers (their in-kind match resulted in greater reach), meteorologists and weather-related journalists (who rallied support for the project and directed listeners to the project website), and retailers (who distributed tens of thousands of handbills, free of cost). To make future disaster preparedness campaigns cost-efficient and effective, involvement of these partners must continue, along with participation by non-governmental and other community advocacy groups.

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## Introduction

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From September 2011 through December 2012, civil defense agencies and others with public health and emergency management responsibility throughout the State of Hawaii supported an innovative, research-driven project to better understand and influence public disaster awareness and preparedness. This report describes the objectives, approach, and results of that project.

The Hawaii Regional Catastrophic Planning Grant (RCPG) program was established in 2007 by the City and County of Honolulu, on behalf of all counties and the State of Hawaii. The program receives funding from the Federal Emergency Management Agency (FEMA) under auspices of the Regional Catastrophic Planning Grant Program (RCPGP). Since 2007, FEMA has administered the RCPGP to promote collaborative, all-hazard, regional planning for catastrophic disasters. More information about the RCPGP is accessible in the *Catalog of Federal Domestic Assistance* or by opening the following page in a web browser:

<https://www.cfda.gov/?s=program&mode=form&tab=step1&id=c6ac734fe1b659457ff8ec486ef08199>

Since 2007, the aim of the RCPG has been to define large-scale requirements, interdependencies, and systems necessary to respond to and recover from catastrophic disasters that may impact Hawaii. A particular emphasis of the program is planning that all jurisdictions need but no one jurisdiction could accomplish alone.

In 2008 and 2009, the RCPG, in collaboration with FEMA, published the Hawaii All-Hazard Catastrophic Disaster Concept of Operations (CONOPS) and the Hawaii Hurricane Operations Plan (OPLAN). These two plans introduced a new planning methodology, the Integrated Planning System (IPS). Adopted from the United States military's Joint Operational Planning and Execution System (JOPEs), IPS defines a hierarchy and objective-based methodology for planning. The CONOPS and OPLAN plans for Hawaii created the first two IPS plans in the nation. The CONOPS laid out state-federal concepts of operation necessary to achieve a coordinated response. The OPLAN defined strategy and tactics relative to hurricanes, one of the State's most prevalent hazards. Together, these two plans laid the foundation for county planning. Since development of these two plans, the main thrust of RCPG activity has been to develop plans that address local requirements and that complement preceding state-federal planning.

One local-level requirement of the RCPG has been to understand, influence, and ultimately maximize public awareness and preparedness for disaster. Most people have come to believe that disasters are occurring more frequently and with more intensity. Governments are becoming increasingly aware of their limited capability, the needs of the public are becoming more complex, and expectations for adequate response and recovery seem to be increasing as well. Increasing public awareness of potential for disaster and facilitation of better preparations by the public are now vital elements of government preparedness strategies. This report and the project it describes are the result of government interest in improving public disaster awareness and preparedness.

For this project, the RCPG sought to answer the following questions:

- How aware is the public of potential disaster?
- How prepared is the public to respond to disaster impacts?
- What expectations does the public have for government response?
- How can governments facilitate better awareness and preparedness?

In September 2011, to solicit help in answering these and other related questions, the City and County of Honolulu's Department of Emergency Management (DEM), on behalf of the RCPG, entered into a 16-month contract with a team of consulting firms experienced in government and public disaster preparedness. The methodology this contract team employed is described below.

## Project Methodology

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Immediately after awarding a contract in September 2011 to Tetra Tech EM Inc. (Tetra Tech), DEM assigned a project manager and established a working group comprised of RCPG representatives to guide contractor work. This combined project team then set out to accomplish the following objectives:

- Assess the level of public disaster awareness and preparedness
- Explore strategies to increase public disaster awareness and preparedness
- Design and implement a pilot campaign designed to evaluate alternatives
- Assess the effectiveness of alternatives
- Recommend and guide government actions that may have the most positive effect on public disaster awareness and preparedness

During one early meeting of the working group, one member eloquently summed-up the RCPG's expectations for the project.

***“We want to know how to move the needle [of disaster awareness and preparedness] and to do so in a way that provides us the most return on future investments.”***

To address each objective in the spirit of this straight-forward direction from the RCPG, the prime contractor mobilized a diverse team of:

- Disaster planners
- Social scientists
- Public information officers
- Graphic artists
- Photographers
- Video producers
- Web designers
- Public opinion researchers

Each member of this team, along with members of the working group, played an important role in activities to accomplish project objectives. The activities associated with each objective are described below. However, it is important to first address two significant project constraints that affected all project activity and each project outcome: schedule and budget.

The project began in September 2011, and given the schedule under which the project was funded (FEMA RCGPG FY 09 grant funds), completion of the project was necessary by July 2012—a period of only 10 months. Because of the time needed to accomplish project research, conduct pre- and post-assessments, and develop quality campaign assets (e.g., radio and television spots, posters, a website), the team had to move very quickly. Consequently, research, design, development, and analysis activities were streamlined and accelerated. For example, fewer than 30 days were available to conduct the pilot. Moreover, not until the RCPG was awarded a 6-month grant extension in July 2011 could the project team and working group engage in more reflection regarding the project.

Another project restraint was allocation of only \$55,000 to place campaign assets with broadcasters, publishers, and other media outlets. Because of the heavy impact on media buys of the 2012 U.S. presidential election season during the project period, the project team also had to work early and quickly to secure as much placement as possible in the face of limited opportunity.

As a consequence of time and budget constraints, the project team had to focus on the objective of increasing awareness of need for disaster preparedness and deliberately downplay the task of increasing disaster preparedness in the scope of work. Increasing preparedness involves changing public behavior, an outcome requiring much more time than the project could allow. However, realizing the importance of preparedness on RCPG strategy and work, the project team endeavored to measure the current level of preparedness and influence the commitment to increase preparedness as much as possible, given the time and budget constraints of the project.

### Assessing Awareness and Preparedness

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The project team's first objective was to assess current levels of public disaster awareness and preparedness. Doing so not only created an awareness and preparedness baseline, but also a means to measure incremental progress. Before developing the assessment tool, the project team conducted research to define disaster awareness and preparedness in terms of indicators that could be measured and tracked over time. The team examined information and materials related to:

- The ongoing FEMA Ready.gov campaign
- Previous public health preparedness campaigns by the Hawaii Department of Health
- Public preparedness focus-group research (addressing preparedness messaging) commissioned by the Los Angeles Emergency Management Department
- Public Health preparedness polling by the Los Angeles Department of Public Health
- Social science behavior change programs designed to increase environmental behaviors, such as recycling and reduction of idling in automobiles
- Various other projects generally available via the Internet

From this research, the following indicators of awareness and preparedness were identified:

- Hazards (e.g., hurricanes, floods, tsunamis) about which Hawaii residents are most concerned
- Best actions and activities (e.g., developing an emergency plan, preparing a disaster kit) for individual and household disaster preparedness
- Perceptions of Hawaii residents regarding their current level of disaster awareness and preparedness
- Household member most responsible for family preparedness
- Duration of time households should expect to be able to survive on stored amounts of food, water, and other supplies
- Source of information for individuals to get information about disasters before, during, and after these occur
- Willingness of people to increase their awareness and preparedness
- Role Hawaii residents believe county and state governments should play in public preparedness

Using these indicators of awareness and preparedness, a telephone survey instrument was prepared and presented to the working group for their review and approval on November 15, 2011. The approved survey instrument was administered to 1,000 people via computer-assisted telephone

interviews in December 2011. The sample design specified the following number of interviews by island: Oahu=400, Kauai=200, Maui=200, and Hawaii=200. A combination of land lines and cell phones were involved to maximize representativeness of the sample. A nominal financial incentive was provided to cell phone respondents in order to offset the cost of airtime. The survey instrument is provided in Annex A – Pre-Pilot Assessment Survey.

Also in December, other members of the project team met with non-governmental organizations to assess the general level of disaster preparedness of traditionally hard-to-reach populations or communities, including native pacific islanders, those living in poverty, the elderly, and people with Access and Functional Needs. The results of that research are included in this report.

## Exploring Alternatives to Increase Awareness and Preparedness

To address the second project objective, the project team met with the working group on January 20, 2012, to review the Pre-Pilot Assessment Survey results. Key findings, found in Annex B – Pre-Pilot Assessment Report, and the discussion that followed included:

- Nearly 90% of respondents indicated having experienced a major disaster.
- Most respondents believed that government is most responsible for disaster preparedness.
- Eight out of 10 respondents recalled seeing or hearing disaster preparedness information within the previous 3 months.
- Hurricanes, tsunamis, and earthquakes elicited the most concern.
- Respondents were twice as concerned about property loss as any other disaster loss.
- Adult respondents under the age of 35 were less likely to have heard or seen disaster preparedness information via television or radio.
- Approximately half of the respondents not prepared for disaster indicated that they had not thought about preparation; the other half indicated they would figure it out at the time of disaster.

Using these findings and other research, the project team shared observations in order to develop consensus for a pilot campaign. These observations included:

- Disaster preparedness builds upon disaster awareness.
- Increasing awareness involves creating an interesting and efficient relay of useful information. Increasing preparedness involves changing behavior. Awareness and preparedness are increased in different ways and over different spans of time.
- Maintaining and increasing both awareness and preparedness requires regular, somewhat frequent campaigning.
- Fear-based messaging is not effective in increasing preparedness.
- Use of new information technology and social media are important to reach the 18-35 demographic.
- Messaging via a variety of media (broadcast, print, online, etc.) is needed to reach the broadest audience.
- Trusted partners (community advocacy or support organizations) are needed to effectively engage hard-to-reach populations.

After discussing these and other observations, the working group agreed to proceed to the next project objective—design and implementation of a pilot disaster awareness campaign.

## Designing and Implementing a Pilot Campaign

Before meeting again with the working group on March 12, 2012, the project team mobilized a number of award-winning campaign directors, cinematographers, photographers, graphic artists, and web designers. Working together with a group of experienced emergency managers and this group of creative campaign designers, the team developed concepts for a pilot public disaster awareness and preparedness campaign. The purpose of the pilot would be to test messages and media to determine which would provide the best and most cost-effective increases in awareness and, to a lesser extent (for reasons already discussed), preparedness.

During this design-phase working group meeting, the project team considered campaign messaging, three different concepts for public service announcements (PSA), website wireframes, and a number of other smaller or incidental campaign assets. After some discussion, the working group selected the concept it liked best – a typical family picnic interrupted by a disaster – and directed the project team to begin full development of campaign assets. The working group also established May 2012 as the month in which to conduct the pilot campaign.

The following subsections describe results of the creative process to develop campaign assets.

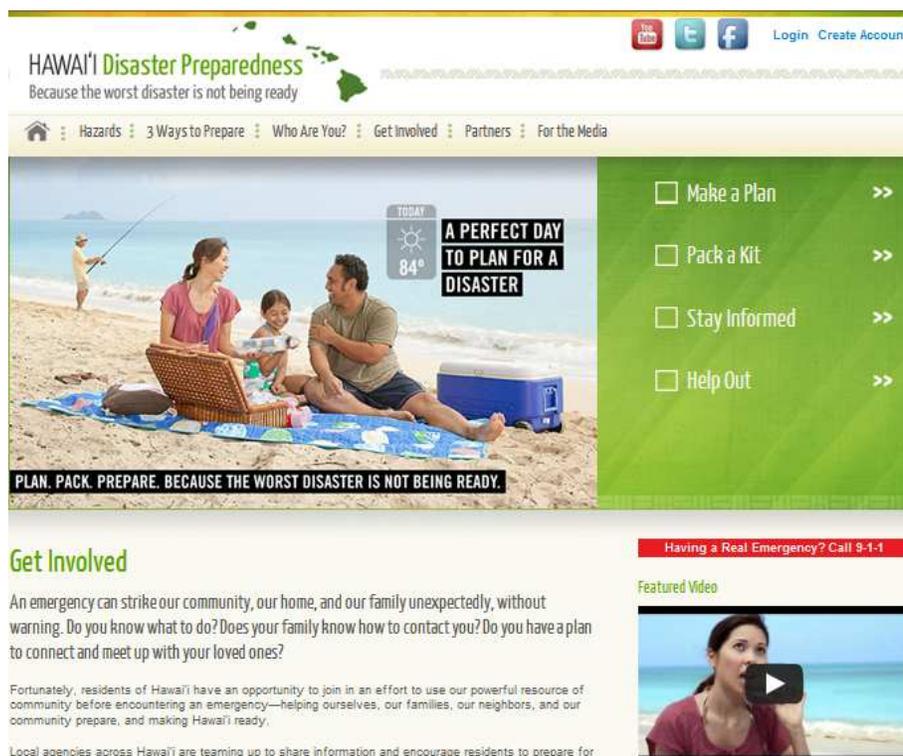
### Website

When the use of a website was agreed upon as a part of the campaign strategy, the project team registered several Internet domain names including [www.getreadyhi.org](http://www.getreadyhi.org) and [www.getreadyhawaii.org](http://www.getreadyhawaii.org).

The project website was to be a single source allowing accessibility to all disaster awareness and preparedness information. The site was developed to complement the national Ready.gov preparedness campaign, but also was designed with a “look and feel” familiar and appealing to Hawaii residents.

The site, as developed, quickly directs people to perform one of four key disaster awareness and preparedness tasks: (1) make a plan, (2) pack a kit, (3) stay informed, and (4) help out. The site also provides useful links to hazard information, detailed information for several demographics, information about and for campaign partners, and information and source files for the media.

The following graphic is a screenshot of the project website homepage at [www.getreadyhawaii.org](http://www.getreadyhawaii.org):



## Television and Radio Public Service Announcements

Working with two award-winning producers and directors, the project team developed one 30-second television and four different radio PSAs. Because of the quality of these spots, the project team was able to negotiate a significant “in-kind” project match in the form of donated airtime.

### Featured Video



### Radio Spots

May 2, 2012

:60 Radio Spot - Oahu

May 2, 2012

:30 Radio Spot - Oahu

May 2, 2012

:30 Radio Spot

May 2, 2012

:60 Radio Spot

## Print and Other Online Assets

By combining the talent of an outstanding still photographer and creative graphic design team, the project developed numerous print ads including newspaper and magazine spots, bus displays, retail point-of-purchase displays and handbills, and numerous online banners.

Much like the television and radio PSAs, the online banners led to offers of substantial in-kind match from website operators.



## Social Media

Several social media websites such as Facebook, Twitter, and YouTube were used to share information about the pilot campaign and drive traffic toward the main project website. Unfortunately, DEM policy did not allow widespread use of social media. Nevertheless, our limited use of these websites during and since the pilot campaign have been promising, particularly with the 18-35 demographic.



Before concluding a discussion of pilot design and implementation, it is important to briefly describe the extensive coordination required to launch the pilot. Contacts with, contract negotiations with, and solicitation of in-kind contributions from more than 30 broadcasters, publishers, retailers, and other organizations were necessary before pilot materials could be shared with the public. Many of these organizations required these materials in different formats that were hand-delivered to station managers and publishers.

Ensuring a successful pilot launch also involved coordinating efforts of all jurisdictions and government agencies. Many federal, state, county, and private organizations were interested in the campaign, so the project team also coordinated a statewide press conference during which the State Adjutant General, the mayors of each county, and the director of DEM all spoke to the media.

With all campaign assets in-place and necessary coordination accomplished, the pilot began on May 2, 2012, and continued through May 31, 2012. For reasons of time, budget, and manageability, the scope of pilot engagement was largely limited to the Island of Oahu. However, because some broadcasters and publishers transmit their work to several islands, some exposure to the pilot campaign occurred in all counties.

Finally, during the pilot, several “earned media” or extra media opportunities became available. Those opportunities are described later under Assessment Findings. For example, using Dateline Media Inc. reporting,

Report Generated:	2012/05/31 15:11:09.965 (CT)
<b>Total Story Count:</b>	3
<b>Total Nielsen Audience:</b>	106,425
<b>Total 30-Second Ad Equivalency:</b>	\$1,125
<b>Total Run Time:</b>	9:32
<b>Total Calculated Ad Equivalency:</b>	\$7,313
<b>Total Calculated Publicity Value:</b>	\$21,939

the project team was able to calculate the effect of several earned media opportunities, including one that featured an interview of the Honolulu Mayor Peter Carlisle at his home.

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## Assessing Pilot Effectiveness

The fourth objective of the project was to assess how successful the pilot had been—specifically, how different campaign assets had performed in a collective effort to “move the needle” for awareness of importance of disaster preparedness. With this information, and knowing the cost of implementing each campaign asset, a return on investment (ROI) also could be calculated.

To accomplish this assessment, the team engaged the same research firm used for the Pre-Pilot Assessment. However, for this second assessment, the assessment tool was revised. The pilot campaign had occurred only on the Island of Oahu, so the sample was selected only from Oahu. The questionnaire was revised to avoid repetition of some now unnecessary demographic questions that were used earlier, and to add questions assessing awareness, recall, and understanding of campaign materials. A copy of the post-pilot campaign survey instrument is provided in Annex C – Post-Pilot Assessment Survey.

The Post-Pilot Assessment occurred in early July 2012. Representatives of 400 households on the Island of Oahu were interviewed. A detailed report of survey findings is in Annex D – Post-Pilot Assessment Report.

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## Recommending Future Actions

The final project objective was to share what the project team learned during the project, and to suggest uses of this knowledge and experience for increasing public disaster awareness and preparedness in the future. This report is the sole formal output of this project activity.

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## Findings

Three types of information were used to assess findings of this project. Two surveys (pre- and post-pilot campaign) provided information about public beliefs, interest, and actions regarding disaster awareness and preparedness. Website activities at [www.GetReadyHawaii.org](http://www.GetReadyHawaii.org) and other related websites also furnished data on public input and reaction to the pilot campaign. Finally, research, interviews, and observations by project team members and the working group provided important information. This section addresses all three types of information used to assess findings.

For the Pre-Pilot Assessment, a 15-minute telephone survey was conducted from November 28 through December 17, 2011. A total of 1,027 Hawaii State residents 18 years or older were surveyed. Table 1 lists the total number of surveys by county.

**Table 1. Sample Size and Margin of Error by County**

County	Sample Size	Maximum Margin of Error at 95% confidence
Honolulu	418	+/-4.7%
Maui	201	6.8%
Kauai	203	6.8%
Hawaii	205	6.8%
<b>Total Statewide</b>	<b>1,027</b>	<b>2.9%</b>

A total of 775 calls were completed using Random Digit Dialing (RDD) of landline phone numbers. Another 252 calls were completed using a purchased sample of cell phone numbers with 808 area codes. Cellphone respondents were given either a \$5 check or a \$7.50 PayPal deposit as an incentive for completing the survey.

For the Post-Pilot Assessment, a similar 10-minute telephone survey occurred, from which some questions in the previous version had been removed and/or added. A total of 409 Honolulu County residents 18 years and older were surveyed. Table 2 indicates the sizes and margins of error of the pre- and post-pilot surveys in Honolulu. Both reflect margins of error at the 95% confidence level.

**Table 2. Pre-Campaign and Post-Campaign Survey Sample Sizes for Honolulu**

Pre-Campaign: November and December 2011			Post-Campaign: July 2012		
County	Sample Size	Maximum Margin of Error	County	Sample Size	Maximum Margin of Error
Honolulu	418	+/-4.7%	Honolulu	409	+/-4.8%

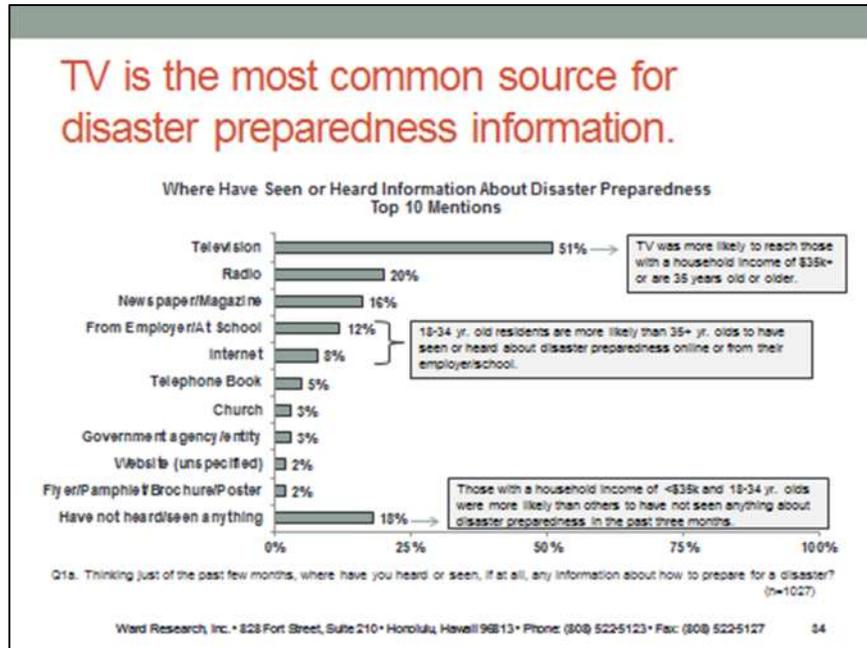
A total of 205 surveys were completed using RDD of landline phone numbers. Another 204 calls were completed using purchased cell phone numbers with 808 area codes. Interviews were conducted July 2 through 6, 2012. Data were weighted by age to accurately reflect the population based on the 2010 Census.

## Assessment Findings

During the pilot campaign, disaster preparedness information reached about 8 of 10 O’ahu residents, with television the most common media source (50%). Television was more likely to reach residents who were born and raised in Hawaii and those who lived with disability. Newspapers and magazines were more likely to reach respondents 35 years and older, and households with income greater than \$35,000. Information from work or school was more likely to reach 18-34 year olds and residents who had lived in Hawaii less than 10 years.

Most respondents indicated they were concerned about hurricanes and tsunamis. No respondent mentioned pandemic influenza as a concern without prompting. However, when asked to rate their level of concern about pandemic flu, more than half (55%) reported they were concerned, about the same as for flash floods (54%).

These reported levels of concern were statistically similar to pre-pilot campaign levels, except for pandemic flu, where concern decreased significantly in the post-campaign survey. This may be because the first survey occurred in December, which is between the two typical flu seasons in Hawaii, so influenza was less likely to be covered in the news and discussed among residents.



One project objective was to measure and influence public dependence on government for individual and family preparedness. Campaign messaging was designed to underscore personal responsibility and decrease expectations of government responsibility. Consequently, significantly fewer respondents agreed during the second assessment than had in the first assessment that government and community organizations are responsible for their preparedness (75% vs. 82%, respectively).

### County-Specific Findings

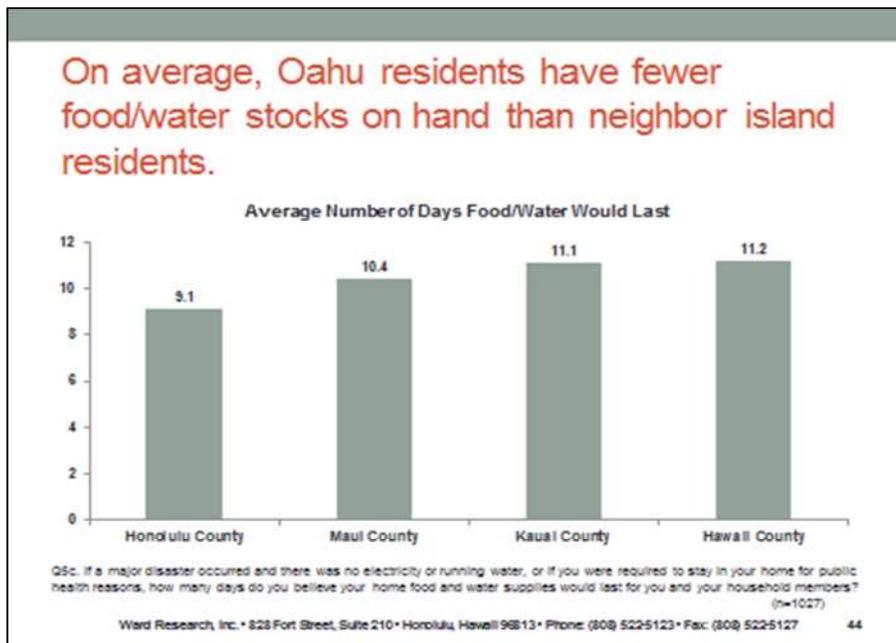
Some differences in concerns about types of disaster were evident among counties. The top three disaster concerns for each county are listed in Table 3.

**Table 3. Type of Disaster Eliciting Most Concern by County**

Honolulu County	Maui County	Kauai County	Hawaii County
Hurricane	Hurricane	Hurricane	Tsunami
Tsunami	Tsunami	Tsunami	Hurricane
Earthquake	Earthquake	Flood	Earthquake

Note: Based on responses to Question 5, Post-Pilot Assessment Survey

Honolulu residents expressed concerns similar to those indicated by residents in Maui and Hawaii Counties, while Kauai County residents were more likely to report a concern about floods. Honolulu County residents also appeared to have fewer days of supplies on hand.



### Ethnicity, Age, and Income-Specific Findings

Different groups of respondents expressed different hazard concerns. Table 4 shows examples of this.

**Table 4. Hazard Concerns by Group**

The following groups...	were most concerned about:
Long-time Hawaii residents	Hurricane
Pacific Islanders, elderly, and households with children	Tsunami
Income > \$75,000	Earthquake
Females, those living with disability	Flood
Elderly	Fire
Females, adults over 35 years old	Pandemic Flu

Residents continue to feel more confident in the State’s ability to handle natural disasters and the least confident in the State’s handling of public health disasters. Overall, reported confidence levels in the State’s ability to respond to disasters were statistically the same in both surveys. Filipino and Hawaiian ethnicities, people with annual household income under \$35,000, and families with children report more confidence in government.

When residents were asked to assess their own level of preparedness, most respondents (81%) felt that they were at least somewhat prepared. Self-reported preparedness increased with household income and decreased with disability. Male respondents rated their preparedness higher than did females. Respondents who had seen or heard information about disaster preparedness reported having more of the types of items required for surviving a disaster, such as bottled water or canned goods, than did respondents who had not seen or heard this information.

Nearly three fourths (70%) of respondents indicated they had stored enough food and water to last 7 days. Only 6% of respondents have prepared a disaster plan; however, 70% of respondents indicated they are likely to complete one. Of those respondents who did not have a disaster plan, 39% indicated that they hadn't thought about doing so prior to the survey.

Although most respondents (72%) indicated they had 9-12 disaster kit items on hand, only 9% reported having actually prepared a disaster kit. The number of disaster preparedness items in households increased with household income. Only 1% of respondents indicated that they had a plan for how to stay informed during a disaster.

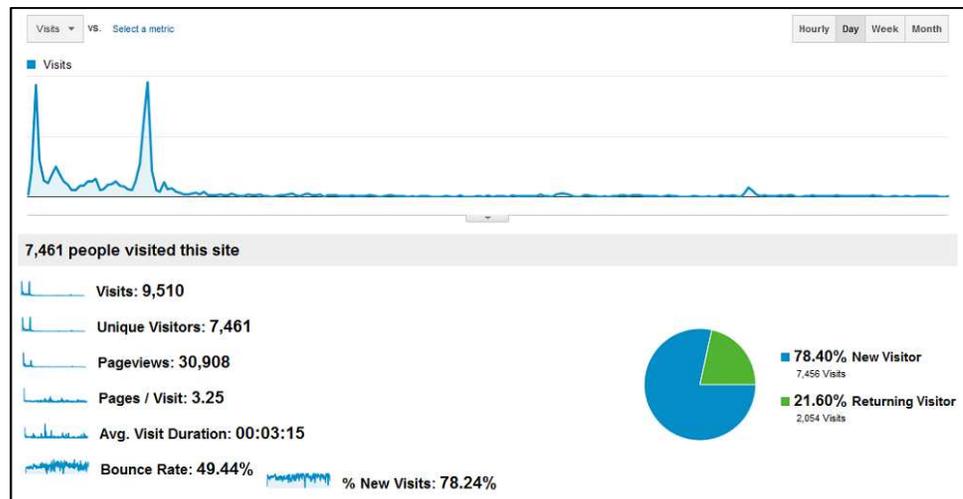
How to prepare, need to prepare, and preparation tips were the most recalled topics of disaster preparedness information.

Only 1% of respondents indicated that they had already helped others in the community prepare for disaster; but 29% said they were very likely to help others do so.

Within just 1 month, 15% of respondents had seen or heard information about GetReadyHawaii.org without a reminder. About one-third of those individuals were able to recall specific information about disaster preparedness.

## Website Findings

The website [www.GetReadyHawaii.org](http://www.GetReadyHawaii.org) serves as a single source where all disaster preparedness information related to the project is accessible. The site also serves as an important indicator of public reaction to the campaign by recording the number of visits and page views, as well as the average visit duration. Using Google Analytics, the project team had been able to review this activity in detail and draw additional conclusions from the information available.



As of December 17, 2012, 9,510 visits to the website had been recorded. Of these visits, approximately 6,500 took place in Hawaii, a little over half of them in Honolulu. Of the visits from Hawaii, 77% or just over 5,000 visits were new or unique. Factoring in the number of households reported in Hawaii during the 2010 U.S. Census, approximately 1.1% of Hawaii households visited the website for an average duration of about 3.5 minutes. About 15% of these visits occurred from mobile devices; the vast majority of those devices were either Apple iPhones or iPads.

During implementation of the pilot campaign, several “earned media” opportunities became available. This refers to voluntary, cost-free media coverage. On May 2, 2012, a statewide press conference kicked off the pilot campaign. This event was covered by a number of media outlets, including radio, television, and print. On May 28 and May 31, John Cummings, the DEM Public Information Officer and Honolulu Mayor Peter Carlisle, respectively, were interviewed. On these days, website traffic surged as much as 10 times the average daily number of visits. Other than the earned media opportunities, only the occurrence of Hurricane Sandy seems to have provoked a significant spike in project website visits, although the earned media events attracted website traffic 10 times greater than that interested in Hurricane Sandy. Earned media, apparently, is extremely valuable in driving visits to [www.GetReadyHawaii.org](http://www.GetReadyHawaii.org).

An examination of how visitors arrived at the project website also suggests that ads and social media played a significant role in website visits. Forty-seven percent of visitors entered the website URL directly into their Internet browsers. This suggests that they were reading the address from a printed

Social Network	Visits	% Visits
1. Facebook	1,286	86.37%
2. Twitter	122	8.19%
3. Facebook Apps	43	2.89%
4. WordPress	19	1.28%
5. HootSuite	8	0.54%
6. Google+	3	0.20%
7. Pinterest	3	0.20%
8. Blogger	2	0.13%
9. YouTube	2	0.13%
10. LinkedIn	1	0.07%

document or that they had recalled it from an earlier time. Thirty-one percent of visitors arrived via referral from a social media website. This suggests that the project Facebook page, Twitter account, and YouTube videos facilitated nearly 2000 website visits—1300 visits via Facebook, most of these resulting from a subordinate paid ad campaign during the last 2 weeks of May 2012 (website referrals from Twitter numbered only 120). Referrals from the paid Facebook ad campaign cost about 60 cents to generate a website visit.

Nearly 31,000 page views were recorded on the website, of which 24,000 were unique or new page views. Of the pages viewed, two types of visits are important to note. The family emergency plan template was downloaded more than 900 times, and the family disaster checklist was downloaded more than 2,000 times. This indicates good prospects for changing actions and behavior—specifically, creating disaster plans and packing disaster kits.

### Project Team and Working Group Observations

From December 2011 through February 2012, the project team interviewed a number of non-governmental organizations and government-affiliated professionals charged with supporting hard-to-reach populations that might be disproportionately affected by disaster. Those individuals the project team interviewed were:

- Dr. Kristine Qureshi, Advanced Public Health Nursing Program, University of Hawaii at Manoa
- Elisabeth “Liz” Chun, Executive Director, Good Beginnings Alliance
- Jan Ii, Administrative Assistant, Good Beginnings Alliance
- Barbara Yukie, Retired Public Health Nurse, Hawaii Department of Health

- Dr. Valerie Yontz, Associate Specialist and Practice Coordinator, University of Hawaii at Manoa.

The project team also reviewed published materials from organizations working in Hawaii with hard-to-reach populations, reviewed emergency and disaster preparedness literature to gather information about communicating with hard-to-reach groups, and reviewed Hawaii State data at <http://hawaii.gov/dbedt/info/economic/databook/2010-individual/>.

From these interviews and independent research by the project team, the following five hard-to-reach groups were identified for further consideration of disaster preparedness:

- Native Hawaiians for whom communications effectiveness can be increased through cultural sensitivity and language
- Elderly residents, especially the “frail” elderly, defined as those with disabilities and chronic medical conditions, and who need regular assistance in daily living (such as meal delivery or independent living support)
- Low-income residents, especially those living below the poverty level and the chronically homeless
- Residents for whom English is not their primary language and who are less likely to watch and respond to English language communications (Micronesians, Marshallese, and other Pacific Islander groups whose numbers have increased significantly over the past decade; Japanese, Chinese, Korean and other immigrants)
- Rural communities, statewide, especially those with limited access to media (lack of cell phone coverage, internet access, TV and radio hookup, etc.).

Importantly, members of these hard-to-reach populations may be in more than one hard-to-reach population. For example, an individual may become hard-to-reach because of a combination of economic, linguistic, and cultural factors. This adds complexity to efforts at effectively targeting specific populations for additional outreach.

### General Conclusions About Hard-To-Reach Populations

Trusted brokers of information and effective communicators are critical to engage hard-to-reach populations. These trusted sources and effective communicators include religious leaders, healthcare professionals, social service providers, cultural practitioners, respected entertainers, and others with local influence.

Individuals from many different nationalities or ethnic groups, including Native Hawaiians, are reachable by mainstream media. However, within each of the hard-to-reach populations is a segment requiring communication using alternative media. Utilization of alternative language media, as well as religious organizations and social service organizations, to transmit messages is necessary to reach groups that do not speak English fluently or that have distinctly different cultural norms. Those currently providing such community services are community health care centers and social service agencies. These agencies are particularly good at collecting and delivering information and conducting follow-up.

Visuals, particularly “universal” symbols, help bridge linguistic and cultural differences among hard-to-reach populations. A community-based approach, such as community-based social marketing utilizing respected members of a target community to deliver messages to that community, will be most important to increase awareness and increase preparedness. Event marketing at cultural and music

festivals, sports events, health fairs, and other community events can also be effective at reaching community members.

## Hard-To-Reach Engagement Partners

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A number of community and regional organizations in Hawaii work with and serve a wide range of hard-to-reach populations. Some organizations that can provide resources and support for a community-based approach to disaster preparedness include:

- Pacific Emprints – A broad-based consortium of health educators and health service providers. The organization is currently developing programs targeting youth for disaster preparedness.
- Hawaii Primary Care Association – A group of 14 community health care centers in the State, focusing on needs of vulnerable populations.
- Medical Reserve Corps, sponsored by State Department of Health – Teams of local volunteers providing medical and public health services.
- Good Beginnings Alliance – A group that has supported disaster preparedness among vulnerable populations and that focuses on policy and advocacy.
- Project Vision – A mobile vision health services facility that travels to a number of different communities each year. This organization serves people who are rural, uninsured, homeless, and low-income, and who face language or cultural barriers.
- Partners in Development – A group that has developed a wide range of programs and outreach efforts. An example is the Early Learning Experience whereby vans travel to communities to reach residents.
- Public schools, including charter schools – Already established institutions that can provide effective settings to share information within their communities.
- The National Disaster Preparedness Training Center, University of Hawaii, Manoa – A local program with national reach that offers training, workshops, and events for emergency responders in coastal communities.
- American Red Cross – A national program with significant local resources.
- Aloha United Way – A fundraising organization that raises millions of dollars for health and human services through efforts of thousands of volunteers.

## Native Hawaiians

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Over 128,000 Hawaii residents identified themselves as Native Hawaiian or Pacific Islander in the 2010 US Census. Of these individuals, approximately 80,000 identified themselves as Native Hawaiians. Table 5 lists their locations within the State.

**Table 5. Native Hawaiian Population by County**

County	Native Hawaiian Population	Percentage of Total Population
Honolulu	217,223	24.4%
Hawaii	54,361	30.8%
Kauai	15,526	23.9%
Maui	35,972	24.6%

<http://hawaii.gov/dbedt/info/economic/databook/2010-individual/>

Native Hawaiians have the lowest mean family income of all major ethnic groups in the State, with an average family income of \$55,865. Native Hawaiian families tend to have a larger than average number of people per household (3.4 people vs. 2.9 people for average household statewide), so their comparatively low income supports a greater number of individuals. In 1999, roughly one in seven Native Hawaiian households (14.1%) lived in poverty.

Effectively reaching native Hawaiians involves:

- Talking story, using culturally relevant channels, language, and symbols
- Working through respected local representatives and leaders
- Engaging through community events like music festivals, sporting events, and health fairs
- Collaborating with community health centers
- Demonstrating preparedness techniques, as a road show, in target communities
- Avoiding mainstream messages, especially those not perceived as relevant to their culture

Organizations chartered to assist Native Hawaiians include:

- Hawaii Alliance for Nonprofit Organizations (HANO)
- Papa Ola Lokahi
- Imi Hale Native Hawaiian Cancer Network
- Community Health Centers in Waianae, Waimanalo, and Waipahu
- The Tobacco Trust Fund
- Queen Liliukolani Children’s Centers
- Kamehameha Schools

Churches, cultural centers, and fire stations are additional key organizations connected to and trusted by hard-to-reach populations.

## Elderly

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The 2010 US Census reported 195,316 residents aged 65 years or older and 25,000 residents aged 85 years and older in the State. A total of 22,752 persons over the age of 65 years in the State are classified as “frail” elderly, defined as persons with physical or mental disabilities that may interfere with their ability to independently perform activities of daily living (i.e., bathing, dressing, toileting, and meal preparation). Table 6 lists locations of the frail elderly within the State.

Table 6. Frail Elderly Population by County

County	Frail Elderly Population	Percentage of Total Population
Honolulu	15,577	9.4%
Hawaii	3,956	11.4%
Kauai	984	7.7%
Maui	2,331	8.8%

<http://hawaii.gov/dbedt/info/economic/databook/2010-individual/>

An estimated 22% of Hawaii residents 65 years of age and older live below the poverty level. By 2030, an estimated 20% of the population in Hawaii will be 65 years of age or older.

Effectively reaching the elderly involves:

- Printing messaging in large font and with colors that provide good contrast
- Having take-aways that can be referred to later as reminders
- Avoiding new communication and information technologies
- Working through caregivers
- Focusing messages on specific issues
- Encouraging use of “buddies” and partnering
- Showing what preparedness looks like, rather than talking about how to be prepared
- Understanding that preparedness in the elderly community will depend greatly on income

Organizations chartered to assist the elderly in Hawaii include:

- Long-Term Care Association of Hawaii
- Center on Disability Studies at University of Hawaii-Manoa
- Hawaii Meals on Wheels
- Local access channels like Olelo
- The Area Agency on Aging of the City and County of Honolulu

### Low-income and Homeless Residents

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Statewide, 9.4% of the residents in Hawaii live below the poverty level. This percentage is highest in Hawaii County (11.9 percent). Table 7 lists their locations within the State and the relative share of the population living below the poverty level in 2010.

**Table 7. Percentage of Population Living Below Poverty Level (2010) by County**

<b>County</b>	<b>Percentage of Population Below Poverty Level</b>
Honolulu	8.9%
Hawaii	11.4%
Kauai	8.8%
Maui	7.9%

An estimated 5,800 people live without a home in Hawaii. Among these, an estimated 3,300 are sheltered and 2,500 are unsheltered.

Effectively reaching the homeless and those with low income involves:

- Changing the message about preparedness to meet the reality of those with low income. Having a 7-day supply of food is not realistic, but understanding how to be prepared for specific challenges in life is relevant and helpful.
- Walking the community to engage this population. Low-income and homeless populations work different hours and tend to have limited access to television, radio, newspapers, flyers, and other common methods of outreach.
- Understanding that Honolulu currently does not have a Homeless Coordinator, so official networks for communicating with this population may not work as effectively as these should.

Specific organizations chartered to assist the homeless and those with low income include:

- Community Health Centers
- Hawaii Meals on Wheels
- Affordable Housing and Homeless Alliance
- Food Banks
- Kokua Kalihi Valley
- Nana’s House on Kauai

### Residents for Whom English is not the Primary Language

The 2010 U.S. Census indicates that 24.8% of households in Hawaii do not speak English at home or have a limited proficiency in English. Honolulu County has the highest percentage of non-English speaking households and people with limited English proficiency—at least 1 in 3.66 persons there has limited proficiency in English. Within other counties, at least 1 in 6 persons has limited English proficiency. The most common languages other than English spoken at home are Tagalog, Chinese, and various Pacific Island languages.

Anecdotal evidence suggests that Pacific Islanders, other than Native Hawaiians, are likely unprepared for disaster. These populations include Marshallese and Chuukese, particularly low-income members of these communities.

Effectively reaching those with limited English proficiency involves:

- Organizing or using sporting events, such as volleyball and basketball tournaments, music and cultural festivals, entertainment venues, and children-focused events like fairs to facilitate message sharing
- Engaging different Micronesian and Marshallese churches and places where religious groups or community elders gather
- Avoiding mass media messages through television and radio. Community-based and ethnic newspapers or newsletters reach these groups better
- Working through KNDI, Olelo, and other non-English broadcasters

### Project Outcomes

Based on the pre-campaign and post-campaign surveys, data collected regarding the project website activity, project team research, and feedback from stakeholders, the project successfully accomplished the objectives specified by the RCPG:

- The level of disaster awareness and preparedness was assessed, including among hard-to-reach populations.
- Alternative methods to increase public disaster awareness and preparedness were discussed with the working group.
- A pilot campaign was designed and implemented to test messaging, dissemination strategies, and public reactions.
- Results of the pilot were assessed, and recommendations were developed for use in future preparedness campaigns.

Specific outcomes are described in more detail below.

## Awareness

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Although both surveys (pre- and post-pilot campaign) revealed that public awareness of disaster risk is already high (~80%), project research demonstrated that many sources of this awareness exist and that the messages being relayed are not consistent.

The pilot challenged the misconception that individual and family preparedness is the responsibility of government, and was successful in moving that needle in the right direction toward individual responsibility for preparedness.

## Preparedness

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Although fewer than 30 days is not enough time for a campaign to change public preparedness behavior, the project induced nearly 3,000 downloads of family emergency plan templates and disaster kit checklists. Several earned media opportunities also showed thousands of television viewers what it means to be prepared.

## Metrics

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The project established awareness and preparedness metrics, and created benchmarks in 2011 and additional measurements in 2012, so that changes in disaster awareness can be identified and evaluated objectively from this point in time forward.

## Identity

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Unaided recall of the [www.GetReadyHawaii.org](http://www.GetReadyHawaii.org) by 15% of respondents, after less than a month of exposure, is a great achievement for new website and austere marketing budget. The site also established a singular brand of disaster preparedness unique to Hawaii, and a common tool available to all public health and safety organizations. Within the Get Ready Hawaii brand, any and all government agencies and non-governmental organizations can collaborate to coordinate and share information with a single voice. Coordinated use of this website with social media tools also expanded awareness among demographic groups not as easily reached via traditional media.

## Assets

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Many campaign assets were produced with continuing value, including:

- A website.
- A 30-second television PSA
- Two 60-second radio PSAs
- Two 30-second radio PSAs
- Over 300 professional still photographs
- A wide variety of graphic art layouts, including bus cards, handbills, and online banners
- Social media sites with hundreds of followers
- Relationships with broadcasters, publishers, community-based organizations, and other potential campaign partners

## Experience

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The RCPG now has stress-tested campaign experience as a result of managing very important persons (VIP), media, and public engagements. Several DEM employees and members of the working group were exposed to project work and now have first-hand experiences useful for managing future campaign projects.

## Match

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Although not a primary concern or objective, careful planning and a little extra work during this project generated in-kind match far exceeding what was required for this project. As a result, other FY 09 RCPGP projects did not have to generate as much project match.

## A Path Forward

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This project constitutes an important first step toward developing a collective, systematic approach to improve disaster awareness and preparedness in Hawaii. During the project, much was learned about Hawaii, including how prepared the State is for disaster, and how preparedness may be increased. Recommendations derived from the work of this project are provided below. A general campaign plan template is also provided in Annex E – Campaign Plan Template.

## Focus

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With a consistent 80% of respondents demonstrating disaster awareness in two previous surveys, future campaigns are not likely to increase awareness much more. Future efforts, then, should be directed at moving residents from awareness to preparedness. Increasing preparedness will involve changing public behavior and especially increasing family emergency plan and disaster kit development above current levels—currently 6% and 9%, respectively.

Previous attempts to increase preparedness without interagency coordination have resulted in some public confusion about what constitutes preparedness. Anecdotal evidence suggests that some preparedness messages are insufficiently instructive, too complex, or impractical to implement. Preparedness marketing must be simple, instructive, and demonstrable. Messaging should be rigorously tested for these criteria.

Two of three key interests expressed by the working group relate to focus. The first interest involved the question of “how” to influence awareness and preparedness. Preparedness appears to be influenced by focusing on simple, instructive, and reasonable messaging. People do not respond to long or fear-based messaging, especially which does not offer solutions or relate to their circumstances. Focusing on relevant messages with simple utility is a key to success.

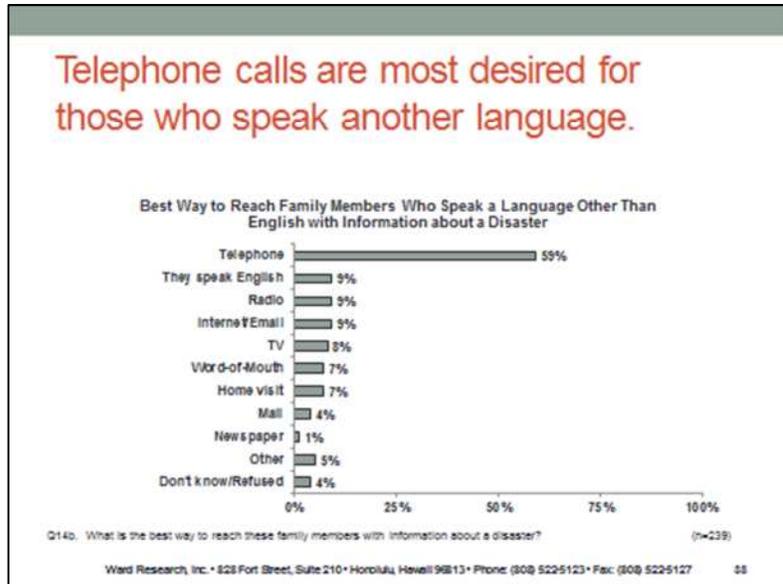
The second key interest of working group members was changing the perception that government is predominantly responsible for individual and family preparedness. Within just 1 month, the pilot campaign was successful in reducing this perception among a sample of the population by almost 10 percentage points. Future campaigns should also focus messaging on individual responsibility for preparedness.

Messages and message delivery systems should also carefully focus on an intended or target demographic. Radio and television broadcasts may reach the most people, and earned media may be the most cost-efficient form of dissemination, but these methods alone will not reach a number of sizable, vulnerable or hard-to-reach communities.

Future campaigns need to carefully focus on desired outcome, message utility, and intended audience.

### Quality

Quality campaign assets are critical to mass appeal and solicitation of support from media outlets and other partners. During this project, much of the in-kind support received from partners was the result of work by award-winning designers and actors who developed great PSAs, print, and graphics. Next to campaign focus, the quality of assets like videos and radio spots is most important.



### Universal Access

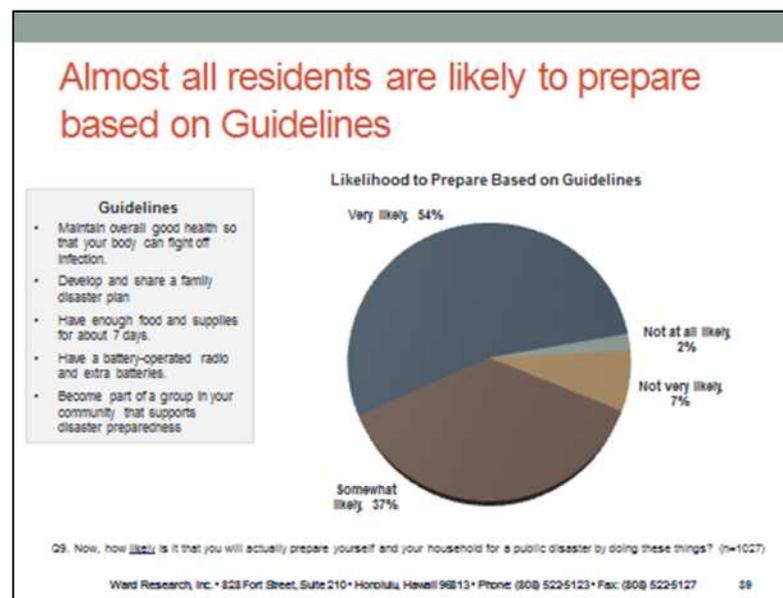
In order to reach most people and especially when attempting to engage hard-to-reach populations, campaigns need to employ several means of message dissemination and be multi-lingual. For this project, messages were translated into 11 different languages, in large part due to in-kind support by non-governmental organizations.

### Accountability

As with most projects, success requires leadership, a budget, and a project plan. For future campaigns to be successful, a manager must be appointed to organize a team and to implement a project plan.

### Persistence

Using the word “campaign” to refer to actions that bring about an increase in public disaster preparedness may be a misnomer. That word is often used to describe promotions or activities of limited



duration. Maintaining public awareness of disaster and preparing for disaster require continual and regular campaigning. In this regard, emergency management agencies in Hawaii might consider allocating a certain budget each year to one or more preparedness campaign activities.

Although project research shows less than 10% of the population is prepared, the same research also suggests that most of the public reports they are very likely to prepare. Capitalizing on this behavioral intention will require persistent campaigning.

## Earned Media

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The third of three key interests expressed by working group members was a desire to increase preparedness with minimal effort and resources. The pilot campaign demonstrated that earned or free media generated 10-fold increases in website visits and 4 to 7-fold increases in emergency plan and disaster kit downloads.

Although coordination of the three largest earned media opportunities (press conference, morning show demonstration, and interview of mayor) required some effort, the relatively low cost and high return of these engagements indicate that “earned media” is the most cost-effective method to increase awareness and preparedness.

## Timing

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Timing of message placement can affect cost and effectiveness of a preparedness campaign. In addition to facing a short project schedule and fairly small budget with which to place messages with broadcasters and publishers, the project team also had to contend with an increasingly active political campaign season. Early in the project, the team decided that May 2012 would be the soonest that quality campaign assets could be ready and the latest that PSAs could be placed without paying the premium charged for advertising near the end of election cycles.

By careful selection of the time period during which a campaign will be executed, cost can be controlled and in-kind match can be maximized. When ad sales are slow and PSAs are developed with sufficient quality and appeal, broadcasters are willing to fill vacant ad space with this quality programming at little or no cost.

## Social Media

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Facebook, Twitter, and YouTube were perhaps the most underutilized campaign assets developed during the project. Although broader use of these tools would have required policy changes not possible during the project, even the minimal amount they were used for purposes of testing confirmed their reach and utility. Using social media in campaigns for the foreseeable future will be necessary to effectively reach the under 35 year-old demographic and an increasing number of people who are beginning to rely on these tools to stay informed and to communicate.

Early reports following Hurricane Sandy (October 2011 in New Jersey and New York) indicate that social media may soon become a major form of communication between emergency managers and the public.

## Partner Engagement

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This project could not have been a success without the engagement and support of many partners. If broadcasters and publishers had not provided in-kind match, a five-fold increase in the advertising budget would have been required to achieve the same result. If meteorologists and weather-related journalists had not rallied for the project, perhaps as much as 25-50% of project website activity would not have occurred. Without the support of retailers, tens of thousands of handbills would not have been distributed free of cost.

Going forward, these partners, as well as non-governmental and other community advocacy groups, must be involved in planning and executing any subsequent campaign. Without this involvement, campaigns will be much more expensive and less effective.

## Conclusion

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Each and every community has a stake in disaster awareness and preparedness. Awareness may be relatively easy to achieve and maintain, because it is the result of decades of drills and real-world experiences. Preparedness, however, is much more difficult to achieve. Increasing preparedness requires changing public behavior, and doing so requires engagement of the whole community, deliberate planning, and broad dissemination of campaign messages using various methods. Intended campaign outcomes must also be clear, compelling, and relatively easy to accomplish on an individual level. And if hard-to-reach and vulnerable populations are to be protected, planning must occur to disseminate preparedness information to those unlikely to receive or act on mainstream messages.

Preparedness campaigns need not be expensive. The means of preparation is much the same in all communities; campaigns can therefore benefit greatly from collaborative efforts with other communities. Conducting common preparedness efforts make messages more consistent, campaigns easier to manage, and ultimately less costly and more effective.

This project spawned a great many insights about preparedness, a rich set of quality campaign tools, and a single preparedness brand that can be used by all. A simple campaign plan template, provided in Annex E, can be used to plan future campaigns and increase preparedness in Hawaii.

## Annexes

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Annex A – Pre-Pilot Assessment Survey

Annex B – Pre-Pilot Assessment Report

Annex C – Post-Pilot Assessment Survey

Annex D – Post-Pilot Assessment Report

Annex E – Campaign Plan Template

Annex F – Acronyms



# WARD RESEARCH, INC.

## PUBLIC DISASTER PREPAREDNESS WR5775

Record Number \_\_\_\_\_(v01)

Interviewer Name \_\_\_\_\_ Time Ended \_\_\_\_\_

Date \_\_\_\_\_ I.D.# \_\_\_\_\_(v02) Time Started \_\_\_\_\_

Respondent Name \_\_\_\_\_ Total Minutes \_\_\_\_\_(v03)

Respondent Phone Number - (v04)

ISLAND:

Oahu.....	1
Maui .....	2
Big Island.....	3
Kauai .....	4

\*\*\*\*\*

- Sample.      Sample Type
1. Landline sample
  2. Cell sample

Hello, I'm ( \_\_\_\_\_ ) from Ward Research, a professional market research company in Honolulu. We're conducting a survey on behalf of all counties in the State of Hawaii. The survey is about disaster preparedness and will take approximately 15 minutes. First, let me verify that you are a Hawaii resident over 18 years of age. **(IF NOT, ASK TO SPEAK TO HEAD OF THE HOUSEHOLD.)**

Cell1a. First of all, is this a landline or a cell phone that we have called? **(IF REFUSED SAY: "WE ARE ONLY ASKING BECAUSE WE ARE TRYING TO ACCOUNT FOR HOUSEHOLDS THAT MAY ONLY USE CELL PHONES. ONCE AGAIN, ALL OF YOUR RESPONSES ARE CONFIDENTIAL AND THIS IS FOR RESEARCH ONLY AND IS NOT SALES-RELATED)**

- |   |                    |
|---|--------------------|
| 1 | Landline (n=750)   |
| 2 | Cell phone (n=250) |
| 9 | Refused            |

**(IF CELL1A=9 TERMINATE)**

S2. Which island do you live on?

- Oahu ..... 1
- Big Island ..... 4
- Kauai ..... 2
- Lanai ..... 3
- Maui ..... 4
- Molokai..... 5
- Refused..... 6

**(IF S2=1-5 CONTINUE, OTHERWISE THANK AND TERMINATE)**

Cell2. Do you also have a **(IF CELL1A=1 “PERSONAL CELL PHONE”; IF CELL1A=2 “LANDLINE AT HOME”)**?

- 1 Yes
- 2 No
- 3 Refused

Cell3. Do you currently use an online Internet service at home?

- Yes..... 1
- No..... 2
- Refused.....3

Cell2. In appreciation for your time, we will either deposit \$7.50 to your Paypal account or send you a check for \$5 to reimburse you for any cell phone charges you may incur for completing this survey. This survey should take about 12 minutes.

Are you in a situation where it is safe to complete this survey, for instance, using a hands-free device if you're driving; and where there will be little to no interruptions?

- 1 Yes
- 2 No
- 3 Refused

**(IF CELL2=2-3 THEN SCHEDULE CALL BACK; OTHERWISE CONTINUE)**

Q1. As I stated earlier, this survey is about disaster preparedness. When you think of disasters, which ones come to mind? **(MULTIPLE RESPONSE; DO NOT READ LIST; ALPHA ORDER)**

- 1 Hurricane
- 2 Tsunami
- 3 Earthquake
- 4 Pandemic Flu
- 5 Terrorism
- 6 Fire
- 7 Flood
- 8 Riot
- 9 Hazardous Material Release
- 10 Transportation Accident
- 11 Natural Disaster (GENERAL MENTION)
- 12 Biological Disaster (GENERAL MENTION)
- 13 Chemical Disaster (GENERAL MENTION)
- 14 Radiological Disaster (GENERAL MENTION)
- 15 Other (specify)
- 16 Don't know/Refused

Q2. I'm going to read you a list of some different disasters. For each one, please tell me how concerned you are about them.

How concerned are you about **(INSERT A-E)? (ROTATE; READ/REPEAT SCALE)**

- A. Hurricanes
- B. Tsunamis
- C. Earthquakes
- D. Pandemic Flu
- E. Others?? Terrorism? Etc?

Very Concerned .....	4
Somewhat Concerned .....	3
Not very Concerned.....	2
Not at all Concerned.....	1
Don't know <b>(DO NOT READ)</b> .....	9

**(IF Q2A-E=3 OR 4, ASK Q2A FOR EACH; OTHERWISE SKIP TO Q3)**

Q2a-e. What concerns you the most about disasters **(INSERT Q2A-E)? (ASK OPEN ENDED; PROBE FOR DETAILS)**

Q3. Overall, how prepared would you say your household is for disasters like those that I just mentioned?

- 1 Very prepared
- 2 Somewhat prepared
- 3 Not very prepared
- 4 Not at all prepared
- 5 Don't know

Q3A. **(IF Q3=1-2 READ: “Who is primarily responsible for preparing”) (IF Q3=3-5 READ “Among your household members, who would you expect to be the person to prepare”) your household for a potential disaster? (If necessary:) What is their relationship to you? (MULTIPLE RESPONSE)**

- 1 Grandfather
- 2 Grandmother
- 3 Father
- 4 Mother
- 5 Uncle
- 6 Auntie
- 7 Husband
- 8 Wife
- 9 Self
- 10 Friend
- 11 Other (Specify)
- 12 Don't know

Q4. To your best ability, please tell me what you should do and/or have in place to be prepared for a disaster? **(ASK OPEN ENDED; MULTIPLE RESPONSE)**

- 1 Extra food that does not require refrigeration like canned food
- 2 Extra water
- 3 First Aid Kit
- 4 Extra medicine
- 5 Disaster plan
- 6 Battery-powered radio
- 7 Flashlight
- 8 Extra batteries
- 9 A list of phone numbers to health and public safety organizations in case of emergency.
- 10 Other (Specify)
- 11 Nothing
- 12 Don't know

Q5a. Do you currently have **(INSERT 1-9)** at home? **(SHOW ONLY THOSE NOT ANSWERED IN Q4; ROTATE; READ LIST; MULTIPLE RESPONSE)**

- A. Extra food that does not require refrigeration like canned food
- B. Extra water
- C. First Aid Kit – or components of a kit
- D. Extra medicine
- E. Disaster plan
- F. Battery-powered radio
- G. Flashlight
- H. Extra batteries
- I. A list of phone numbers to health and public safety organizations in case of emergency.

- 1 Yes
- 2 No
- 3 Don't know/refused

Q5b. If a major disaster occurred and there was no electricity or running water, or if you were required to stay in your home for public health reasons, how many days do you believe your home food and water supplies would last for you and your household members? **(ENTER NUMBER 0-999; 999=DON'T KNOW)**

Q6. Where would you expect to receive information such as disaster situation updates and instructions on what to do and where to go?

- 1 Friends/family
- 2 Neighbors
- 3 TV
- 4 Radio
- 5 Text message/mobile device

Q7. When you are sick with the flu for example, do you... **(ROTATE A-C, READ 1-4)**

- A) Stay home from work or school to prevent the spread of germs
- B) Wash your hands often
- C) Cover your mouth when you cough

All of the time ..... 4  
Most of the time..... 3  
Some of the time ..... 2  
Never ..... 1  
Don't know **(DO NOT READ)** ..... 9

(v)

Q8. Before a disaster, there are several things that you could do to prepare. For example, it is advisable to.....

- Maintain overall good health so that your body can fight off infection.
- Develop a family disaster plan
- Have enough food and supplies for about 7 days.
- Have a battery-operated radio and extra batteries.
- Become part of a group in your community that supports disaster preparedness

Q8b. How willing are you to do these things? **(READ 1-4)**

- Definitely willing ..... 4
  - Somewhat willing ..... 3
  - Somewhat not willing ..... 2
  - Definitely not willing ..... 1
  - It depends **(DO NOT READ)** ..... 5
  - Don't know **(DO NOT READ)** ..... 9
- (v)

Q9. Now, how likely is it that you will actually prepare yourself and your household for a public disaster by doing these things? **(READ 1-4; READ LIST AGAIN IF NECESSARY)**

To prepare for a public disaster, it is advisable to.....

- Maintain overall good health so that your body can fight off infection.
- Develop a family disaster plan
- Have enough food and supplies for about 7 days.
- Have a battery-operated radio and extra batteries.
- Become part of a group in your community that supports disaster preparedness

- Very likely ..... 4
  - Somewhat likely ..... 3
  - Not very likely 2
  - Not at all likely 1
  - It depends **(DO NOT READ)** ..... 5
  - Don't know **(DO NOT READ)** ..... 9
- (v)

**(IF Q9A=1-2, 5, OR 9 ASK Q9B; OTHERWISE SKIP TO Q10)**

Q9b. Why are you not very likely to prepare yourself and your household for a disaster by doing these things? Please be specific. **(PROBE FOR SPECIFICS)**

Q10. Do any of the persons in your household speak a language other than English as their primary language?

- Yes..... 01 (CONTINUE)
- no..... 02 (SKIP TO Q20)
- don't know..... 09 (SKIP TO Q20) (v)

**(IF Q10=1 ASK Q10A; OTHERWISE SKIP TO Q11)**

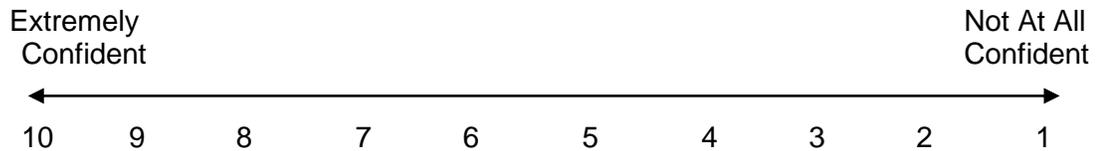
Q10a. What language is that? **(DO NOT READ)**

- Ilocano1 .....(v)
- Tagalog .....2 (v)
- Visayan .....3
- Japanese.....4
- Mandarin .....5
- Cantonese.....6
- Hawaiian .....7
- Korean8
- Marshallese .....9
- Samoan.....10
- Tongan.....11
- Vietnamese .....12
- Chuukese .....13
- Other (specify) \_\_\_\_\_ 14
- Don't know / Refused (DO NOT READ).....15

Q10b. What is the best way to reach these family members with information about a pandemic? **(PROBE)**

- \_\_\_\_\_ (v)
- \_\_\_\_\_ (v)

Q11. I'm going to read you types of emergencies or disasters that could occur and I would like you to tell me *how confident* you are that government agencies in the State of Hawaii would be able to respond effectively to each. Please use the 10-point scale, with 10=extremely confident in the Department's ability to respond to a threat and 1=not at all confident in the Department. First... **(READ LIST, ROTATE)**



- A) A terrorist attack .....
- B) A natural disaster such as a hurricane or tsunami .....
- C) An accidental technological disaster like a hazardous material spill.....
- D) A public health disaster like a flu pandemic .....

**(IF Q11B or C<8, ASK: )**

Q12. You gave a **(INSERT Q11B OR C RESPONSE)** rating to governments in the State of Hawaii responding to disaster. Why are you not very confident about this? **(PROBE)**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Now I have just a few questions so that we can describe the people we have talked to...

- D1. What is your ethnic identification? **(IF MIXED, ASK)** Would that include Hawaiian?
- Caucasian .....1
  - Chinese .....2
  - Filipino .....3
  - Hawaiian/part-Hawaiian.....4
  - Japanese.....5
  - mixed .....6
  - other .....8 **(CONTINUE)**
  - Don't know / Refused (DO NOT READ).....9

**(IF D1=8 ASK D1A)**

<b>D1A. (OTHER ETHNIC)</b>	
Korean .....	1
African American .....	2
Native American .....	3
Samoan.....	4
Tongan.....	5
Micronesia.....	6
Vietnamese .....	7
Marshallese.....	8
Asian Indian .....	9
Other .....	10

D2. What was your age on your last birthday? (99 = refused)

(v)

D3. What was your household income for 2010, before taxes: **(READ LIST)**

under \$25,000 .....	1
\$25,000 - but under \$35,000 .....	2
\$35,000 - but under \$50,000 .....	3
\$50,000 - but under \$75,000 .....	4
\$75,000 - but under \$100,000 .....	5
\$100,000 and above.....	6
refused <b>(DO NOT READ)</b> .....	9

D4. What is your home zip code?

[RECORD NUMBER 96001-96900]  
REF

D5. **(RECORD ONLY, DO NOT ASK)** Gender:

male .....	1
female .....	2

(v)

**In the event my supervisor wants to verify this interview, may I have your first name please? (RECORD).**

**That was my last question. Thank you very much for your help in completing this survey.**

## Annex B – Pre-Pilot Assessment Report

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# HAWAII DISASTER PREPAREDNESS

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Prepared for TetraTech, Inc.

January 4, 2012



WARD RESEARCH  
I N C O R P O R A T E D

# Table of Contents

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# EXECUTIVE SUMMARY

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# Executive Summary

## Disaster Perceptions and Experiences

- The most common disasters residents have personally experienced are hurricanes (62%), tsunamis (31%), and earthquakes (31%). Only 11% of residents stated they have not experienced any disasters in their lifetime.
- These are also the three disasters with which residents are most concerned: hurricanes (60% unaided mention of concern); tsunamis (51%); and earthquakes (21%).
  - Kauai residents are more concerned with floods, however, than they are with earthquakes; and they are also the most concerned of all counties about hurricanes.
- Less than 1% of residents mentioned pandemic flu as a concern, on an unaided basis. However, when asked to rate their level of concern about pandemic flu 62% stated they were somewhat or very concerned about it, about the same as concerns about flash floods (61%).
- The most common concern about disasters is the loss of property (24%), followed by the loss of life (14%) of the safety of family members (13%). Only 2% stated they have no concerns at all.
- Residents feel the most confident in the State handling natural disasters, but the least confident in terms of public health disasters.
  - Those who rated their confidence in the State a 7 or lower were asked why and the most common reasons surrounded a general lack of trust in the State's abilities.

# Executive Summary (Continued)

## Disaster Preparedness

- About 8 out of 10 residents recall seeing or hearing information about how to prepare for a disaster in the past three months, most commonly on television (51%) or radio (20%).
  - 64% and 61% stated they currently receive disaster-related information via radio and TV, respectively, as well.
  - 18-34 yr. olds were more likely than their older counterparts to have seen or heard disaster preparedness information at work/school or on the internet.
  - Those with household members who speak a foreign language stated that the best way to reach this segment is by telephone (59%).
- Those who do not recall seeing or hearing about how to prepare for a disaster are more likely to be 18-34 yrs. old and/or in the lower income bracket (<\$35,000 household income).
- The information recalled was about how to prepare and specific items that should be in place (e.g. emergency kit, extra food, extra water, etc.).
- While the most common organization residents believed to be responsible for the disaster preparedness information was a government entity – county, state, or federal – (30%), 21% believed that the media station was responsible for the disaster preparedness information.
- 91% of residents are somewhat or very likely to prepare for a disaster based on standard guidelines. However, the majority believe that the government and organizations are responsible for their preparedness

# Executive Summary (Continued)

## Disaster Preparedness (Continued)

- When residents were asked to assess their own preparedness, only 25% stated they were “very” prepared and another 54% stated they were “somewhat” prepared.
  - Self-reported preparedness improved with age as 34% of 65+ year olds stated they were “very” prepared but only 26% of 35-65 yr. olds and 20% of 18-34 yr. olds stated the same.
  - In addition, Kauai residents were more likely than Oahu and Big Island residents to state they were “very” prepared for a disaster.
- Food and water were top-of-mind supplies that should be in place to be prepared for a disaster with 76% and 67% (respectively) stating these were necessary. Flashlight was the third most common answer with only 32% stating this.
- Three out of ten (30%) residents report they do not have food/water supplies to last them 7 days. The average number of days residents have stocked is 10 days.
- Despite residents’ inability to recall what specific items are necessary to prepare, 45% have 8-9 of the nine recommended items and another 23% have seven of the nine items. On average, residents have 7 of the nine items in place at home.
  - The nine items residents were specifically asked about were: Extra food that does not require refrigeration like canned food to last 7 days; Extra water to last 7 days; First Aid Kit – or components of a kit; Extra supplies of prescription medicine to last 7 days; Disaster plan; Battery-powered radio; Flashlight or lantern; Extra batteries that fit flashlight or radio; A list of current phone numbers to health and public safety organizations in case of emergency.
  - Residents who recall seeing or hearing information in the past few months about how to prepare for a disaster had more preparedness items ready, on average, than did those who did not recall information (7.2 vs. 6.4 items, respectively).
  - Older residents and/or higher income residents also had more preparedness items ready, on average, than younger and/or lower income residents.

# Executive Summary (Continued)

## **Disaster Preparedness (Continued)**

- The most common reasons for not stocking up on extra food given by the 14% who did not have them were: they don't like canned foods (18%), did not think of stocking up (18%), and they have stocks but it would last less than 7 days (14%).
- The most common reasons for not stocking up on extra water given by the 36% who did not have them were: did not think of it or do not think it is necessary (23%), plans to get extra water when the need arises (21%) and they have stocks but it would last less than 7 days (14%).
- The most common reasons for not stocking up on a first aid kit given by the 7% who did not have them were: did not think of it (22%) and they have some supplies but not an entire kit (21%).
- The most common reasons for not having a disaster plan given by the 52% who did not have one were: did not think of it (39%) and they will figure it out when the time comes (28%).

# Executive Summary (Continued)

## Conclusions

- Continue communicating and educating about how to prepare for a disaster.
  - Those who have heard or seen information about how to prepare are more prepared for a disaster than others.
- The 18-34 yr. old population and lower income households (<\$35,000 household income per year) need to be specifically targeted because:
  - Traditional media (TV and radio) are not as popular among these segments;
  - They were more likely to have not read or seen anything about disaster preparedness in the past few months; and,
  - They are the less prepared for a disaster.
- Educate and communicate with 18-34 yr. olds through work/school or the internet.
- Lower income households will be more challenging to educate and reach as they are less likely to have heard or seen information through any of the media outlets.
- Communicate about the importance of being prepared in terms of household and personal safety and well-being, as these are top concerns.
- Educate residents of how the State is prepared for disasters, particularly public health disasters, to increase confidence in responding to disasters.
- Delve deeper into exact expectations residents have on the State and community organizations in terms of helping them be prepared.

# OBJECTIVES AND METHODOLOGY

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# Objectives

The overall objective of the research was:

**TO MEASURE LEVELS OF KNOWLEDGE AND AWARENESS  
ABOUT DISASTER ISSUES, PLANS, AND PREPAREDNESS  
AMONG THE GENERAL POPULATION.**

# Methodology

- The 15-minute telephone survey was conducted November 28 through December 17, 2011.
- A total of n=1,027 Hawaii State residents 18 + years old were surveyed. The table below presents the total number of surveys by county.

n=775 were completed using Random Digit Dialing (RDD) Landline phone numbers.

n=252 were completed using purchased cell phone numbers with 808 area codes.

County	Sample Size	Maximum Margin of Error*
Honolulu	418	+/-4.7%
Maui	201	6.8%
Kauai	203	6.8%
Hawaii	205	6.8%
<b>Total Statewide</b>	<b>1,027</b>	<b>2.9%</b>

\* at 95% confidence level.

- Cellphone respondents were given either a \$5 (check) or \$7.50 (Paypal) incentive for completing the survey.
- The survey instrument was developed by Ward Research and submitted to the client for review and approval. A copy of the instrument is in the Appendix.

# Methodology (Continued)

- All calling took place in the Calling Center in the Ward Research downtown Honolulu offices from 5-9 p.m. on weekdays, and 9 a.m. to 8 p.m. weekends during the survey period. This Calling Center uses Computer-Assisted Telephone Interviewing (CATI) technology, which allows for 100% monitoring of calls through electronic and observational means.
- Data processing was accomplished using SPSS for Windows, an in-house statistical software package, which allows for the cross tabulation of data by key variables (i.e., age, ethnicity, and income).
- Data was weighted by telecommunication services, age and ethnicity to more accurately reflect the population based on Census 2010.

# RESPONDENT PROFILE

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AGE	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
18-24 years old	13%	9%	11%	6%	12%
25-34 years old	20%	18%	14%	20%	19%
35-44 years old	20%	12%	20%	12%	18%
45-54 years old	22%	21%	14%	21%	21%
55-64 years old	11%	22%	24%	14%	14%
65+ years old	13%	16%	15%	21%	14%
Refused	*%	2%	2%	5%	1%
Average Age	44	48	48	49	45
<b>Household Income</b>					
Under \$25,000	11%	16%	29%	13%	14%
\$25,000 - <\$35,000	12%	15%	17%	7%	13%
\$35,000 - <\$50,000	11%	13%	13%	16%	12%
\$50,000 - <\$75,000	17%	16%	15%	12%	16%
\$75,000 - <\$100,000	16%	16%	5%	9%	14%
\$100,000 +	16%	11%	12%	12%	15%
Refused	17%	13%	10%	31%	17%
Median Income	\$60,700	\$49,400	\$34,400	\$48,800	\$55,400
Unweighted Base	(418)	(201)	(203)	(205)	(1027)

Gender	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
Male	46%	51%	47%	53%	47%
Female	54%	49%	53%	47%	53%
Years Lived in Hawaii					
Less than 2 years	5%	1%	2%	1%	4%
2 - <5 years	5%	8%	7%	4%	5%
5 - <10 years	6%	8%	11%	8%	7%
10 or more years	29%	39%	34%	42%	31%
Born and raised in Hawaii	55%	45%	46%	44%	52%
Don't know/Refused	1%	--	--	1%	*%
Children under 18 in Household					
Yes	49%	43%	53%	38%	48%
No	51%	57%	47%	60%	52%
Refused	1%	1%	--	1%	1%
Disability in Household					
Yes	19%	15%	16%	23%	19%
No	80%	85%	84%	76%	80%
Refused	1%	--	*%	1%	1%
Unweighted Base	(418)	(201)	(203)	(205)	(1027)

Ethnic Identification	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
Caucasian	19%	34%	34%	35%	24%
Chinese	7%	1%	1%	2%	5%
Filipino	13%	13%	10%	13%	13%
Hawaiian/Part-Hawaiian	21%	26%	34%	18%	23%
Japanese	22%	7%	6%	15%	18%
Mixed	8%	11%	6%	11%	9%
Other	7%	6%	7%	4%	7%
Don't know/Refused	1%	3%	2%	3%	2%
Unweighted Base	(418)	(201)	(203)	(205)	(1027)

Ethnic Identification (Other)	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
Samoan	34%	--	19%	28%	29%
African American	27%	--	21%	--	23%
Korean	11%	15%	--	--	10%
Micronesian	7%	--	--	--	5%
Vietnamese	5%	--	--	--	4%
Marshallese	--	15%	14%	--	3%
Tongan	--	25%	--	--	2%
Other	16%	44%	46%	72%	24%
Base =	(21)	(8)	(3)	(9)	(41)

Speak Language(s) other than English	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
Yes	28%	28%	27%	32%	28%
No	72%	72%	73%	67%	72%
Unweighted Base	(418)	(201)	(203)	(205)	(1027)

Other Language					
Ilocano	26%	27%	20%	33%	26%
Japanese	16%	3%	4%	22%	14%
Spanish	9%	16%	28%	10%	12%
Tagalog	11%	8%	7%	2%	9%
Hawaiian	6%	19%	10%	9%	8%
Samoan	6%	--	18%	16%	8%
Visayan	7%	--	1%	--	5%
Cantonese	6%	--	--	--	4%

Table continued on following page...

Other Languages (Continued)	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
French	1%	5%	1%	6%	2%
German	2%	*%	--	2%	2%
Vietnamese	2%	--	--	--	2%
Korean	2%	--	--	--	2%
Mandarin	2%	2%	--	--	1%
Chuukese	1%	--	--	--	1%
Marshallese	--	5%	--	--	1%
Tongan	--	2%	1%	--	--
Other	2%	12%	8%	--	4%
Base =	(112)	(52)	(43)	(32)	(239)

Area	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
East Honolulu	11%	--	--	--	8%
Windward	15%	--	--	--	11%
North Shore	1%	--	--	--	1%
Central Oahu	16%	--	--	--	11%
Moanalua/Aiea/Pearl City	9%	--	--	--	6%
Urban Honolulu	31%	--	--	--	22%
Leeward	6%	--	--	--	4%
Ewa Plain	9%	--	--	--	6%
Napili/Lahaina	--	8%	--	--	1%
Wailuku	--	32%	--	--	3%
Kihei/Kahului	--	21%	--	--	2%
East Maui	--	28%	--	--	3%

Area (Continued)	Honolulu County	Maui County	Hawai'i County	Kaua'i County	Total Statewide
Molokai	--	6%	--	--	1%
Lanai	--	*%	--	--	*%
Hilo	--	--	50%	--	5%
Kohala	--	--	7%	--	1%
Kailua-Kona	--	--	30%	--	3%
South	--	--	9%	--	1%
Lihue	--	--	--	21%	2%
Princeville/Hanalei	--	--	--	10%	1%
Hanapepe/Koloa	--	--	--	16%	1%
Kekaha/Waimea	--	--	--	22%	2%
Kapaa	--	--	--	23%	2%
Refused	2%	4%	4%	8%	3%
Unweighted Base	(418)	(201)	(203)	(205)	(1027)

# DETAILED FINDINGS

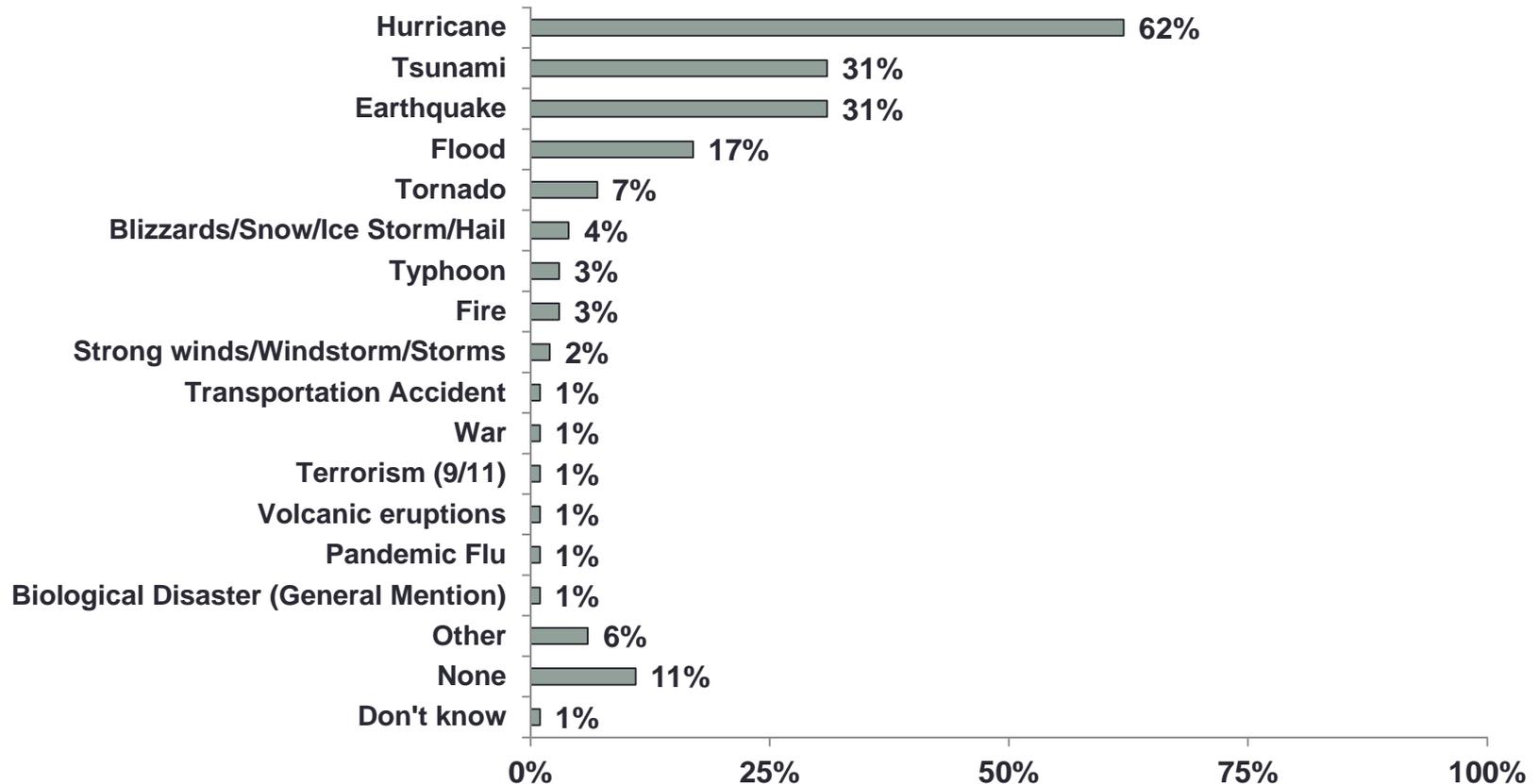
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# PERCEPTIONS AND EXPERIENCES

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# Hurricanes are the most commonly experienced disaster among residents.

Disasters Experienced in Lifetime

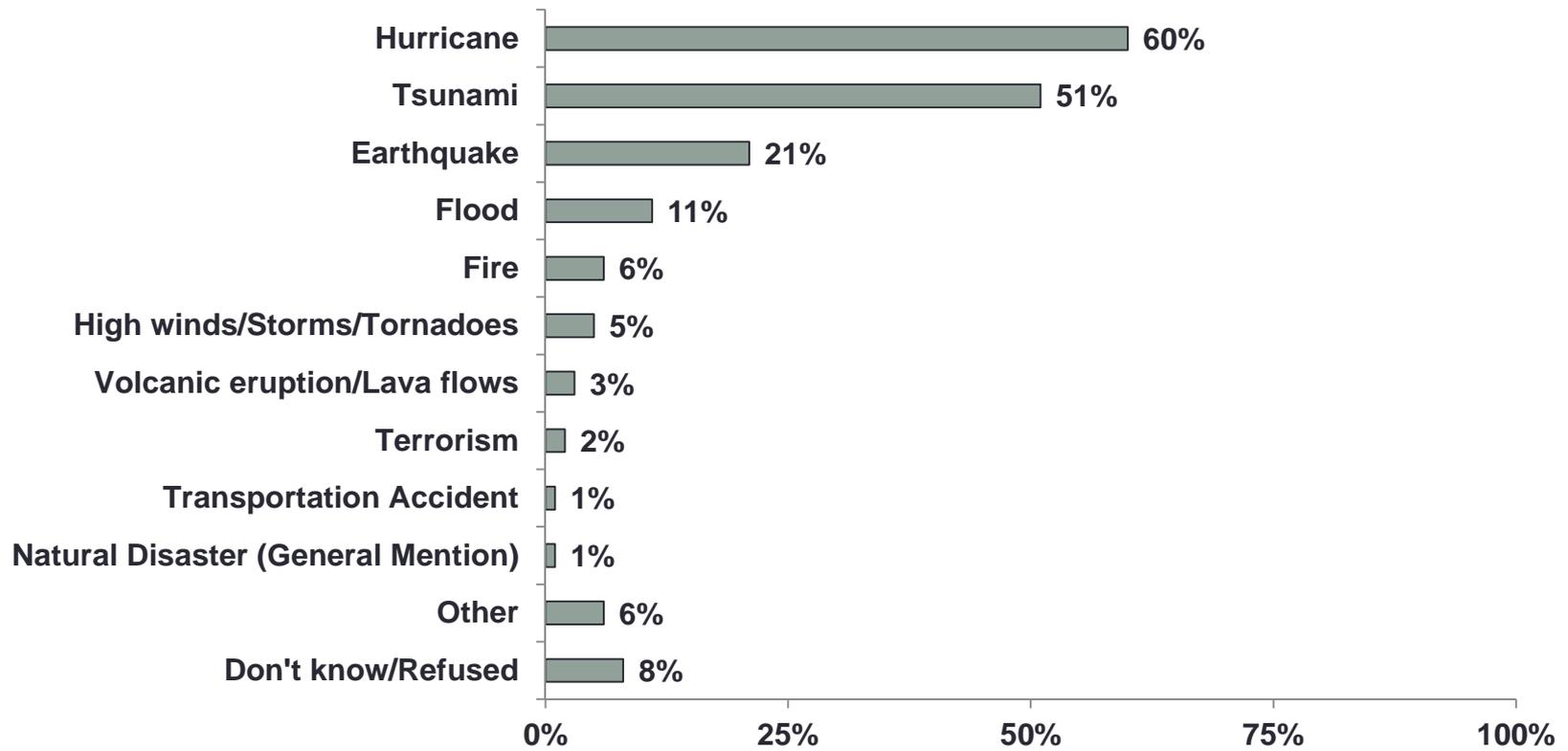


Q12. Which, if any, types of disasters have you experienced in your lifetime?

(n=1027)

# Residents are most concerned about Hurricanes and Tsunamis.

Disasters Concerned About the Most



Q2a. When you think of disasters that may impact your community, which ones concern you the most?

(n=1027)

# Kauai County residents are not as concerned about earthquakes as they are about floods.

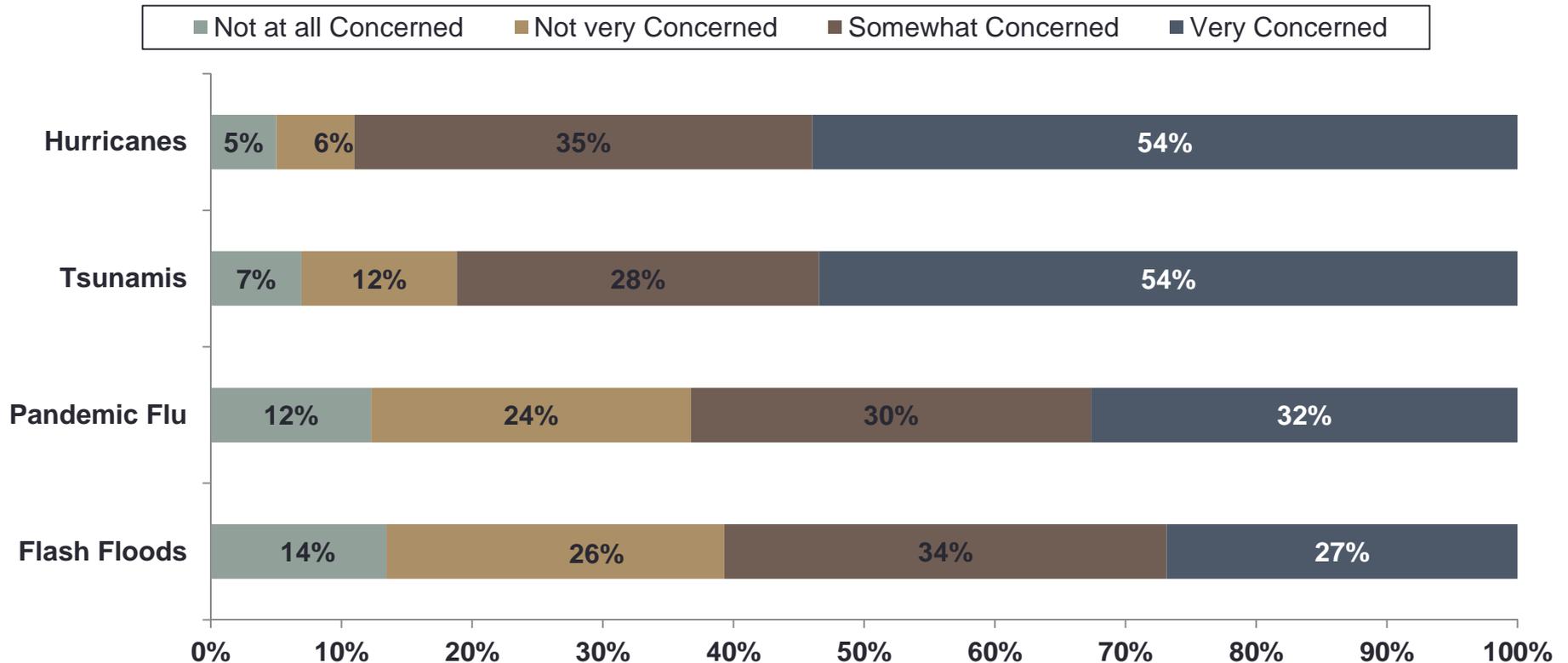
Top Three Disasters of Concern by County

Honolulu County	Maui County	Kauai County	Hawaii County
Hurricane (60%)	Hurricane (62%)	Hurricane (76%)	Tsunami (52%)
Tsunami (50%)	Tsunami (60%)	Tsunami (50%)	Hurricane (43%)
Earthquake (22%)	Earthquake (17%)	Flood (14%)	Earthquake (34%)

Q2a. When you think of disasters that may impact your community, which ones concern you the most?

(n=1027)

# There is a higher level of concern regarding hurricanes than tsunamis.



Q2b. I'm going to read you a list of some different disasters. For each one, please tell me how concerned you are about them.  
How concerned are you about **hurricanes, tsunamis, pandemic flu, and flash floods**? (n=1027)

# Certain segments of the population have greater concerns about different disasters.

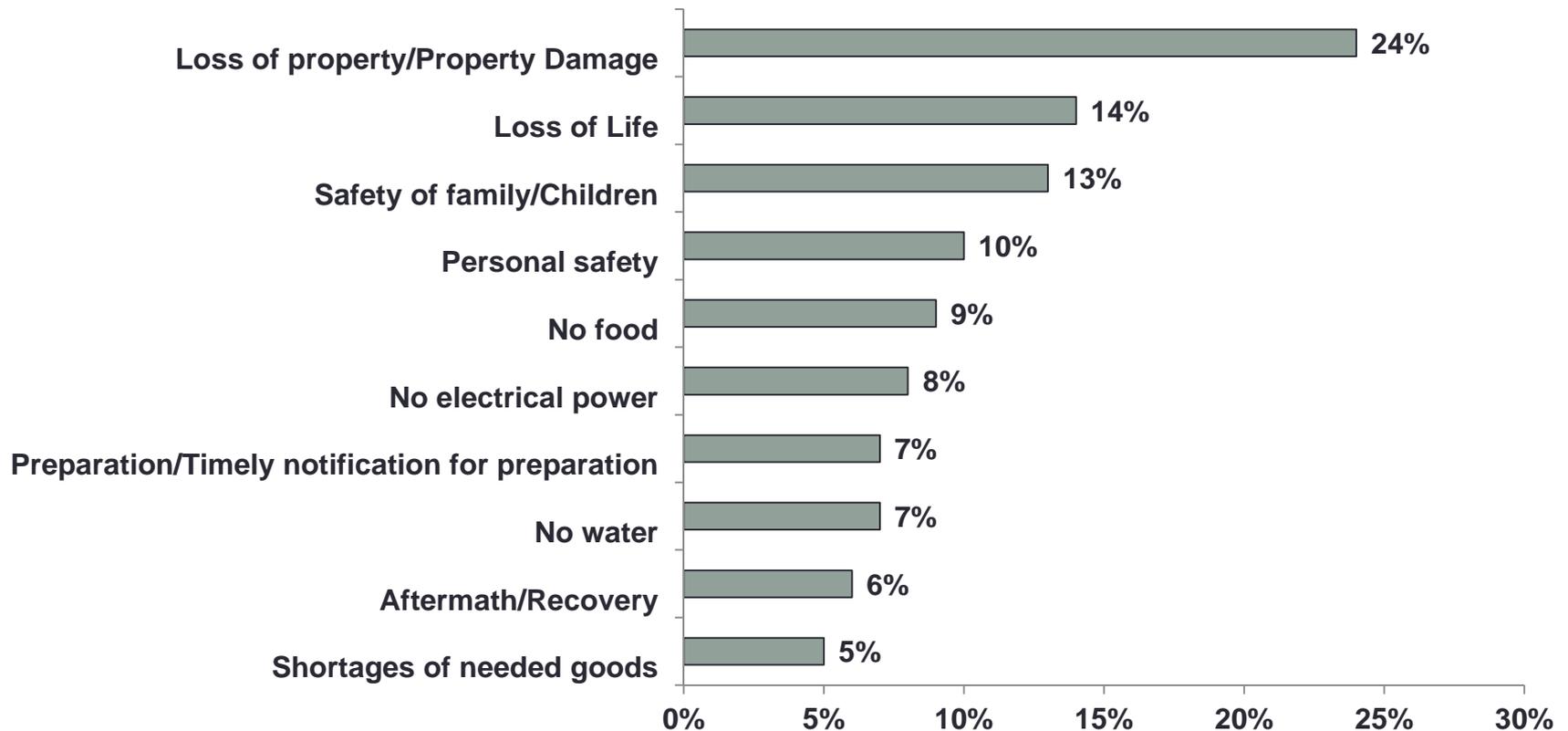
## Segments More Concerned with Specific Disasters

Hurricanes	Tsunamis	Pandemic Flu	Flash Floods
<ul style="list-style-type: none"><li>Honolulu, Maui, and Kauai county residents</li><li>Residents living in Hawaii for 10+ years or those born and raised in Hawaii</li></ul>	<ul style="list-style-type: none"><li>Those with children &lt;18 yrs. old in household</li><li>18-64 yr. olds</li></ul>	<ul style="list-style-type: none"><li>Those with children &lt;18 yrs. old in household</li><li>&lt;\$35k household income</li></ul>	<ul style="list-style-type: none"><li>Maui and Kauai county residents</li><li>&lt;\$75k household income</li></ul>

In general, females, Hawaiians, and Filipinos are more concerned with disasters than their counterparts (i.e. males, other ethnicities).

# Loss of property is the top concern when it comes to disasters.

Top 10 Concerns About Disasters

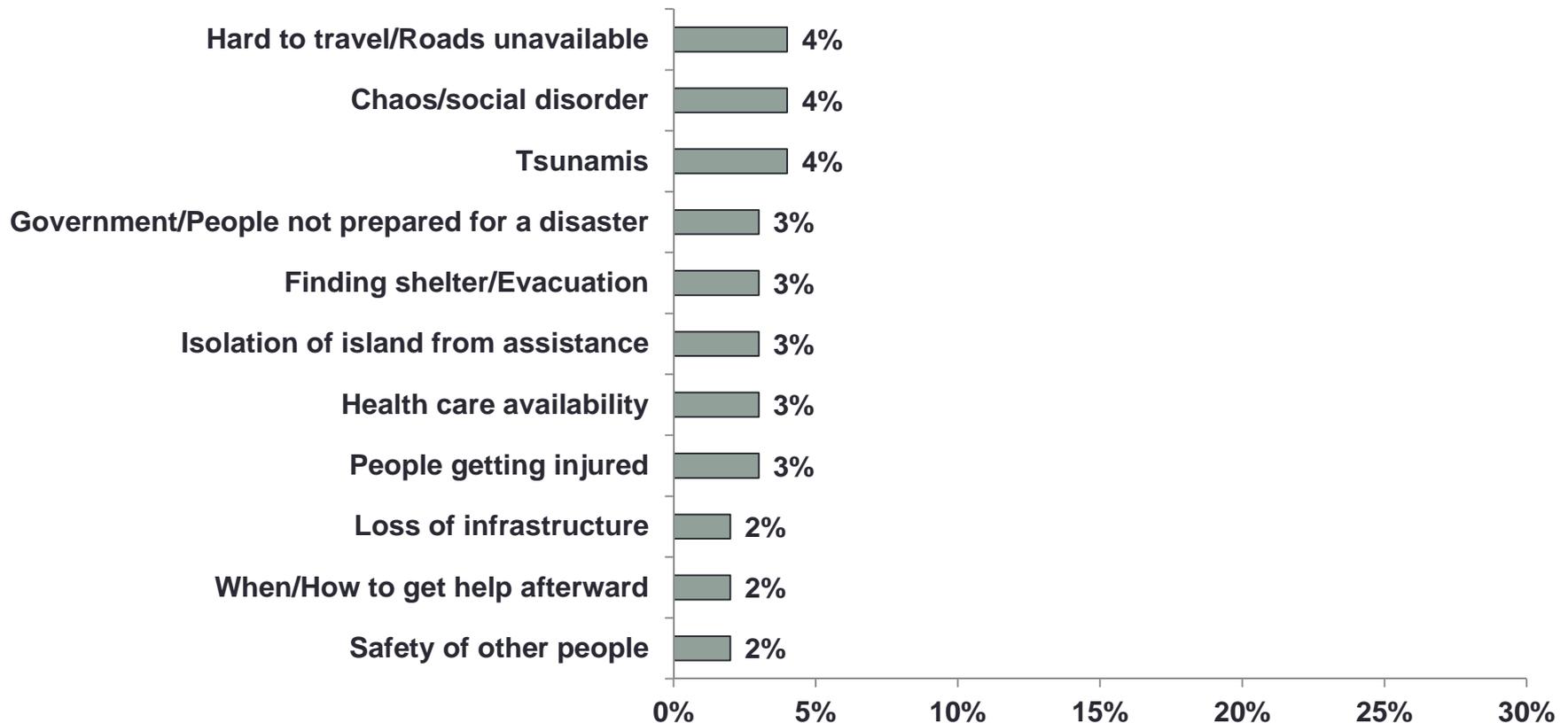


Q2c. What concerns you the most about disasters?

(n=980)

# Other concerns include mobility, aid, and safety.

## Other Concerns About Disasters (Continued)

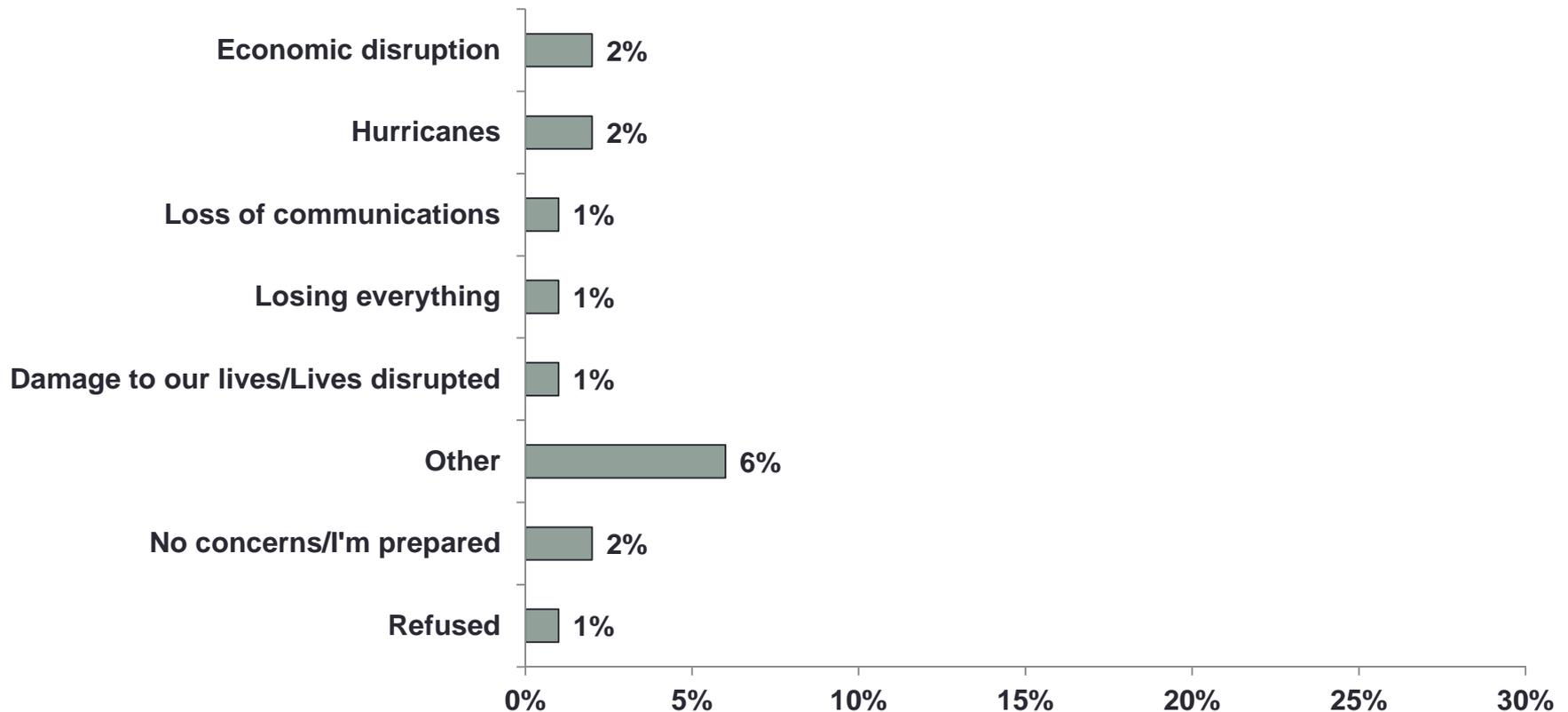


Q2c. What concerns you the most about disasters?

(n=980)

# Only 2% stated they have no concerns about disasters.

## Other Concerns About Disasters (Continued)



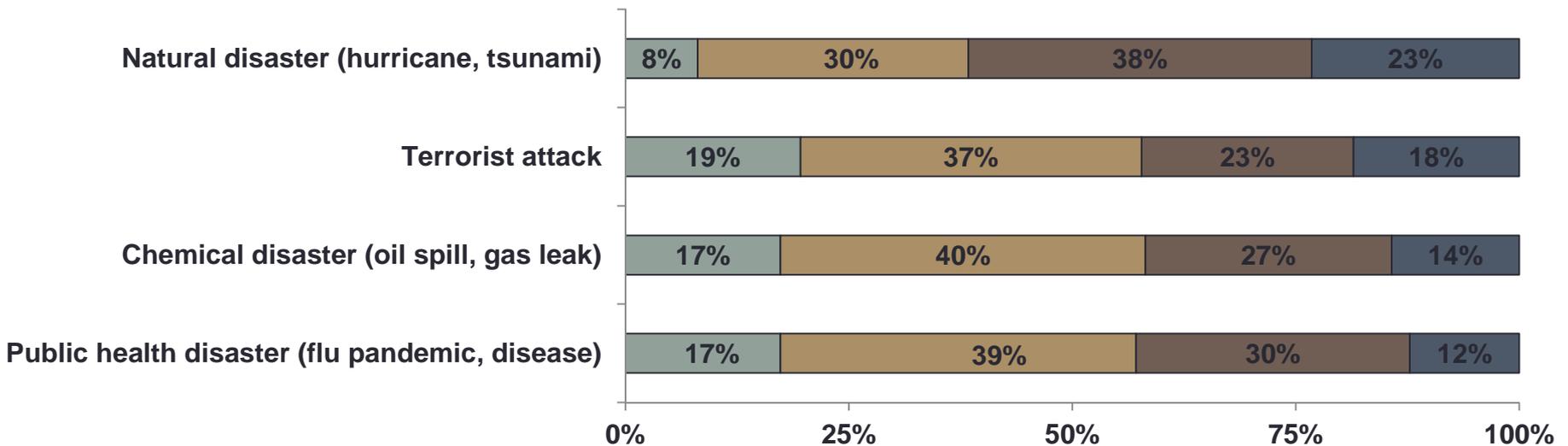
Q2c. What concerns you the most about disasters?

(n=980)

# Residents feel most confident in the State handling natural disasters, but the least confident with public health disasters.

## Confidence Level in State's Response to Emergencies or Disasters

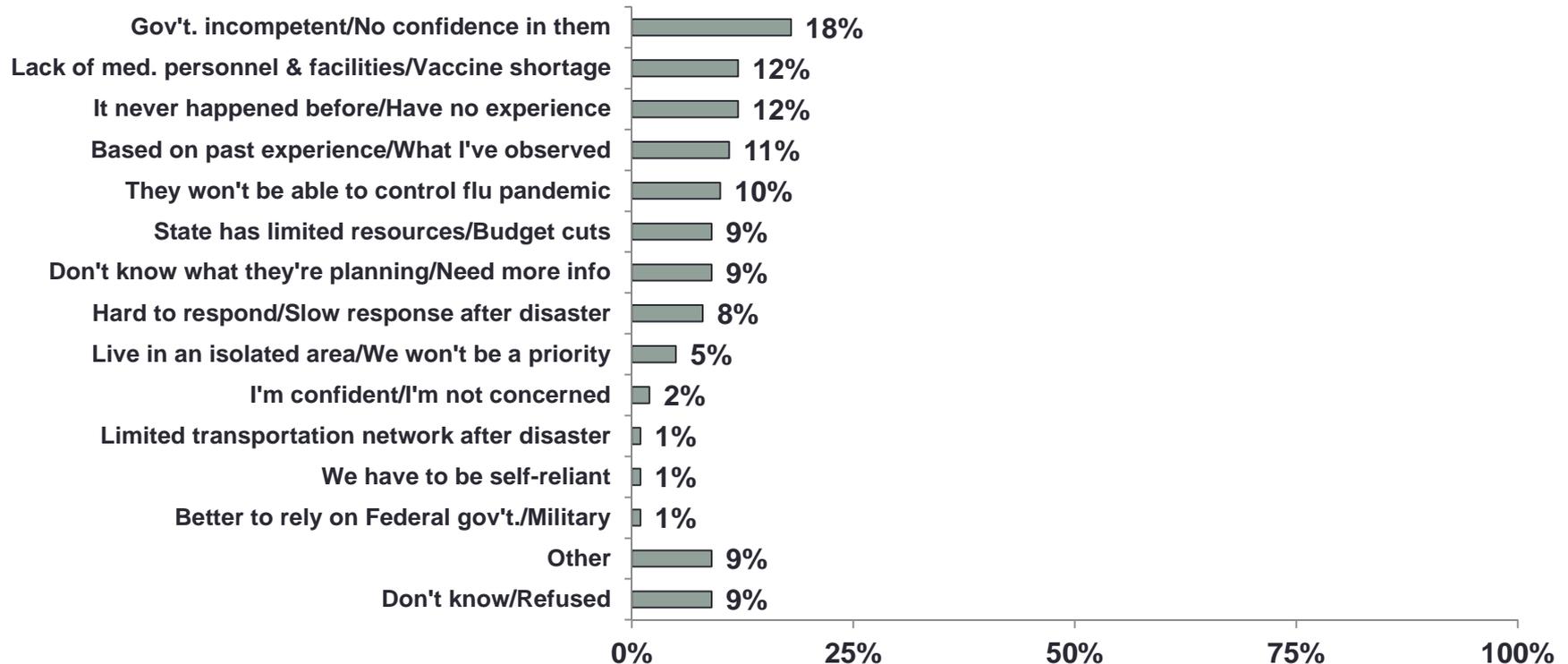
■ Not at all confident (1-4) ■ (5-7) ■ (8-9) ■ Extremely confident (10)



Q10a. I'm going to read you a list of emergencies or disasters that could occur and I would like you to tell me how confident you are that government agencies in the State of Hawaii would be able to respond effectively on each. Please use a 10-point scale, 10=extremely confident and 1=not at all confident in the State. (n=1027)

# The most common cause for any level of concern with the State mostly surround a lack of trust in overall abilities.

Reason For Not Being Confident in State of Hawaii's Response to a Natural Disaster



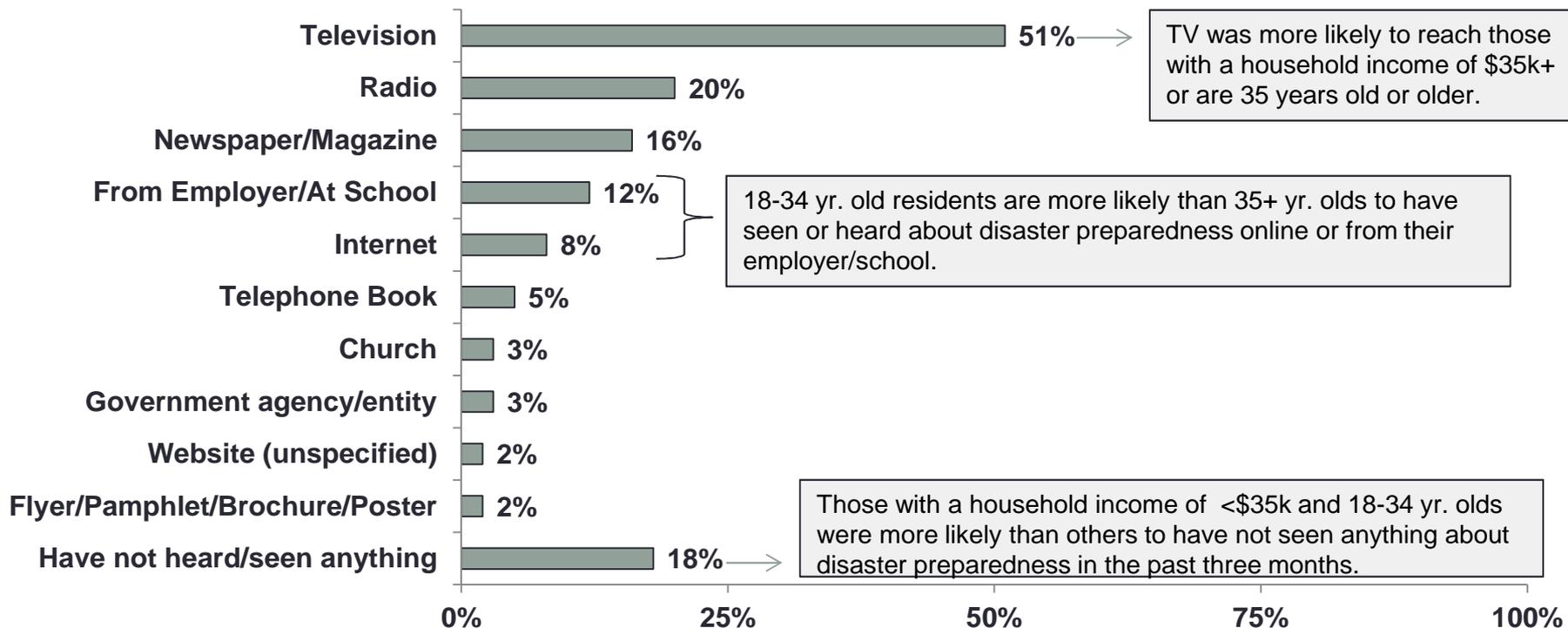
Q11. You gave a (INSERT 1-7 RATING OF NATURAL/PUBLIC HEALTH DISASTER) to agencies in the State of Hawaii responding to a disaster. Why are you not very confident about this? (n=689)

# DISASTER PREPAREDNESS

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# TV is the most common source for disaster preparedness information.

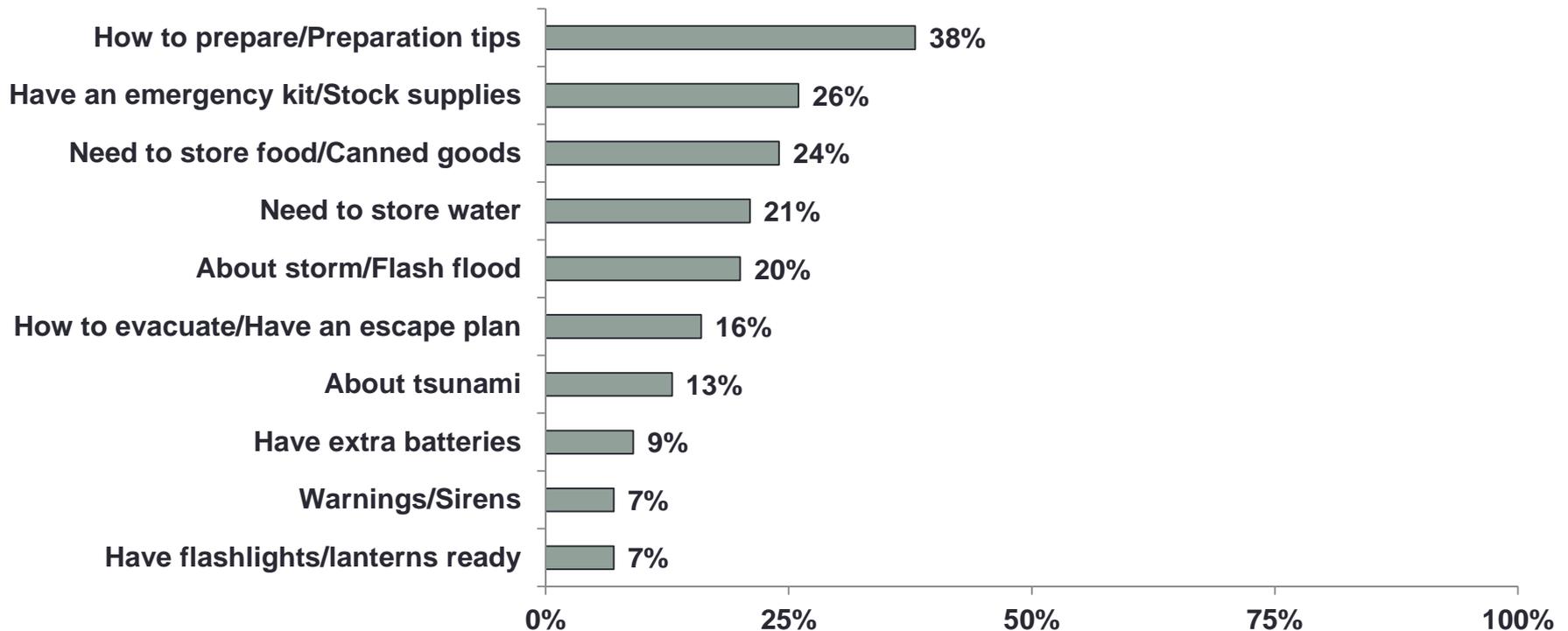
Where Have Seen or Heard Information About Disaster Preparedness  
Top 10 Mentions



Q1a. Thinking just of the past few months, where have you heard or seen, if at all, any information about how to prepare for a disaster?  
(n=1027)

# Information recalled was about how to prepare for a disaster.

Information Heard or Saw  
Top 10 Mentions

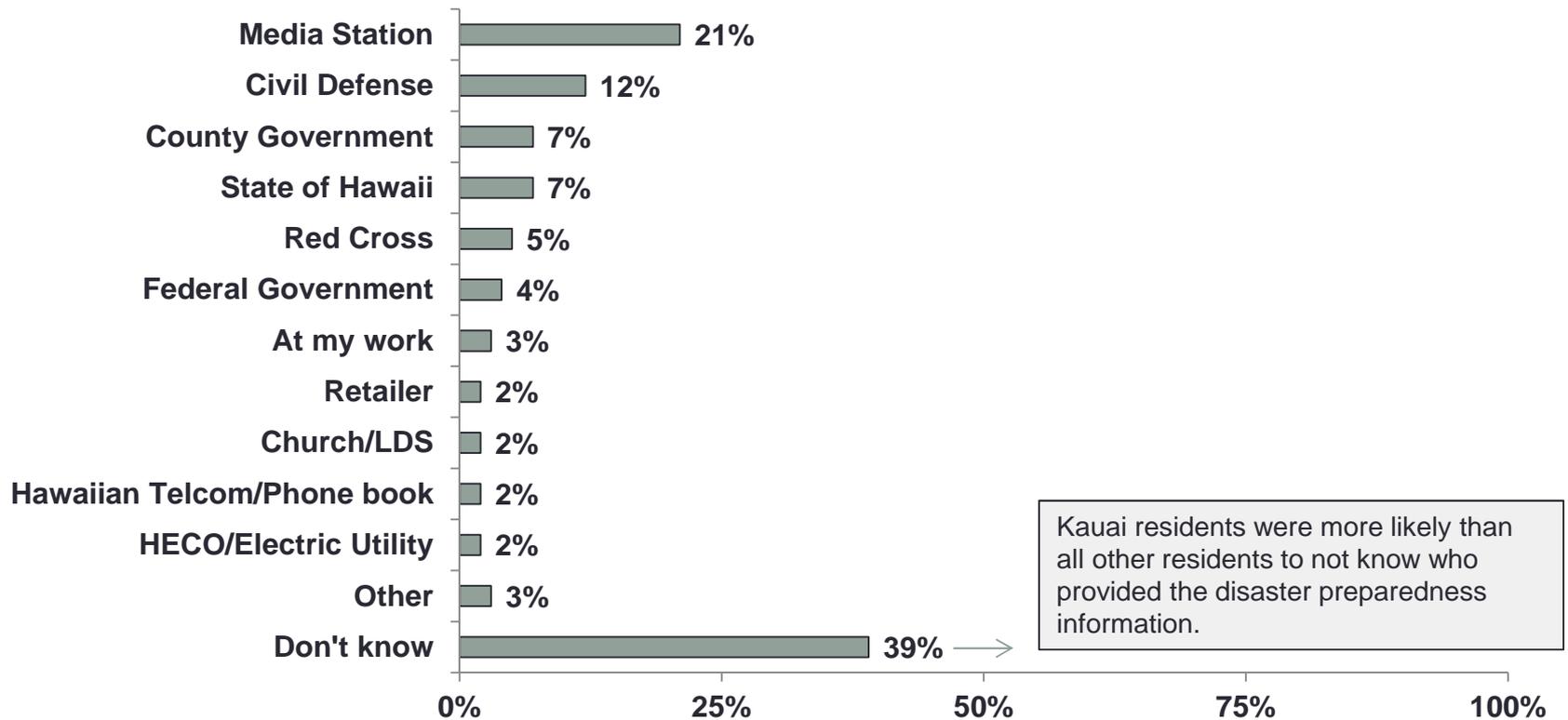


Q1b. What was the information that you heard or saw?

(n=790)

# The media and government were credited for disaster preparedness information.

Organization Responsible for Information Seen or Heard

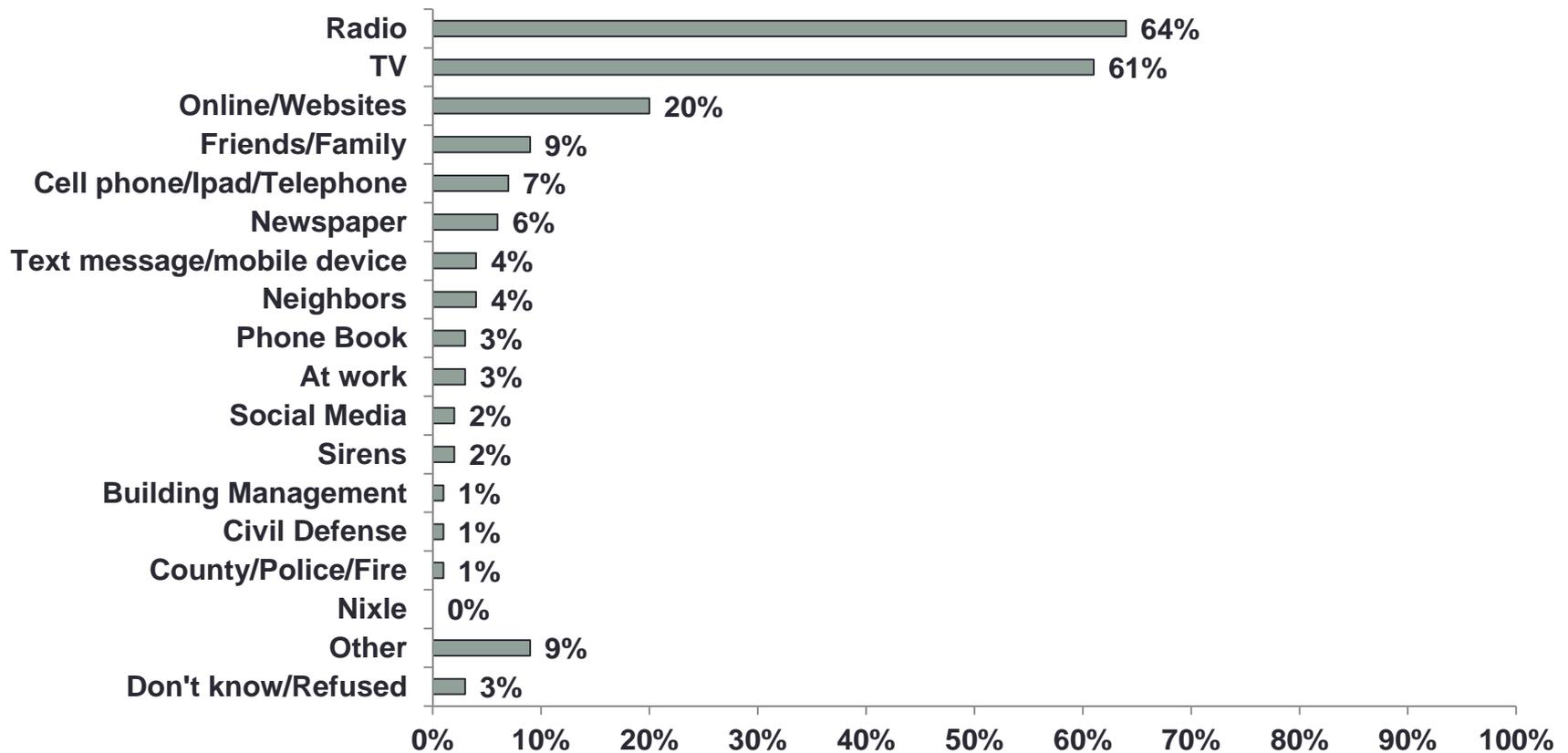


Q1c. Which organization was responsible for that information that you remember hearing or seeing?

(n=790)

# Radio and TV and most relied upon for disaster-related information.

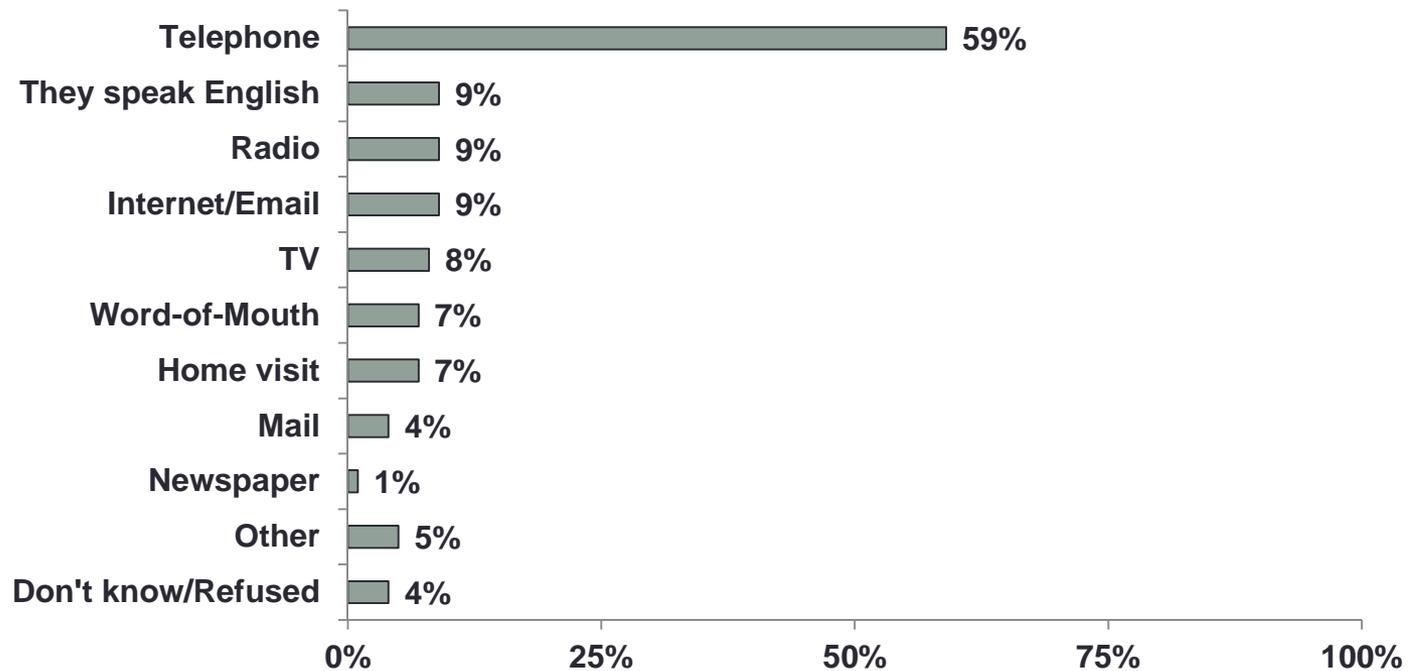
How to Currently Receive Disaster Information



Q6. How do you receive information about disasters including situation updates and instructions on what to do and where to go?  
(n=1027)

# Telephone calls are most desired for those who speak another language.

**Best Way to Reach Family Members Who Speak a Language Other Than English with Information about a Disaster**



Q14b. What is the best way to reach these family members with information about a disaster?

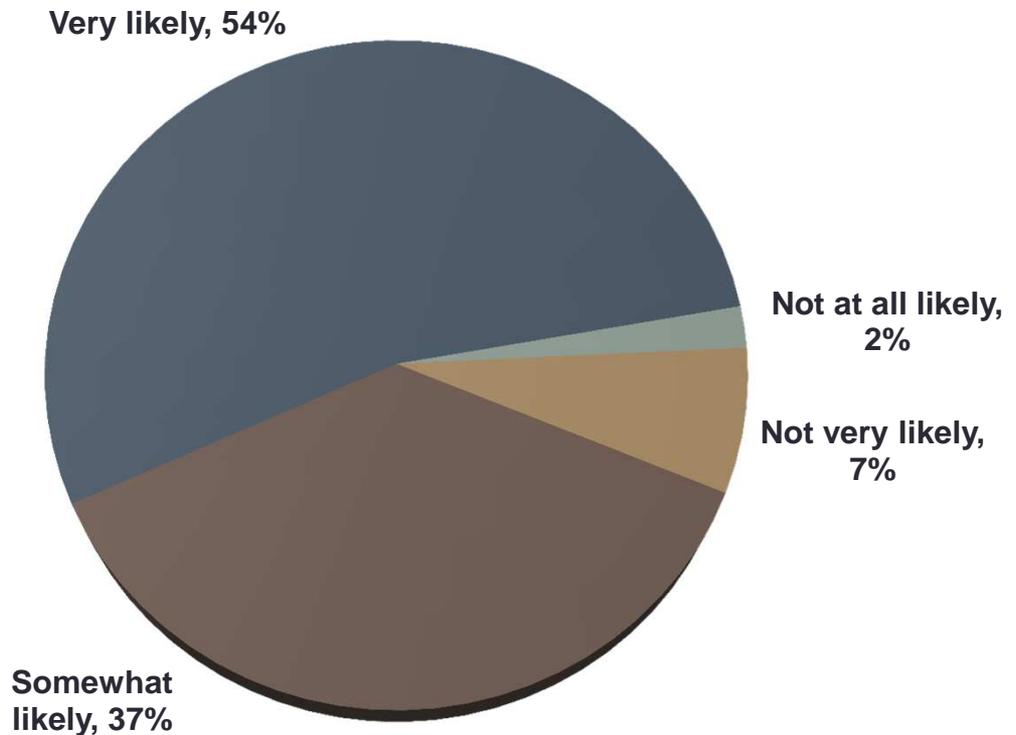
(n=239)

# Almost all residents are likely to prepare based on Guidelines

## Guidelines

- Maintain overall good health so that your body can fight off infection.
- Develop and share a family disaster plan
- Have enough food and supplies for about 7 days.
- Have a battery-operated radio and extra batteries.
- Become part of a group in your community that supports disaster preparedness

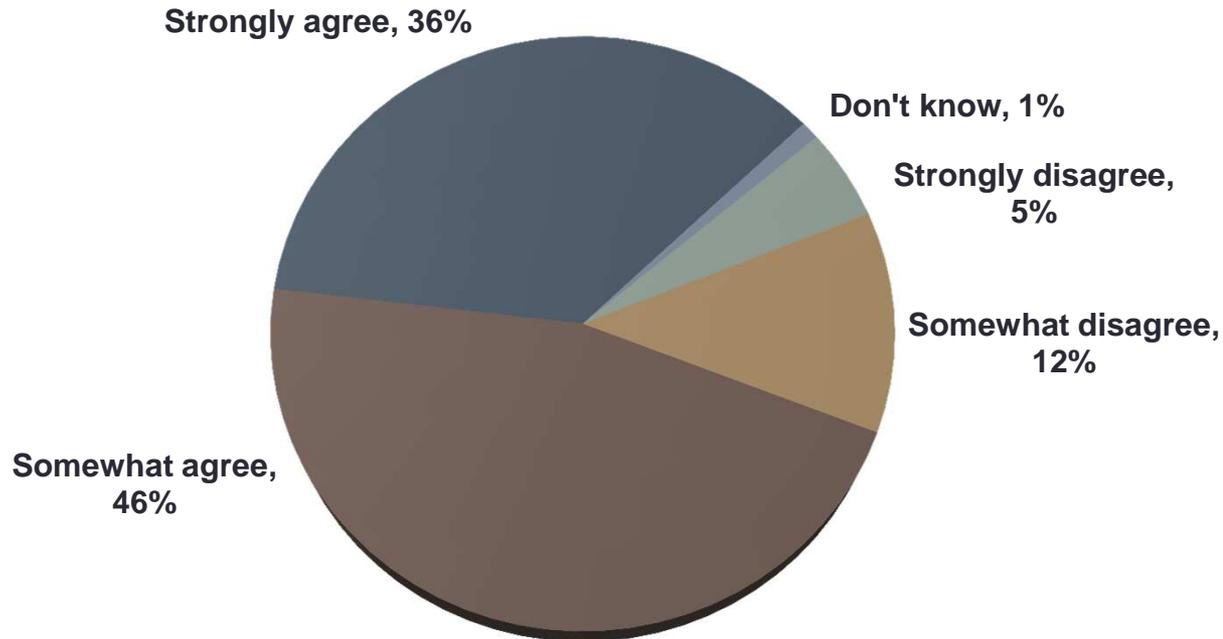
## Likelihood to Prepare Based on Guidelines



Q9. Now, how likely is it that you will actually prepare yourself and your household for a public disaster by doing these things? (n=1027)

# However, the majority believe that the government and organizations are responsible for their preparedness.

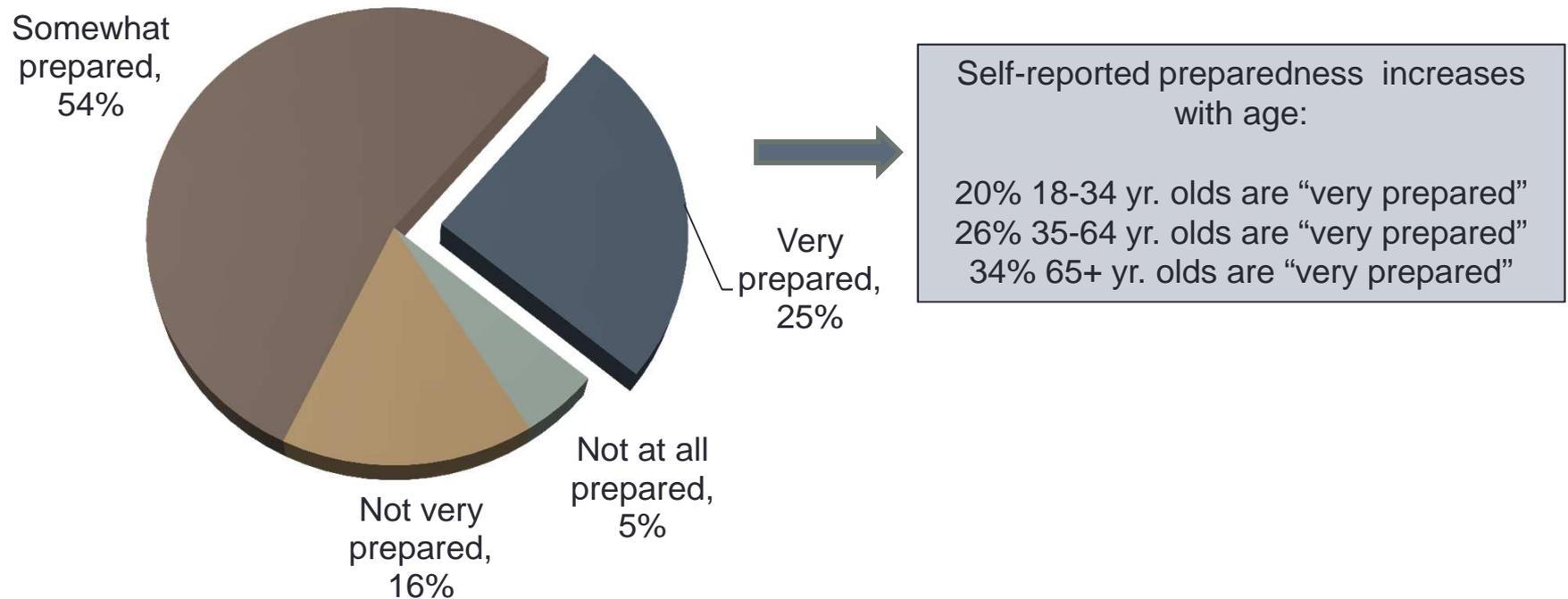
***Local governments, state government and community organizations are most responsible for getting individuals and families prepared for disaster***



Q13. Please tell me how much you agree or disagree with this statement: *Local governments, state government and community organizations are most responsible for getting individuals and families prepared for disaster.* Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with this statement? (n=1027)

# Only 25% of residents report being “very” prepared.

## Preparedness Self-Assessment

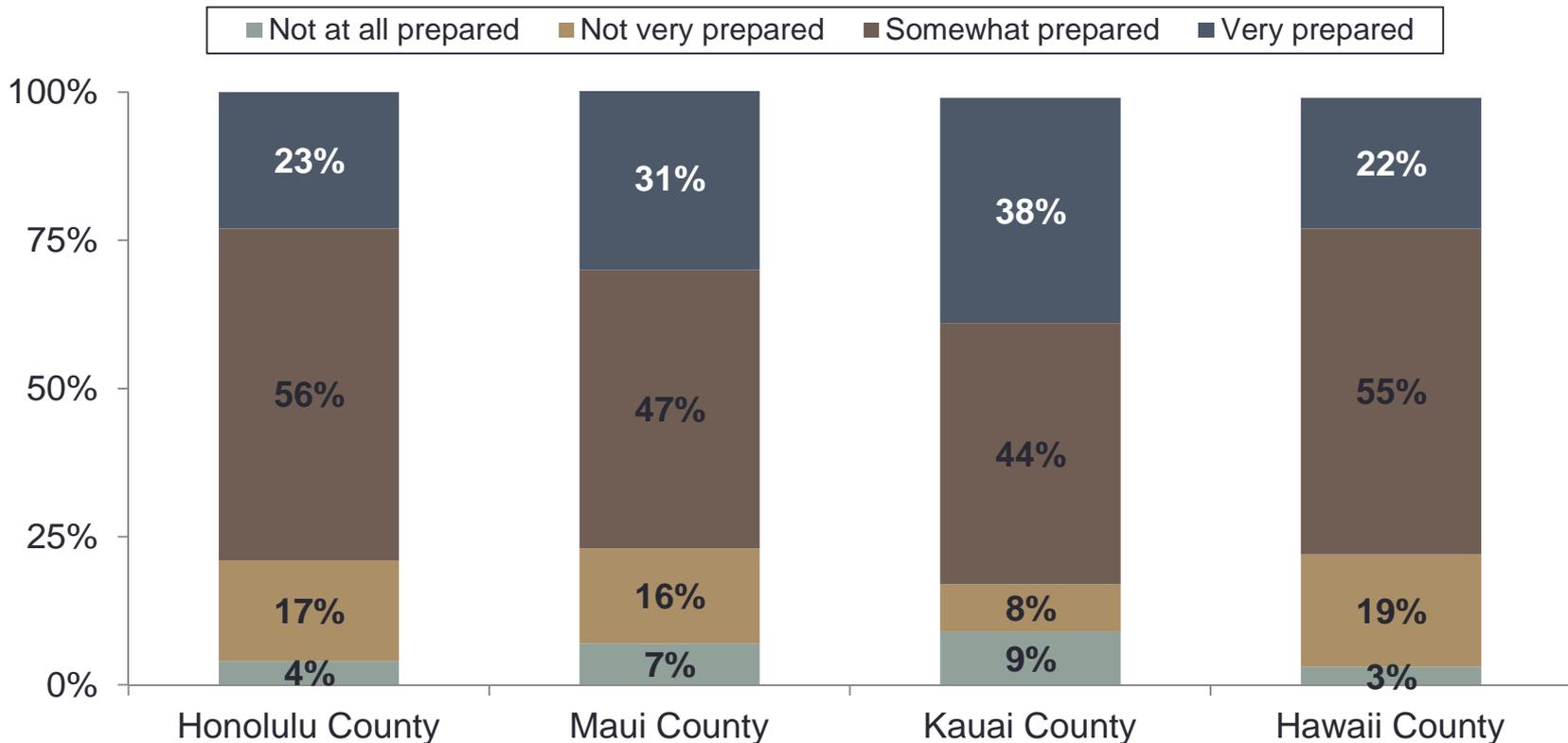


Q3. Overall, how prepared would you say your household is for disasters like those that I just mentioned?

(n=1027)

# Kauai residents are more likely to be “very” prepared compared to Oahu and Big Island residents.

## Preparedness Self-Assessment



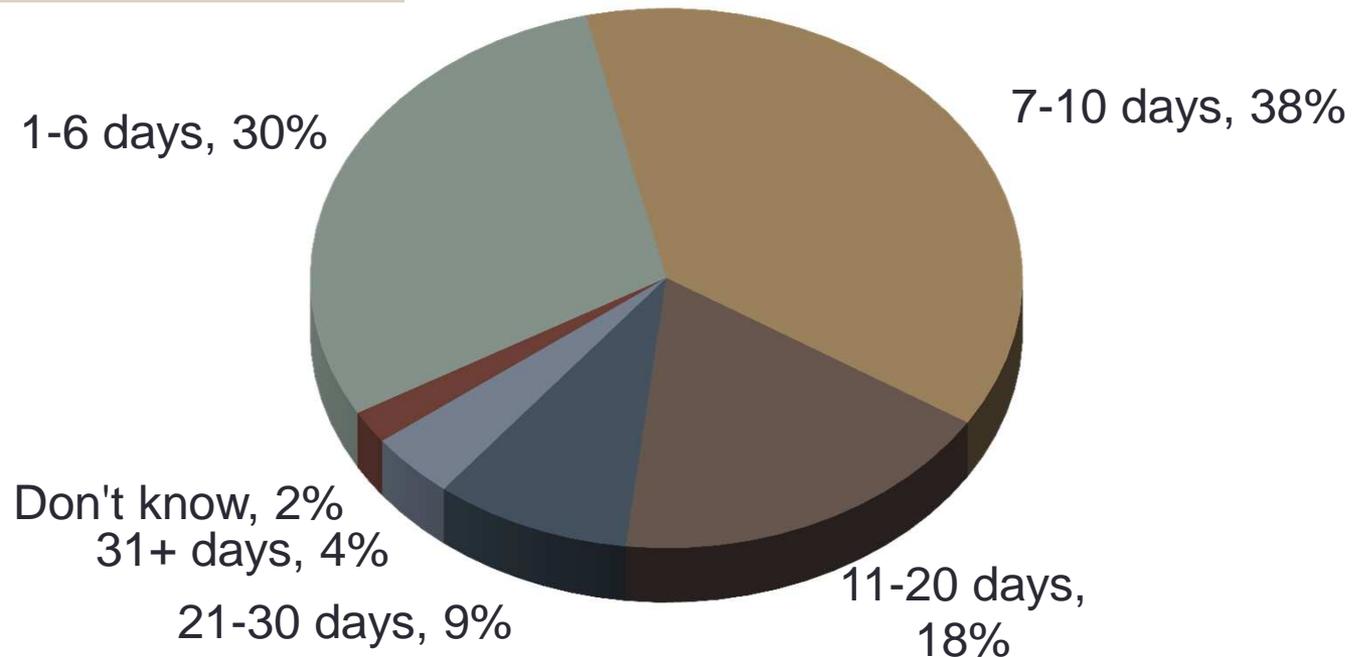
Q3. Overall, how prepared would you say your household is for disasters like those that I just mentioned?

(n=1027)

# Three out of ten residents report they do not have food/water supplies to last them 7 days.

## Total # of Days Current Food/Water Supplies Would Last

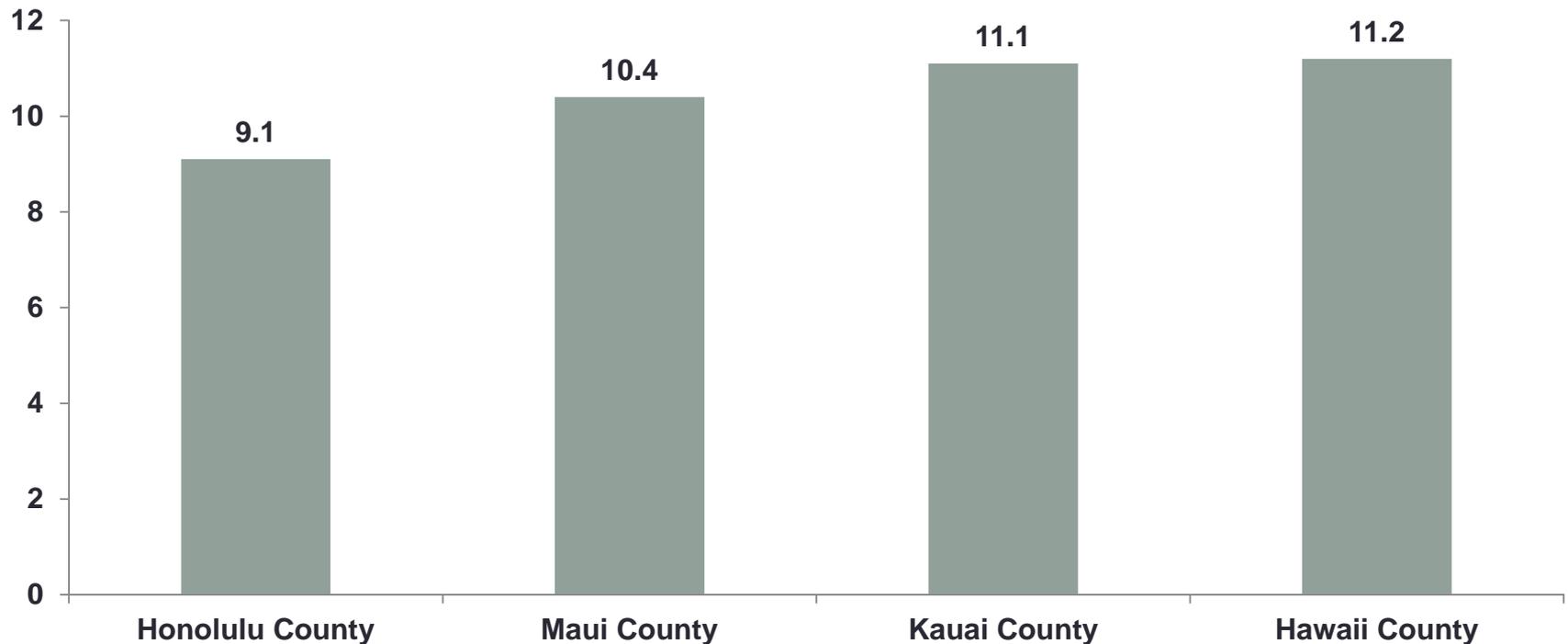
Average # Days Supplies Would Last: 10



Q5c. If a major disaster occurred and there was no electricity or running water, or if you were required to stay in your home for public health reasons, how many days do you believe your home food and water supplies would last for you and your household members?  
(n=1027)

# On average, Oahu residents have fewer food/water stocks on hand than neighbor island residents.

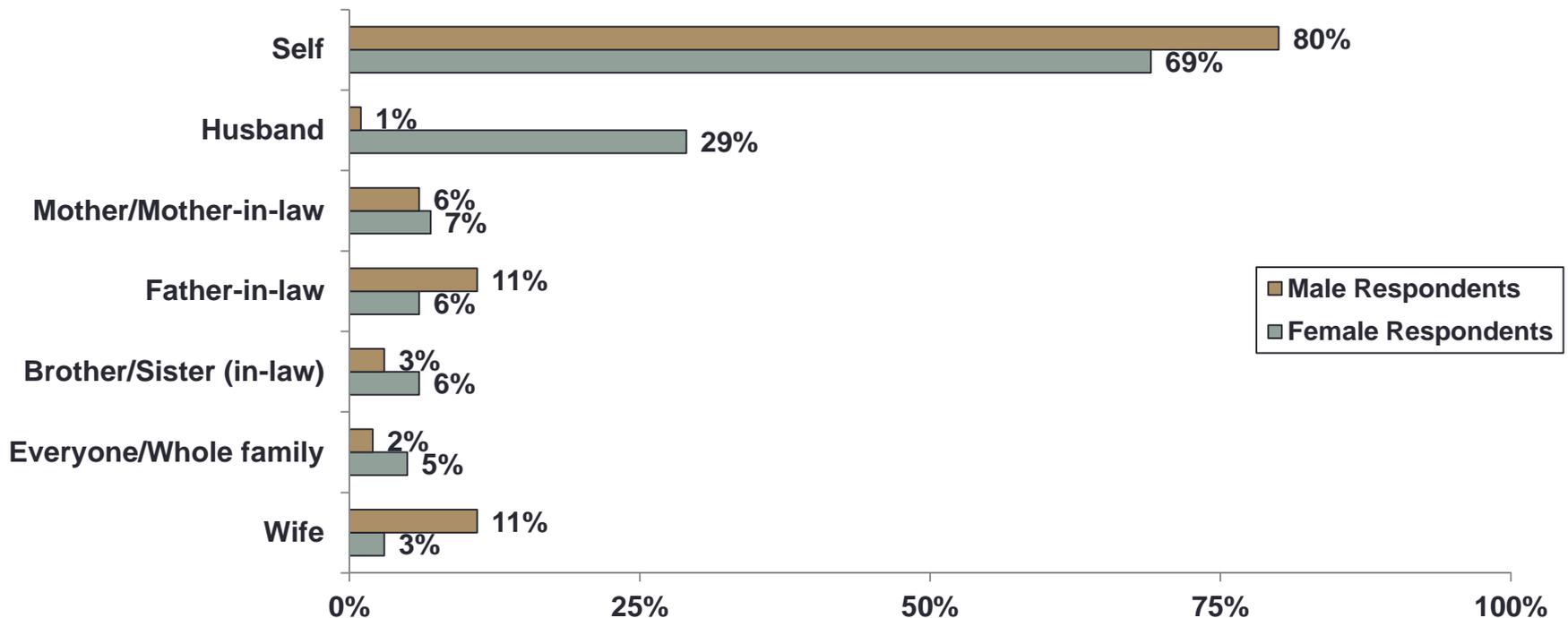
**Average Number of Days Food/Water Would Last**



Q5c. If a major disaster occurred and there was no electricity or running water, or if you were required to stay in your home for public health reasons, how many days do you believe your home food and water supplies would last for you and your household members?  
(n=1027)

# Men are more likely than women to be the person to prepare their household for a disaster.

**Top 7 People Most Likely to Prepare Household**

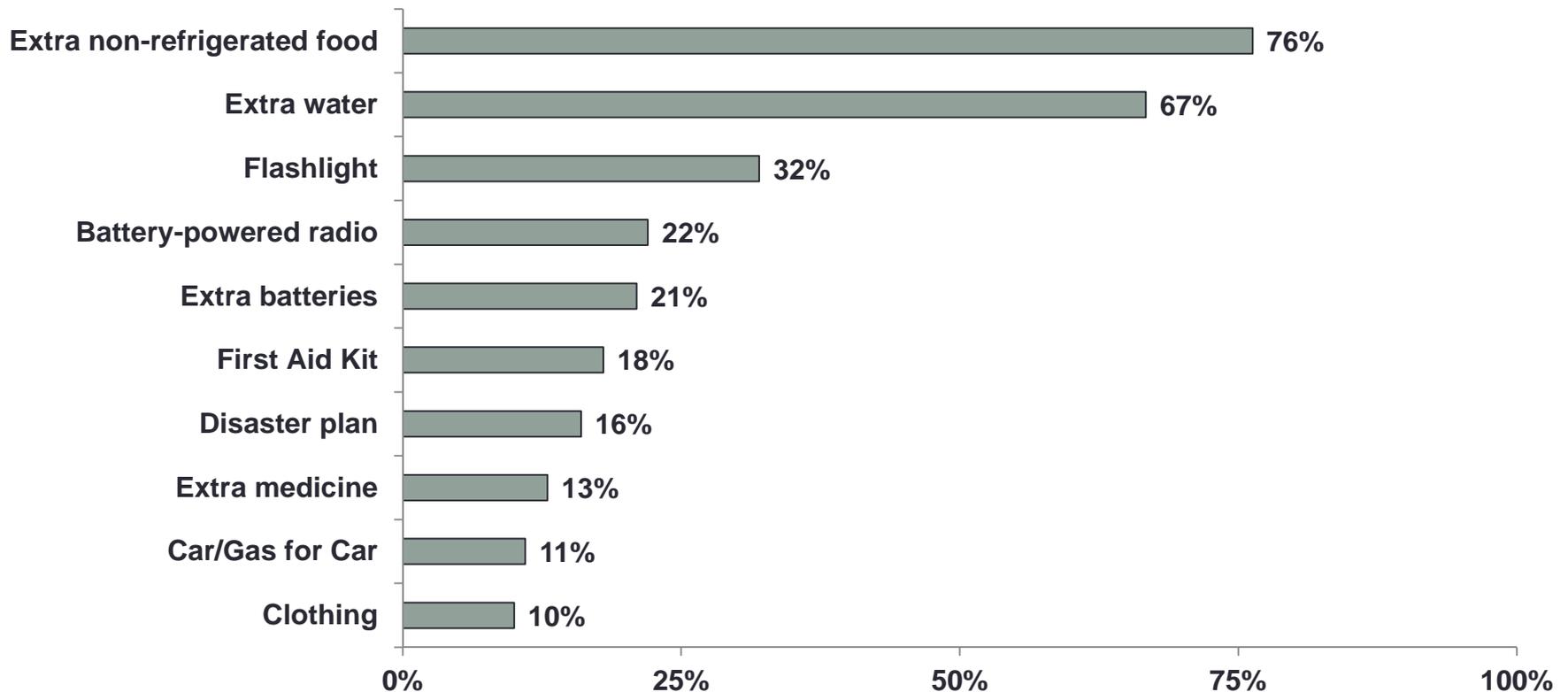


Q3A. (IF Q3=3-4 READ: “Who is primarily responsible for preparing”) (IF Q3=1-2,5 READ “Among your household members, who would you expect to be the person to prepare”) your household for a potential disaster? (If necessary:) What is their relationship to you?

(n=1027)

# Food and water are top-of-mind in terms of disaster preparedness.

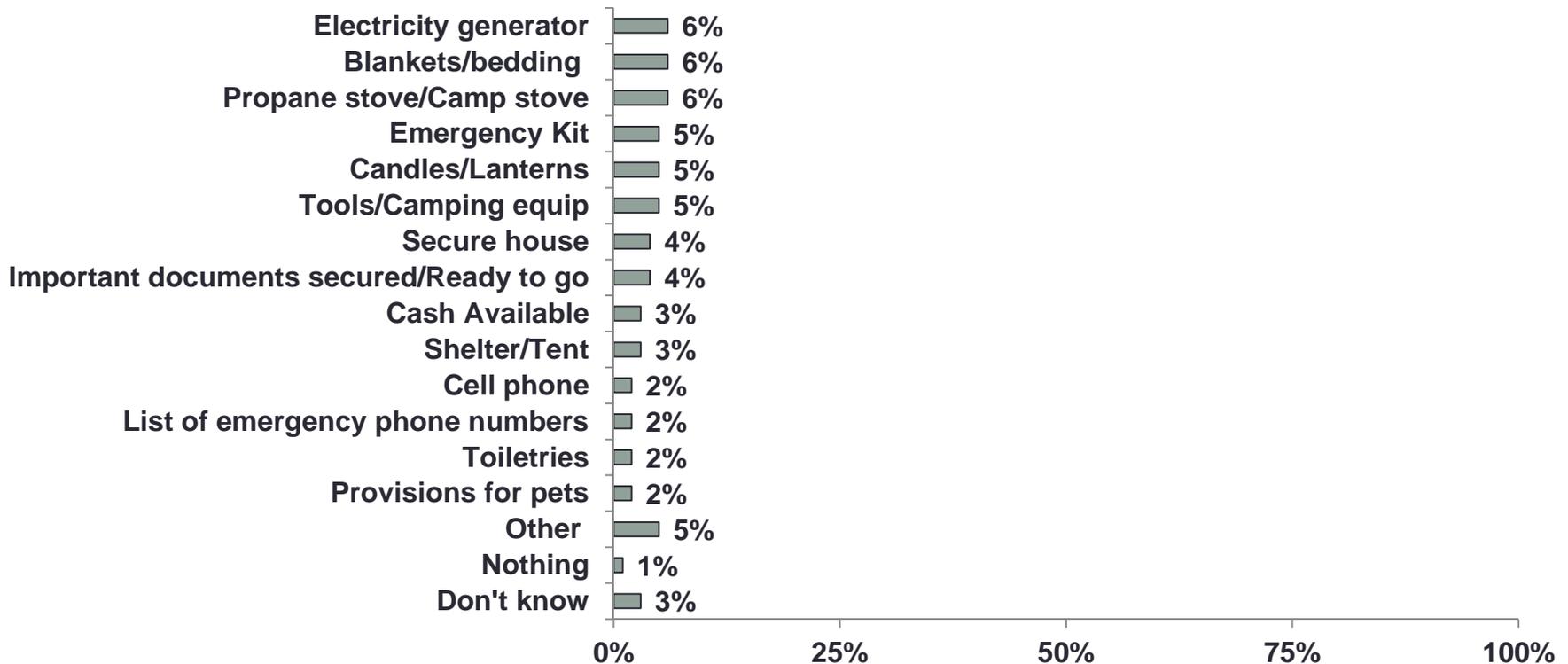
What Should Be in Place to Prepare



Q4. To your best ability, please tell me what you should do and/or have in place to be prepared for a disaster? (n=1027)

# Other items considered include more comfort and convenience-related items.

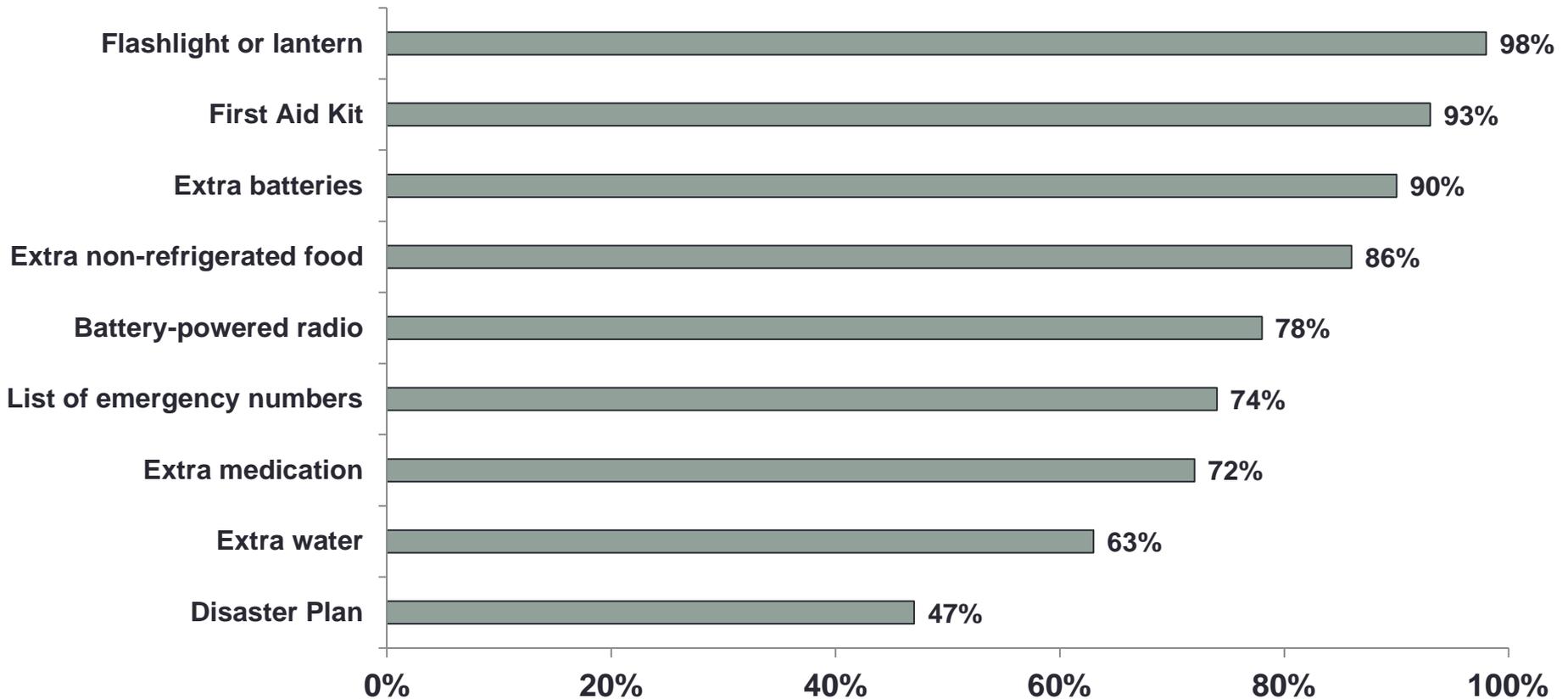
What Should Be in Place to Prepare



Q4. To your best ability, please tell me what you should do and/or have in place to be prepared for a disaster? (n=1027)

# Despite their inability to recall specific items necessary for preparedness, many have what is needed.

What Households Currently Have in Place



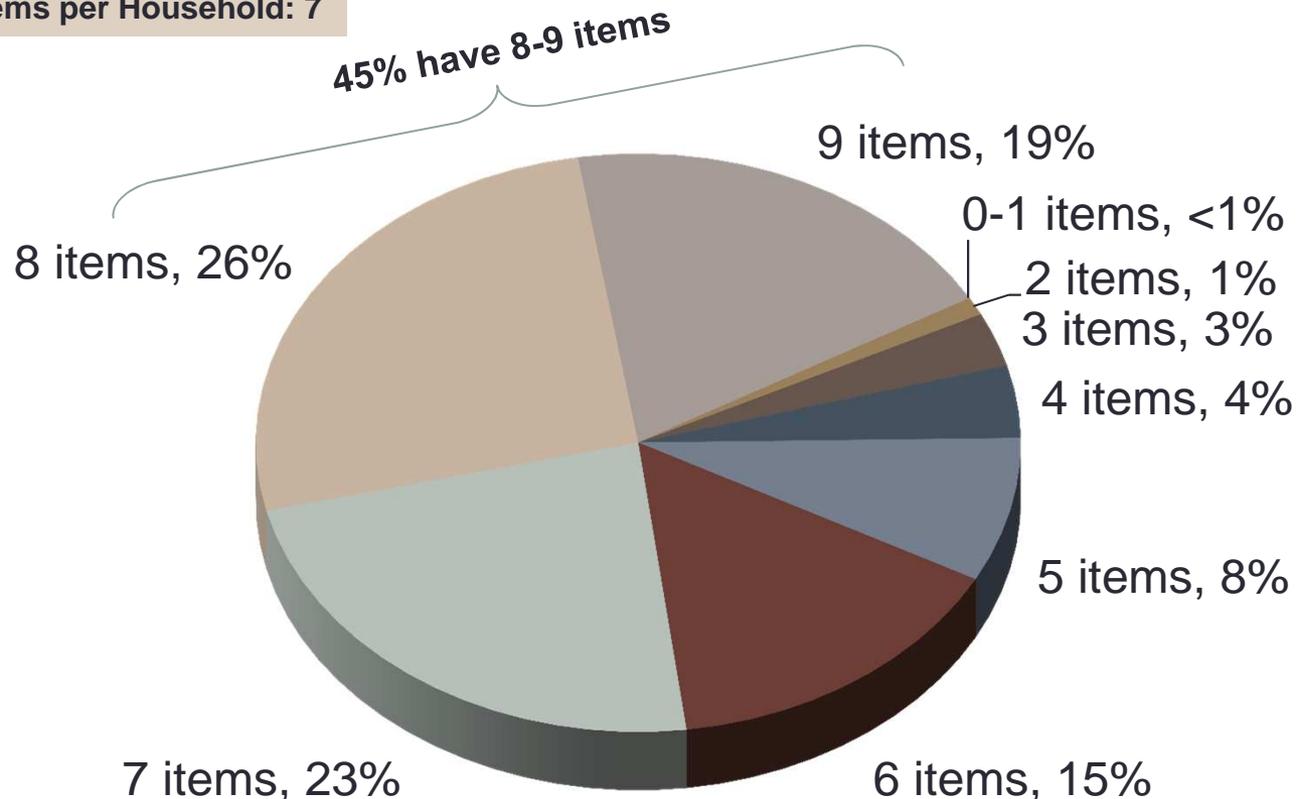
Q5a. Do you currently have (INSERT ITEM) at home?

(n=1027)

# Almost half of residents have almost all nine recommended items for preparedness.

## Total Items Currently at Home

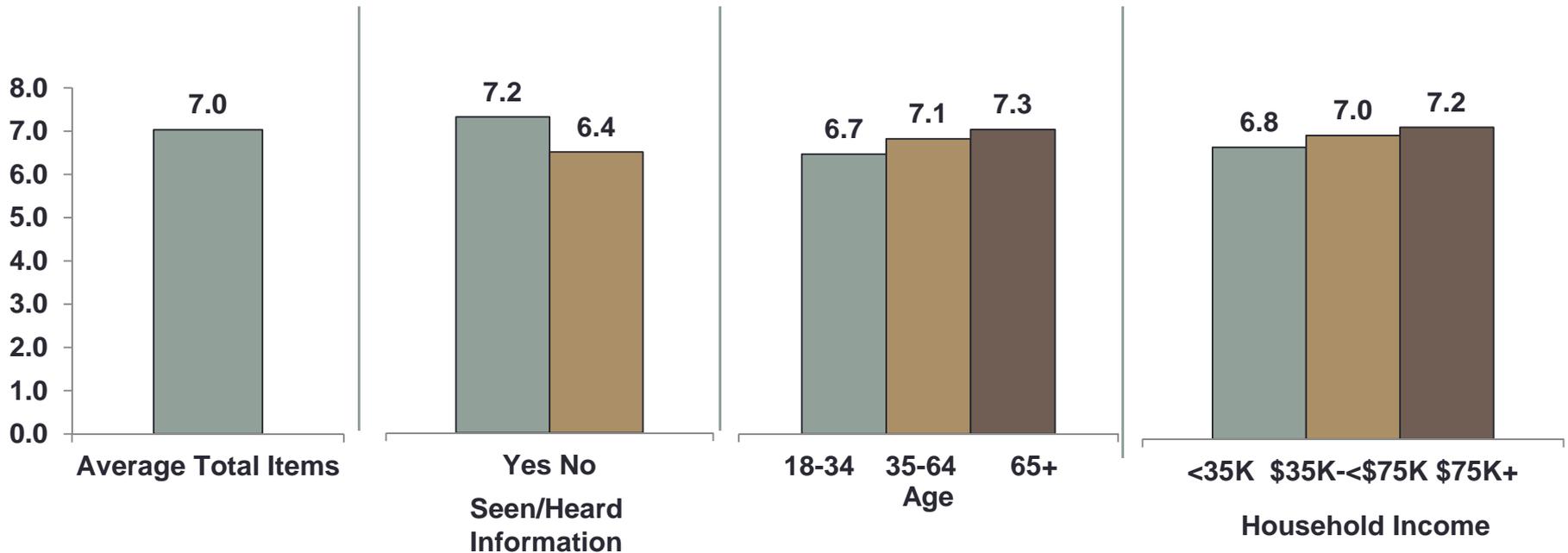
Average # of Items per Household: 7



Q5d. Total items currently have at home (based on Q5a-Q5i)?

(n=1027)

# Those who recall seeing information about preparedness, older residents, and higher income households are more prepared than others



Q5d. Total items currently have at home (based on Q5a-Q5i)?

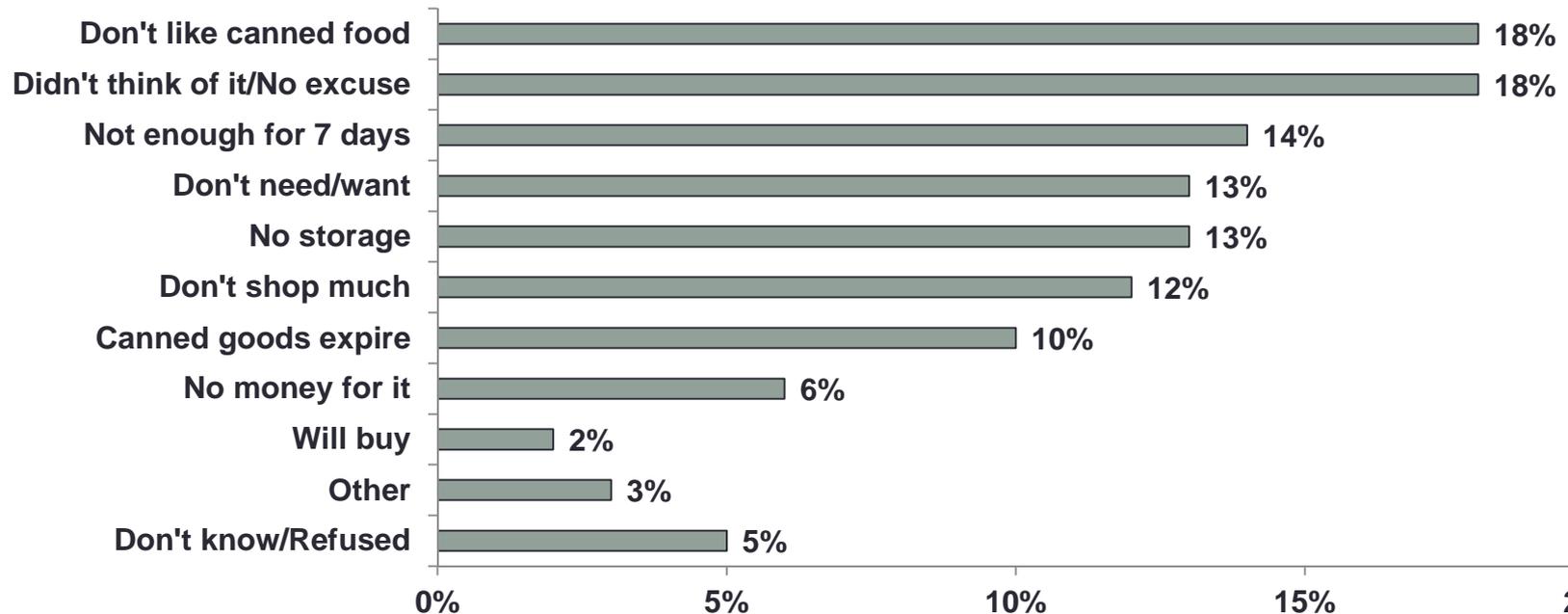
(n=1027)

# A common reason for not stocking up on canned goods is simply not liking canned goods.

## Do Not Have 7 Days of Extra Food



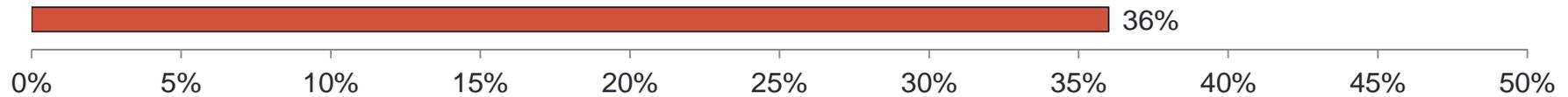
## Reasons for Not Having Extra Food



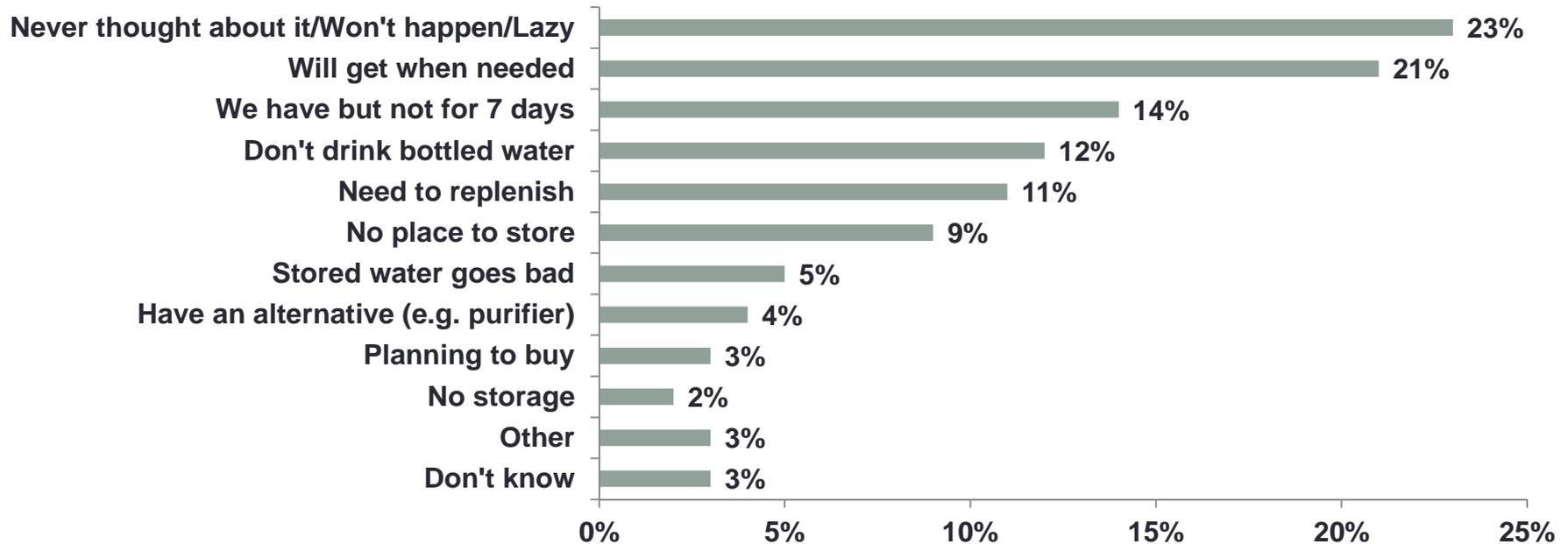
Q5b. Why don't you currently have **extra food that does not require refrigeration like canned goods at home?** (n=144)

# A lack of urgency is felt among those who do not have water stored.

## Do Not Have 7 Days of Extra Water



## Reasons for Not Having Extra Water

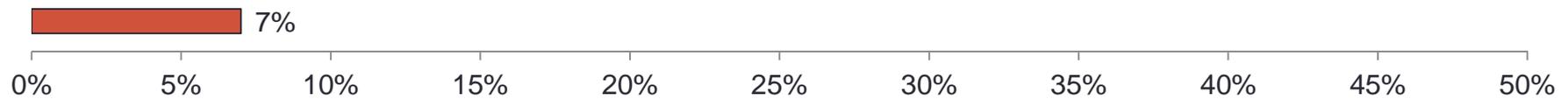


Q5b. Why don't you currently have extra water to last 7 days at home?

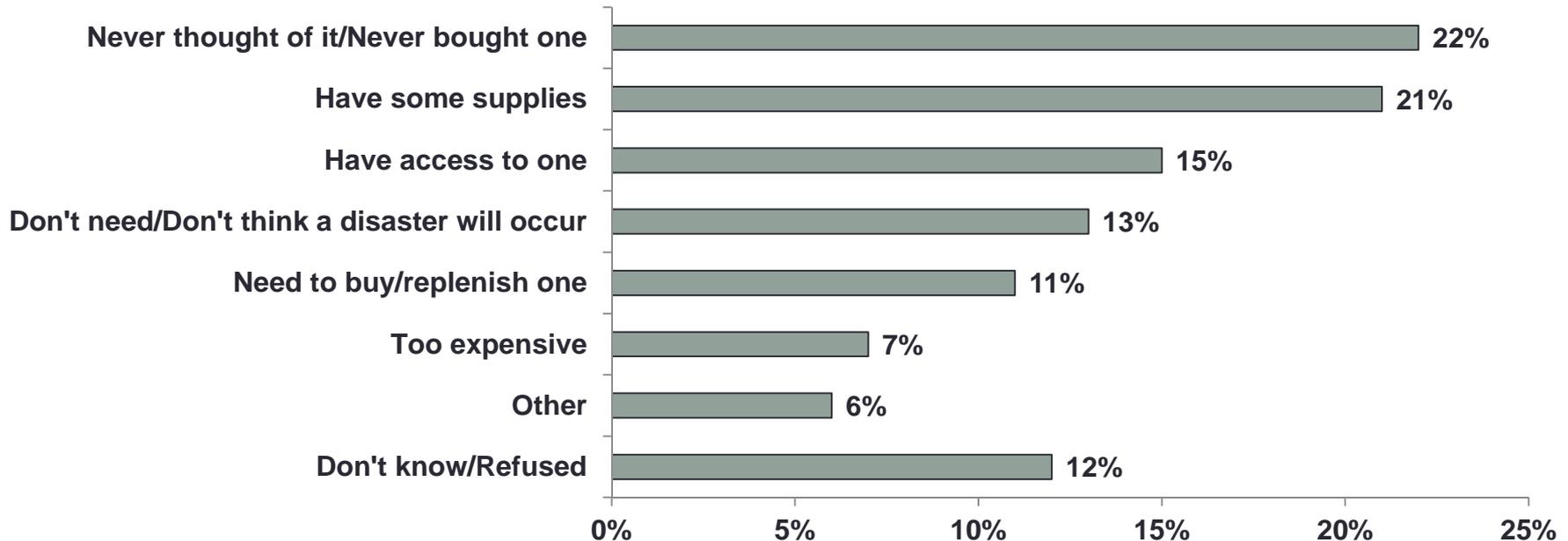
(n=348)

# A first aid kit is not important to those who do not already have one.

## Do Not Have First Aid Kit



## Reasons for Not Having a First Aid Kit



Q5b. Why don't you currently have a first aid kit or components of a kit at home?

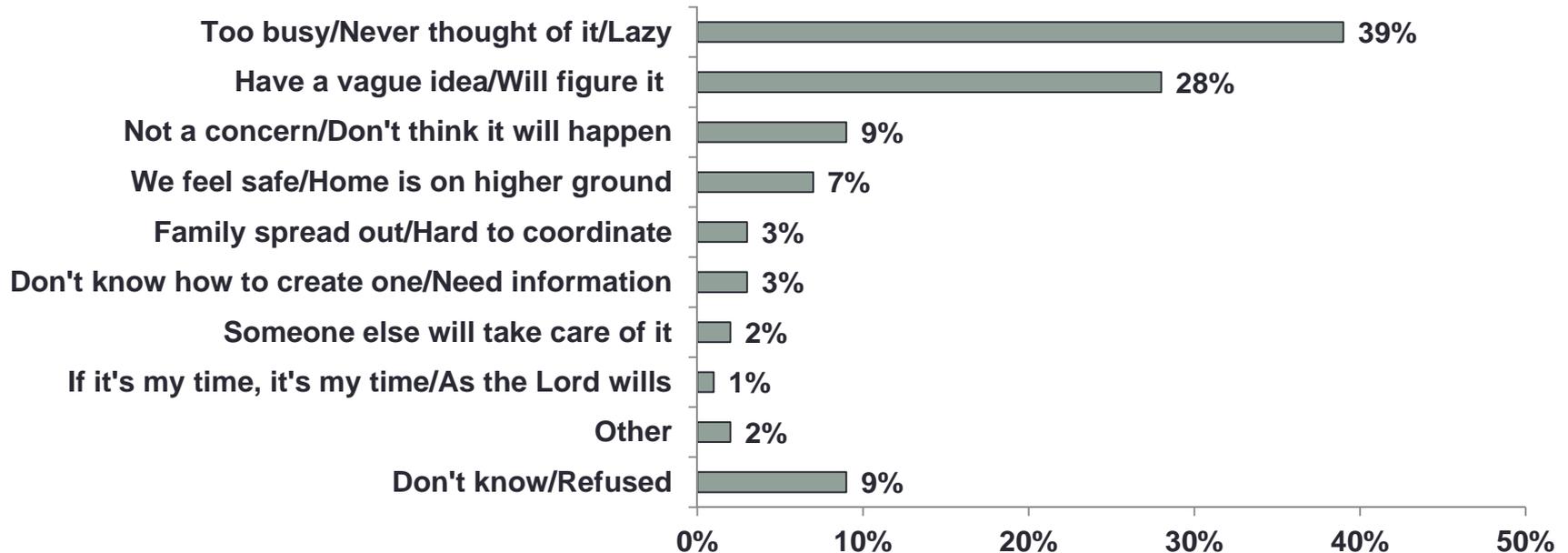
(n=85)

# Again, a lack of urgency or interest keeps several from preparing a disaster plan.

## Do Not Have a Disaster Plan



## Reasons for Not Having a Disaster Plan



Q5b. Why don't you currently have a disaster plan?

(n=499)

# Conclusions

- Continue communicating and educating about how to prepare for a disaster.
  - Those who have heard or seen information about how to prepare are more prepared for a disaster than others.
- The 18-34 yr. old population and lower income households (<\$35,000 household income per year) need to be specifically targeted because:
  - Traditional media (TV and radio) are not as popular among these segments;
  - They were more likely to have not read or seen anything about disaster preparedness in the past few months; and,
  - They are the less prepared for a disaster.
- Educate and communicate with 18-34 yr. olds through work/school or the internet.
- Lower income households will be more challenging to educate and reach as they are less likely to have heard or seen information through any of the media outlets.
- Communicate about the importance of being prepared in terms of household and personal safety and well-being, as these are top concerns.
- Educate residents of how the State is prepared to increase confidence in responding to disasters.
- Delve deeper into exact expectations residents have on the State and community organizations in terms of helping them be prepared.



# WARD RESEARCH, INC.

## PUBLIC DISASTER PREPAREDNESS POST-TEST WR6002

Record Number \_\_\_\_\_(v01)

Interviewer Name \_\_\_\_\_ Time Ended \_\_\_\_\_

Date \_\_\_\_\_ I.D.# \_\_\_\_\_(v02) Time Started \_\_\_\_\_

Respondent Name \_\_\_\_\_ Total Minutes \_\_\_\_\_(v03)

Respondent Phone Number - (v04)

ISLAND:

Oahu.....	1
Maui .....	2
Big Island.....	3
Kauai .....	4

\*\*\*\*\*

- Sample.      Sample Type
1. Landline sample
  2. Cell sample

Hello, I'm ( \_\_\_\_\_ ) from Ward Research, a professional market research company in Honolulu. We're conducting a survey on behalf of the city and county of Honolulu among Oahu residents. The survey is about disaster preparedness and will take approximately 15 minutes. First, let me verify that you are a Hawaii resident over 18 years of age and living on Oahu? **(IF NOT, ASK TO SPEAK TO HEAD OF THE HOUSEHOLD OR TERMINATE.)**

Cell1a. First of all, is this a landline or a cell phone that we have called? **(IF REFUSED SAY: "WE ARE ONLY ASKING BECAUSE WE ARE TRYING TO ACCOUNT FOR HOUSEHOLDS THAT MAY ONLY USE CELL PHONES. ONCE AGAIN, ALL OF YOUR RESPONSES ARE CONFIDENTIAL AND THIS IS FOR RESEARCH ONLY AND IS NOT SALES-RELATED)**

- |   |                    |
|---|--------------------|
| 1 | Landline (n=750)   |
| 2 | Cell phone (n=250) |
| 9 | Refused            |

**(IF CELL1A=9 TERMINATE)**

**(IF S2=1-5 CONTINUE, OTHERWISE THANK AND TERMINATE)**

Cell2. Do you also have a **(IF CELL1A=1 “PERSONAL CELL PHONE”; IF CELL1A=2 “LANDLINE AT HOME”)**?

- 1 Yes
- 2 No
- 3 Refused

Cell3. Do you currently use an Internet service at home?

- Yes..... 1
- No..... 2
- Refused.....3

Q1a. As I stated earlier, this survey is about disaster preparedness. Thinking just of the past few months, where have you heard or seen, if at all, any information about how to prepare for a disaster? **(MULTIPLE RESPONSE; DO NOT READ LIST; ALPHA ORDER)**

- 1 Newspaper/Magazine
- 2 Television
- 3 Radio
- 4 Website (GENERAL MENTION/UNSPECIFIED)
- 5 Facebook
- 6 Twitter
- 7 Text message
- 8 Internet
- 9 Other (Specify)
- 10 Have not heard or seen anything
- 11 Don't know/refused

**(IF Q1A=1-7 ASK Q1B; OTHERWISE SKIP TO Q2)**

Q1b. What was the information that you heard or saw? **(ASK OPEN ENDED; PROBE)**

Q2. Have you heard or seen any information or advertising about the website Get Ready Hawaii dot org?

- 1 Yes
- 2 No
- 3 Don't know/refused

Q2b. What specifically do you remember from the advertising or information you saw about Get Ready Hawaii dot org? **(ASK OPEN-END; PROBE FOR SPECIFICS)**

Q3. Which organization was responsible for that information that you remember hearing or seeing? **(MULTIPLE RESPONSE; DO NOT READ LIST; ALPHA ORDER)**

- 1 Hawaii Department of Health
- 2 State of Hawaii
- 3 County government (Honolulu, Maui, Kauai, or Hawaii)
- 4 Red Cross
- 5 Civil Defense
- 6 Other (Specify)
- 7 Don't know/refused

Q4. When you think of disasters that may impact your community, which ones concern you the most? **(MULTIPLE RESPONSE; DO NOT READ LIST; ALPHA ORDER)**

- 1 Hurricane
- 2 Tsunami
- 3 Earthquake
- 4 Pandemic Flu
- 5 Terrorism
- 6 Fire
- 7 Flood
- 8 Riot
- 9 Chemical spill (oil spill, gas leak, etc.)
- 10 Transportation Accident
- 11 Natural Disaster (GENERAL MENTION)
- 12 Biological Disaster (GENERAL MENTION)
- 13 Chemical Disaster (GENERAL MENTION)
- 14 Radiological Disaster (GENERAL MENTION)
- 15 Other (specify)
- 16 Don't know/Refused

Q5. I'm going to read you a list of some different disasters. For each one, please tell me how concerned you are about preparing for them.

How concerned are you about **(INSERT A-D)? (ROTATE; READ/REPEAT SCALE 1-4)**

- A. Hurricanes
- B. Tsunamis
- C. Flash Flood
- D. Pandemic Flu

Very Concerned ..... 4  
Somewhat Concerned ..... 3  
Not very Concerned..... 2  
Not at all Concerned..... 1  
Don't know **(DO NOT READ)** ..... 9

Q6. Overall, how prepared would you say your household is for disasters like those that I just mentioned?

- 1 Very prepared
- 2 Somewhat prepared

- 3 Not very prepared
- 4 Not at all prepared
- 5 Don't know

Q3A.

Q7. Do you currently have **(INSERT A-L)** at home? **(ROTATE; READ LIST; MULTIPLE RESPONSE)**

- A. Extra food that does not require refrigeration like canned food to last 3 days
- B. One gallon of water per person per day to last 3 days
- C. A First Aid Kit – or components of a kit
- D. Wrench or pliers
- E. Can opener
- F. Local map
- G. A Battery-powered or hand-crank radio
- H. Flashlight or lantern
- I. Extra batteries that fit flashlight or radio
- J. Whistle
- K. Dust masks
- L. Moist towelettes

- 1 Yes
- 2 No
- 3 Don't know/refused

Q8. Now, how likely is it that you will actually prepare yourself and your household for a disaster by doing these things? **(READ 1-4; READ LIST AGAIN IF NECESSARY)**

To prepare for a public disaster, it is advisable to.....

- A. Develop a disaster plan
- B. Pack a disaster kit that contains all the items that I mentioned earlier like Extra food, water, a First Aid Kit, Wrench or pliers, a Battery-powered, Dust masks and things like that
- C. Stay informed about disaster threats in your area
- D. Help others in the community prepare for disaster

- Very likely ..... 4
- Somewhat likely ..... 3
- Not very likely 2
- Not at all likely 1
- It depends **(DO NOT READ)** ..... 5
- Don't know **(DO NOT READ)** ..... 9

(v)

Q9. How likely are you to **(INSERT A-B; ROTATE)** in the next 12 months?

- A. Pack a disaster kit (IF Q9B<3)

B. Develop a disaster plan (IF Q9A<3)

- Very likely ..... 4
- Somewhat likely ..... 3
- Not very likely ..... 2
- Not at all likely ..... 1
- It depends **(DO NOT READ)** ..... 5
- Don't know **(DO NOT READ)** ..... 9

(v)

**(IF Q9A/B<3 ASK Q9B; OTHERWISE SKIP TO Q10)**

Q9B. Why are you not very likely to (IF 9A<3: “Pack a disaster kit”) or (IF 9B<3: “develop a disaster plan”) in the next 12 months? **(ASK OPEN ENDED; PROBE FOR SPECIFICS)**

Q10. I'm going to read you types of emergencies or disasters that could occur and I would like you to tell me *how confident* you are that government agencies in the State of Hawaii would be able to respond effectively to each. Please use the 10-point scale, with 10= extremely confident in the State's ability to respond to a threat and 1=not at all confident in the State. First... **(READ LIST, ROTATE; ENTER 1-10)**

- A) A terrorist attack .....
- B) A natural disaster such as a hurricane or tsunami .....
- C) A chemical disaster like an oil spill or gas leak .....
- D) A public health disaster like a flu pandemic or disease outbreak .....

**(IF Q10B or D<8, ASK: )**

Q13. Please tell me how much you agree or disagree with this statement:

*Local governments, state government and community organizations are most responsible for getting individuals and families prepared for disaster.*

Do you **(READ 1-4)** with this statement?

- 1 Strongly agree
- 2 Somewhat agree
- 3 Somewhat disagree
- 4 Strongly disagree

Now I have just a few questions for classification purposes...

D1. How many children under the age of 18 years old are currently living in your household?  
**(INSERT NUMBER 0-99; 99=DON'T KNOW/REFUSED)**

D1a. Is there anyone with a disability that lives in your household?

- 1 Yes
- 2 No
- 3 Don't know/refused

D2. What is your ethnic identification? **(IF MIXED, ASK)** Would that include Hawaiian?

- Caucasian ..... 1
- Chinese ..... 2
- Filipino ..... 3
- Hawaiian/part-Hawaiian ..... 4
- Japanese ..... 5
- mixed ..... 6
- other ..... 8 **(CONTINUE)**
- Don't know / Refused (DO NOT READ) ..... 9

**(IF D2=8 ASK D2A)**

D2A. (OTHER ETHNIC)	
Korean .....	1
African American .....	2
Native American .....	3
Samoan .....	4
Tongan .....	5
Micronesian .....	6
Vietnamese .....	7
Marshallese .....	8
Asian Indian .....	9
Other .....	10

D3. What was your age on your last birthday? (99 = refused)



D4. What was your household income for 2010, before taxes: **(READ LIST)**

- under \$25,000 ..... 1
- \$25,000 - but under \$35,000 ..... 2
- \$35,000 - but under \$50,000 ..... 3
- \$50,000 - but under \$75,000 ..... 4
- \$75,000 - but under \$100,000 ..... 5
- \$100,000 and above ..... 6
- refused **(DO NOT READ)** ..... 9

D5. What is your home zip code? **[RECORD NUMBER 96001-96900]**  
REF

D6. How many years have you lived in Hawaii?

- less than 2 years ..... 1
- 2 - less than 5 years ..... 2
- 5 - less than 10 years ..... 3
- 10 or more years ..... 4
- born and raised in Hawaii ..... 5
- don't know/refused **(DO NOT READ)** ..... 9

D7. **(RECORD ONLY, DO NOT ASK)** Gender:

- male ..... 1
- female ..... 2

**In the event my supervisor wants to verify this interview, may I have your first name please? (RECORD).**

**That was my last question. Thank you very much for your help in completing this survey.**

## Annex D – Post-Pilot Assessment Report

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# HAWAII DISASTER PREPAREDNESS: POST- CAMPAIGN MEASURE

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Prepared for TetraTech, Inc.

July 2012



WARD RESEARCH  
I N C O R P O R A T E D

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# EXECUTIVE SUMMARY

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# Executive Summary

## Disaster Awareness

- During the campaign, disaster preparedness information reached about 8 out of 10 O‘ahu residents with television being the top media source (50%).
  - Television was more likely to reach residents who were born and raised in Hawaii and those who lived with a person with a disability than those who moved to Hawaii or households without a disability.
  - Newspapers and magazines were more likely to reach older respondents, 35+ years old, and households with income of \$35,000+ than younger respondents and households with lower income.
  - Information from work/school was more likely to reach 18-34 yr. olds and residents who lived in Hawaii less than 10 years than their counterparts.
- How to prepare, the need to prepare, and preparation tips were the most recalled topics of disaster preparedness information.
- In just one month, one in seven respondents (15%) had seen or heard information about GetReadyHawaii.org.
  - About one-third of those who had heard about GetReadyHawaii.org were able to recall information about disaster preparedness.
  - Almost one in five (18%) respondents who had seen or heard about GetReadyHawaii.org identified their City and County or (although not completely accurate) one of its partners as being responsible for the information.

# Executive Summary (Continued)

## Disaster Concerns and Perceptions

- Respondents were asked to name the disaster which was the most concerning to them. Hurricanes (61% unaided mention of concern) and tsunamis (51%) continue to be the top concerns.
  - None of the respondents surveyed mentioned pandemic flu as a concern on an unaided basis. However, when asked to rate their level of concern about pandemic flu, more than half (55%) continue to report they were somewhat or very concerned about it, about the same as for flash floods (54%).
- Reported levels of concern were statistically similar to pre-campaign levels, except for pandemic flu which decreased significantly.
- Residents continue to feel the most confident in the State's ability to handle natural disasters, but the least confident in terms of public health disasters. Overall, reported confidence levels in the State remain statistically the same as in the baseline survey.

# Executive Summary (Continued)

## Disaster Preparedness

- When residents were asked to assess their own preparedness, a majority of the residents (81%) felt that they were prepared (very or somewhat).
  - Self-reported preparedness improved with household income (HHI) - 26% of \$75K+ HHI stated they were “very” prepared but only 20% of \$35K-<75K and 14% of <\$35K stated the same.
  - In addition, males also rated their preparedness higher than did females.
- A majority of respondents reported either being already prepared or were likely to prepare for a disaster by developing a disaster plan (76%), a disaster kit (82%), staying informed about threats (92%), and helping other’s in the community prepare (69%).
  - Among the one-fifth of respondents who reported being not very or not at all likely to develop a disaster plan or prepare a disaster kit, over one-third felt that a disaster would not happen in Hawaii and felt it was not a concern.
- Three out of four (72%) residents report that they have nine to twelve recommended items for preparedness.
  - Respondents who had seen/heard information about disaster preparedness reported having more items than did respondents who had not seen/heard information.
  - The average amount of items in the household increased with household income.
- Significantly fewer respondents were likely to agree that government and community organizations were responsible for their preparedness than they were in the baseline study (82% pre-campaign vs. 75% post-campaign).

# Executive Summary (Continued)

## Conclusions

- The pilot campaign had notable successes.
  - 15% of respondents indicated that they had seen or heard information about the GetReadyHawaii.org.
  - Almost one-third of those who had heard of the website were able to playback campaign information about how to prepare, the need to prepare, and preparation tips.
  - By the time of the post-campaign survey, a majority of respondents (76%) reported that they had either already developed a disaster plan or were likely to develop one in the next 12 months. In addition, more than three out of four respondents (78%) also reported having either packed a disaster kit or were likely to pack a kit in the next 12 months.
  - Significantly fewer respondents than before the campaign agreed that the State or community organizations were responsible for their disaster preparedness.
- It is important to continue communicating and educating the public about how to prepare for a disaster.
  - Those who had seen or heard information were more likely to develop a disaster plan or pack a disaster kit in the next 12 months than were those who had not seen or heard information.
  - Those who were somewhat or very prepared were reportedly more likely to stay informed and help others in the community prepare for disasters as well.
- Lower income households and females need to be specifically targeted because they are reportedly less prepared for a disaster than are their counterparts.
  - Lower income households (<\$35K) were more likely than their counterparts to believe that government and community organizations were responsible for their disaster preparedness. In addition, they have less emergency items in place on average than were households earning more than \$35,000.

# Recommendations

- Recognition of the GetReadyHawaii.org URL was at 15%, which is quite high for new website recognition. Awareness of this element of the campaign --- and the traffic generated at the site --- indicate the success of the campaign in building awareness of and traffic to the site. It is likely, too, that additional aided questioning about other campaign components (e.g. a description of the television ad) would have yielded additional specific awareness.
- With a consistent 80% of respondents (pre- and post-campaign) indicating awareness of disaster preparedness information, however, it is unlikely that future campaigns could increase awareness much beyond that level. Future efforts, then, should be directed at moving residents from that awareness to the need to take action on preparedness.
- Only 6% of households interviewed said they have developed a disaster plan, and 9% said they have a kit with emergency supplies. These metrics can provide a baseline against which future change can be measured --- moving those who said they are very likely to do so in the next 12 months to actually take action and do so.

# OBJECTIVES AND METHODOLOGY

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# Objectives

The overall objective of the research was:

**TO MEASURE POST-CAMPAIGN LEVELS OF KNOWLEDGE AND  
AWARENESS OF DISASTER ISSUES, PLANS, AND  
PREPAREDNESS.**

# Methodology

- The 10-minute post-campaign telephone survey was developed by Ward Research, using a similar survey as that used in the pre-campaign and submitted to the client for review and approval. Some questions were removed and/or added from previous versions. See appendix for revisions.
- A total of n=409 Honolulu county residents 18+ years old were surveyed. The table below displays completes by county and corresponding margins of error at 95% confidence level.
  - n=205 were completed using Random Digit Dialing (RDD) Landline phone numbers.
  - n=204 were completed using purchased cell phone numbers with 808 area codes.

Pre-Campaign: November and December 2011		
County	Sample Size	Maximum Margin of Error
Honolulu	418	+/-4.7%

Post-Campaign: July 2012		
County	Sample Size	Maximum Margin of Error
Honolulu	409	+/-4.8%

- Interviews were conducted July 2 through July 6, 2012. All calling took place in the Calling Center in the Ward Research downtown Honolulu offices. This Calling Center uses Computer-Assisted Telephone Interviewing (CATI) technology, which allows for 100% monitoring of calls through electronic and observational means.
- Data processing was accomplished using SPSS for Windows, which allows for the cross tabulation of data by key variables (i.e., age, ethnicity, and income).
- Data was weighted by age to accurately reflect the population based on Census 2010.

# RESPONDENT PROFILE

---

Age	2011	2012
18-24 years old	13%	13%
25-34 years old	18%	18%
35-44 years old	20%	17%
45-54 years old	18%	17%
55-64 years old	15%	15%
65+ years old	19%	18%
Refused	1%	1%
Average Age	47	46
<b>Household Income</b>		
Under \$25,000	11%	14%
\$25,000 - <\$35,000	11%	7%
\$35,000 - <\$50,000	11%	11%
\$50,000 - <\$75,000	19%	18%
\$75,000 - <\$100,000	15%	15%
\$100,000 +	16%	19%
Refused	17%	17%
Median Income	\$61,000	\$64,500
Base	(418)	(409)

Gender	2011	2012
Male	48%	50%
Female	52%	50%
<b>Years Lived in Hawaii</b>		
Less than 2 years	5%	4%
2 - <5 years	5%	3%
5 - <10 years	6%	7%
10 or more years	32%	27%
Born and raised in Hawaii	52%	58%
Don't know/Refused	1%	1%
<b>Children under 18 in Household</b>		
Yes	45%	44%
No	55%	56%
Refused	1%	<1%
<b>Disability in Household</b>		
Yes	18%	15%
No	81%	85%
Refused	<1%	<1%
Base	(418)	(409)

Area	2011	2012
East Honolulu	12%	11%
Windward	14%	16%
North Shore	2%	3%
Central Oahu	17%	15%
Moanalua/Aiea/Pearl City	8%	13%
Urban Honolulu	30%	26%
Leeward	7%	4%
Ewa Plain	8%	9%
Refused	2%	3%
Base =	(418)	(409)

Ethnic Identification	2011	2012
Caucasian	23%	20%
Chinese	6%	5%
Filipino	15%	14%
Hawaiian/Part-Hawaiian	18%	23%
Japanese	22%	23%
Mixed	7%	7%
Other	6%	7%
Don't know/Refused	2%	2%
Base =	(418)	(409)

Ethnic Identification (Other)	2011	2012
Vietnamese	<1%	2%
Korean	<1%	1%
Samoan	2%	<1%
Marshallese	0%	<1%
African American	1%	<1%
Micronesian	<1%	0%
Other	1%	2%
Base =	(418)	(409)

# DETAILED FINDINGS

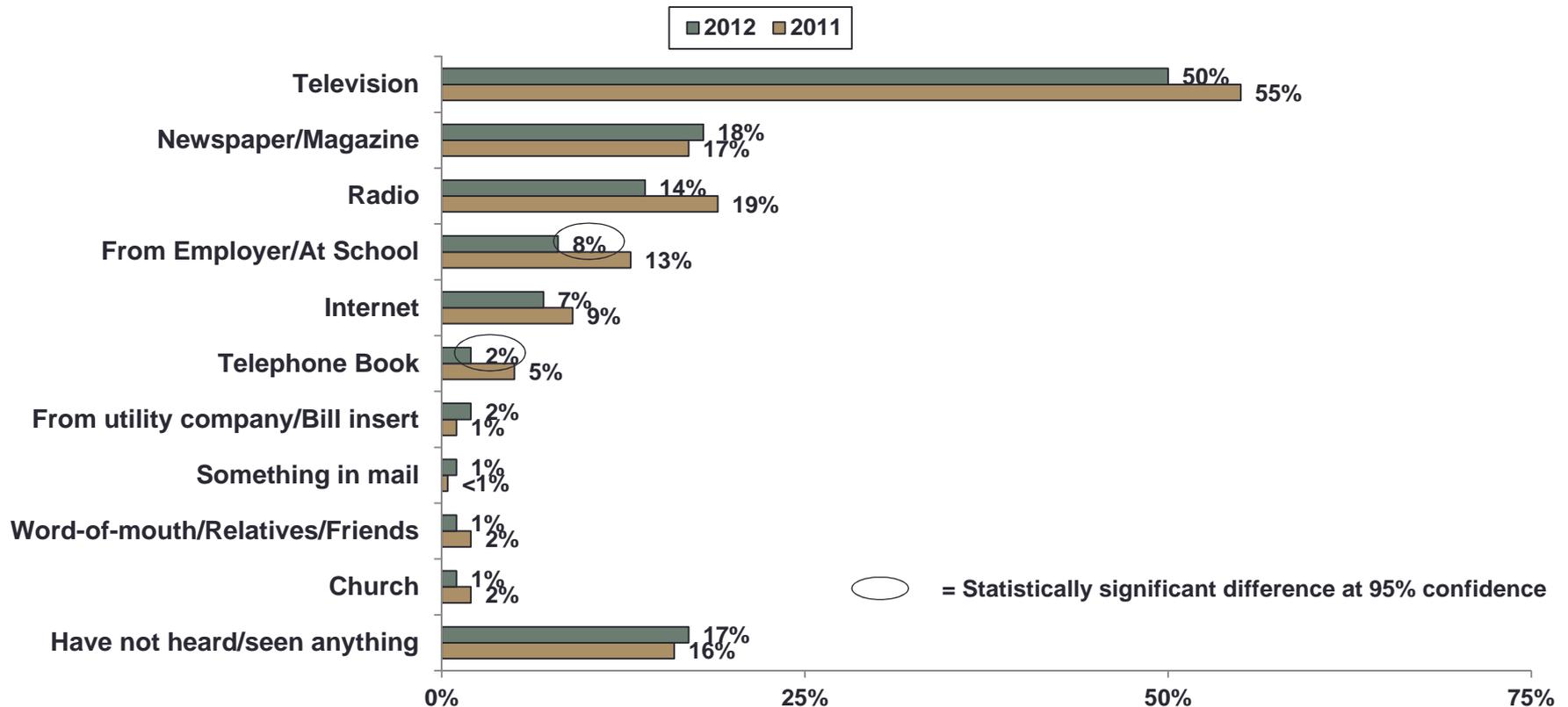
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# DISASTER AWARENESS

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# Half of the respondents stated that they received disaster preparedness information from TV during the time of the campaign.

Where Have Seen or Heard Information About Disaster Preparedness  
Top 10 Mentions



Q1a. Thinking just of the past few months, where have you heard or seen, if at all, any information about how to prepare for a disaster?

(2011: n=418; 2012: n=409)

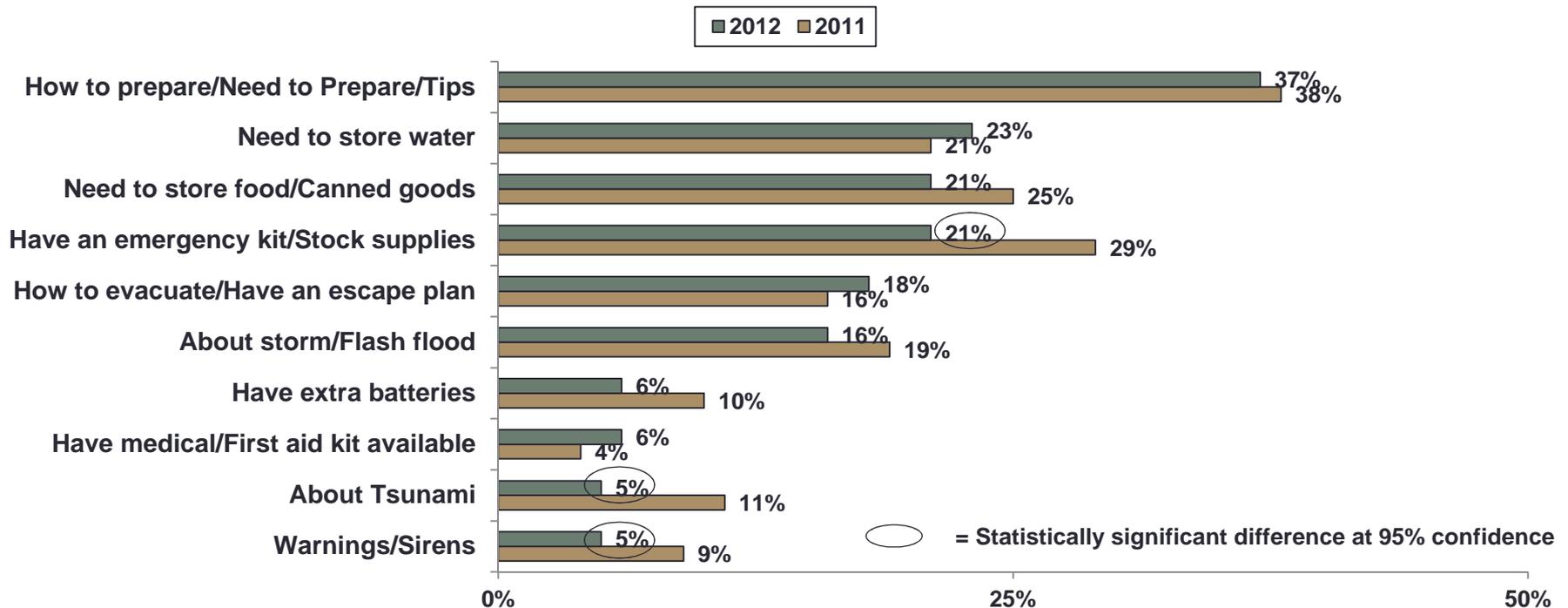
# Different information sources reached certain segments more than others.

## Specific Media Outlets Reached Certain Population Segments More than Others

Television	Newspaper/ Magazine	From Employer/ School
<ul style="list-style-type: none"><li>• Residents born and raised in Hawaii</li><li>• Disability in household</li></ul>	<ul style="list-style-type: none"><li>• 35+ year olds</li><li>• \$35K+ household income</li></ul>	<ul style="list-style-type: none"><li>• &lt;35 year olds</li><li>• Residents who lived in Hawaii &lt;10 years</li></ul>

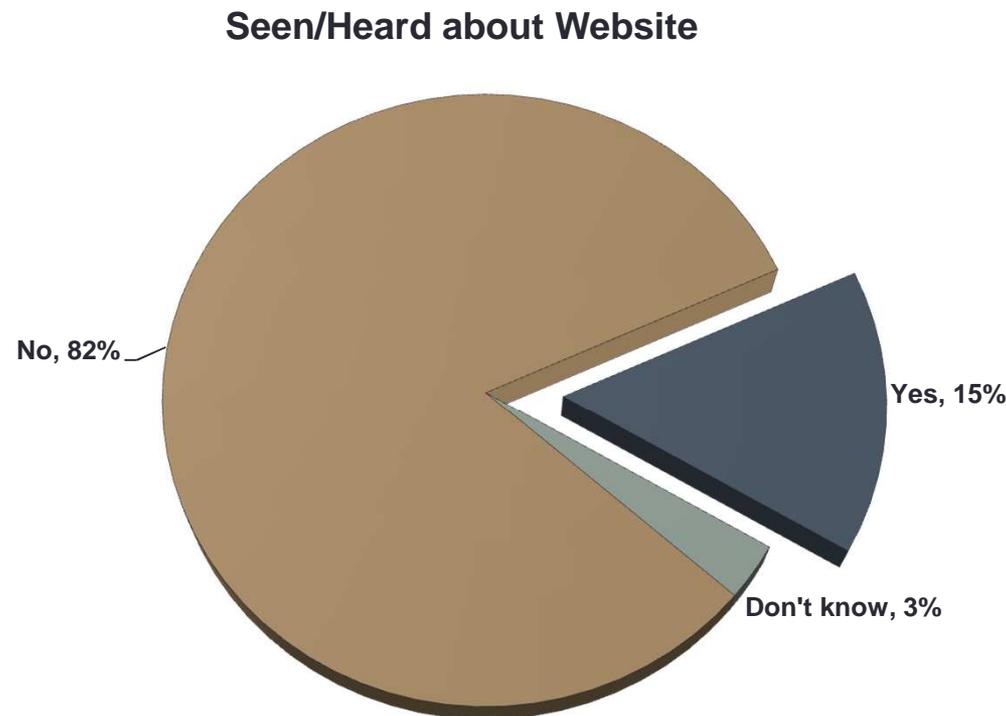
Among those who saw/heard preparedness information, more than one-third continue to recall information about how to prepare and the need to prepare for disaster preparation.

Information Heard or Saw  
Top 10 Mentions in 2012



Q1b. (IF RESPONDENT CHOSE NEWSPAPER/MAGAZINE, TV, RADIO, WEBSITE, FACEBOOK, TWITTER, OR TEXT MESSAGE) What was the information that you heard or saw?  
(2011: n=334; 2012: n=324)

In just one month, one out of seven respondents (15%) said they had seen or heard information about GetReadyHawaii.org.

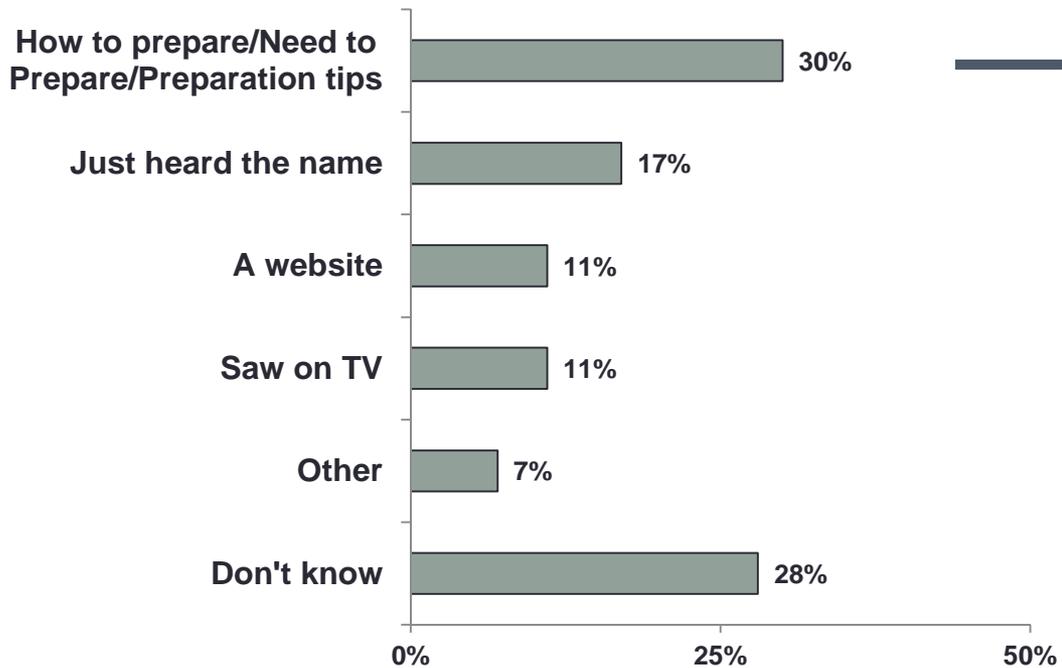


Q2. Have you heard or seen any information or advertising about the website GetReadyHawaii.org?

(n=409)

Among respondents who had seen or heard information about GetReadyHawaii.org, almost one third were able to recall information about disaster preparation.

### Information Seen/Heard



### Selected Verbatim Comments

- *“Disaster preparedness - pack a kit, make a plan”.*
- *“People are at a beach and they were talking about being prepared in case of an emergency and things you should have ready.”*
- *“What kind of food to prepare like canned goods, water, medicines, etc.”*
- *“Be prepared. Pay attention to signals that come on radio or TV stations, make sure car is fueled up, have enough cash for a month...”*
- *“It says secure your home and go where you need to go.”*
- *“The best time to get prepared is when everything’s fine.”*
- *“The worst disaster is not being ready.”*

Q2. Have you heard or seen any information or advertising about the website GetReadyHawaii.org?

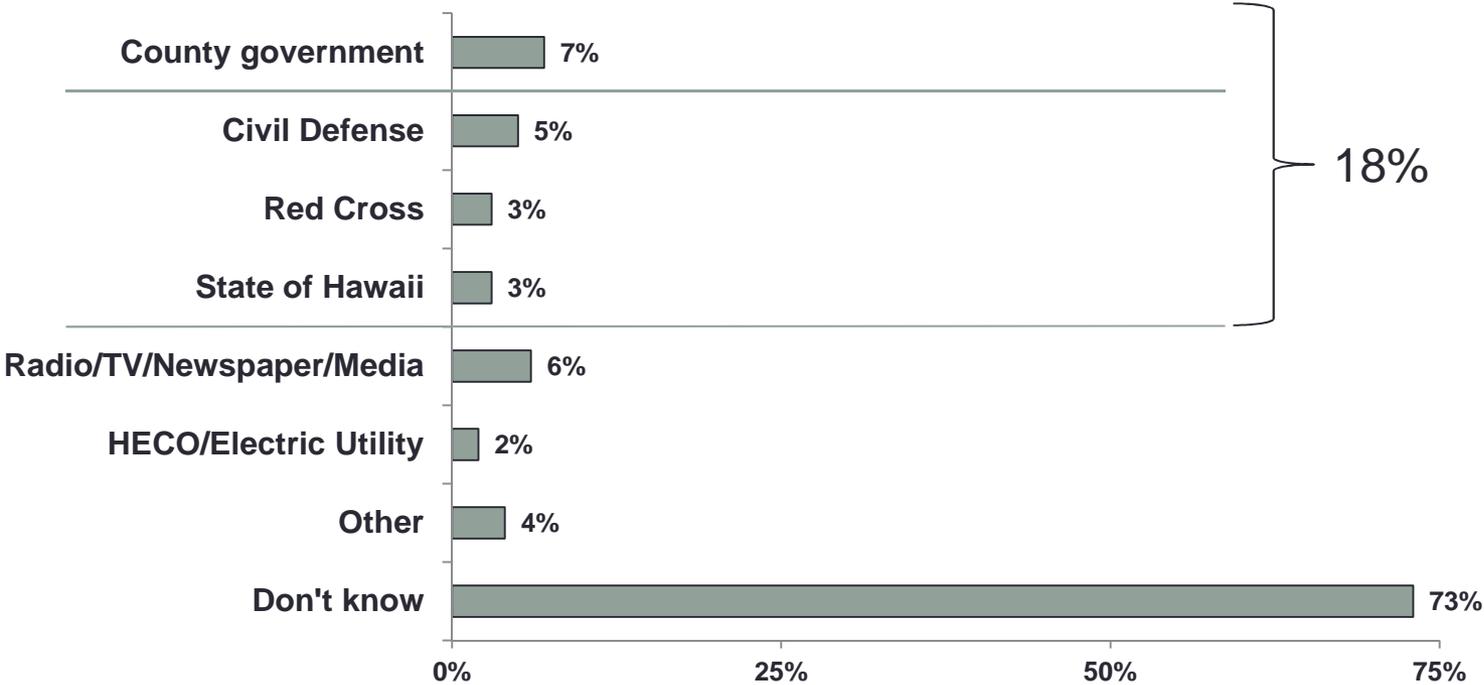
(n=409)

Q2b. What specifically do you remember from the advertising or information you saw about GetReadyHawaii.org?

(n=60)

Among those who had seen or heard anything about GetReadyHawaii.org, almost one of ten correctly identified their county government as being the source of information. In addition, almost one of five respondents identified either the county or (although still not completely accurate) one of its partners. The vast majority did not know the sponsor.

### Source of Website Information



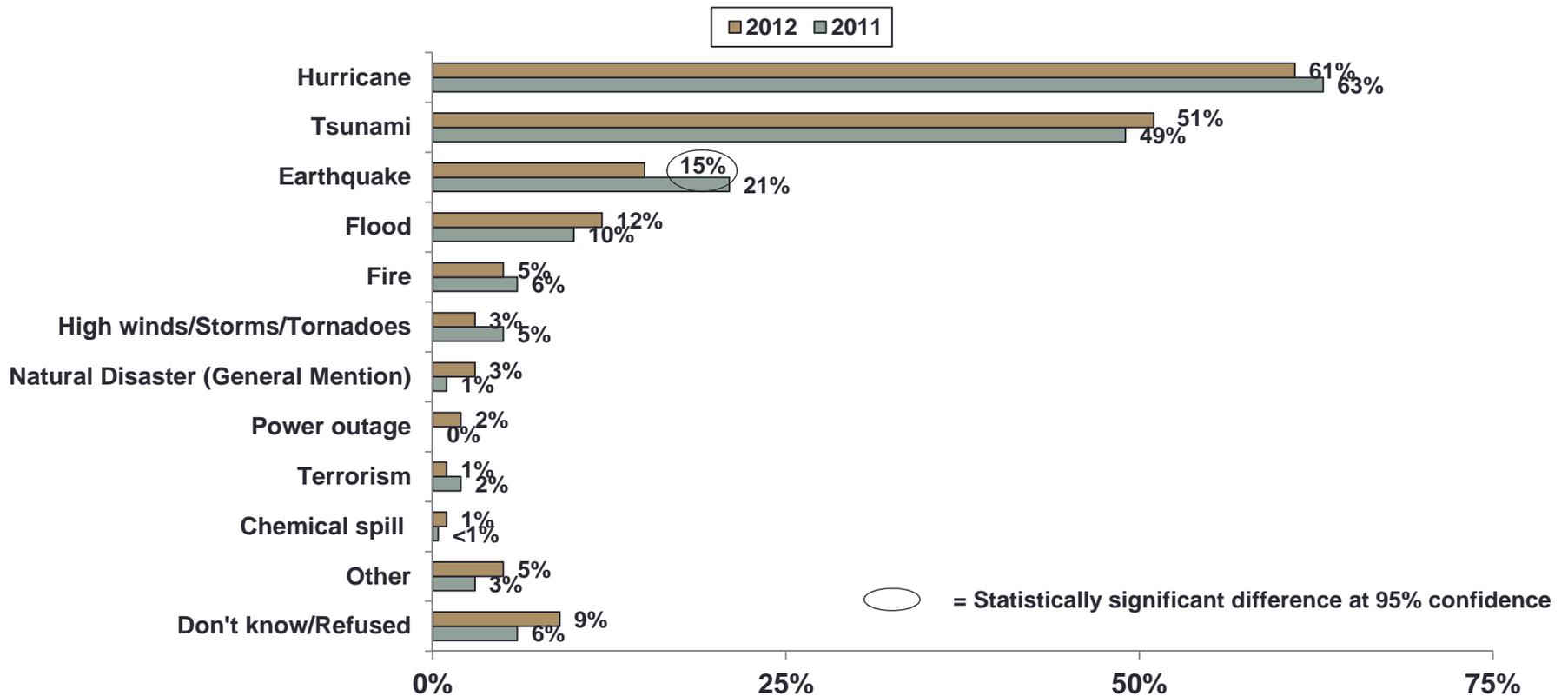
Q2. Have you heard or seen any information or advertising about the website GetReadyHawaii.org? (n=409)  
 Q3. Which organization was responsible for that information that you remember hearing or seeing about GetReadyHawaii.org? (n=60)

# DISASTER CONCERNS AND PERCEPTIONS

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# Residents continue to mention hurricanes and tsunamis most often, as disasters that concern them the most.

Disasters Concerned About the Most  
Unaided Mentions



Q2a. When you think of disasters that may impact your community, which ones concern you the most?

(2011: n=418; 2012: n=409)

# Disasters are mentioned more by certain segments than others.

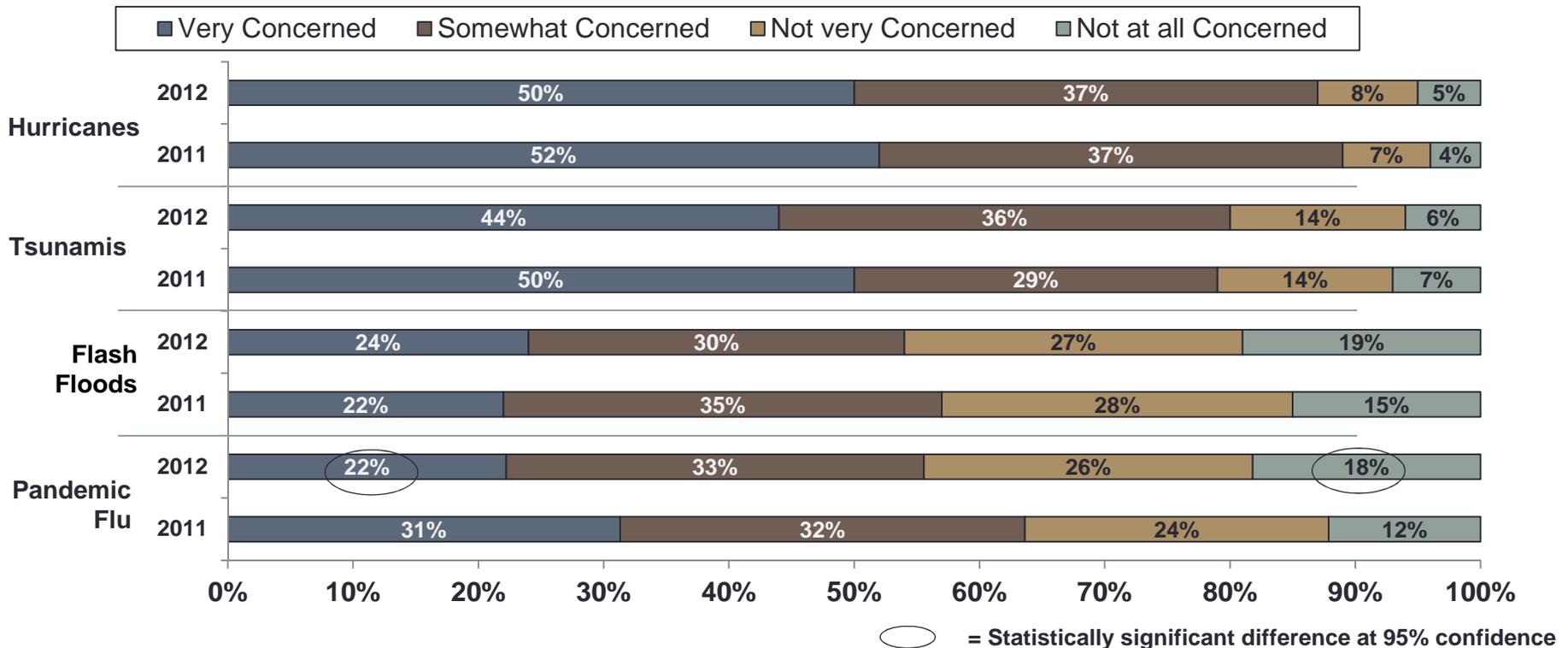
## Certain Segments Mention Specific Disasters More than Other Segments Do

Hurricanes	Tsunamis
<ul style="list-style-type: none"> <li>• Seen/heard information</li> <li>• \$35K+ household income</li> <li>• Lived in Hawaii 10+ years (including those born and raised)</li> </ul>	<ul style="list-style-type: none"> <li>• Households with children &lt;18 yrs. old</li> <li>• Residents &lt;65 years old</li> <li>• Caucasian, Filipino, and Hawaiian (vs. Japanese)</li> </ul>

Earthquakes	Floods	Fire
<ul style="list-style-type: none"> <li>• &lt;\$75K household income</li> </ul>	<ul style="list-style-type: none"> <li>• Disability in household</li> </ul>	<ul style="list-style-type: none"> <li>• Residents 65+ years old</li> </ul>

Respondents were asked to rate their level of concern about specific disasters. Levels of concern for most disaster types remain statistically similar to pre-campaign testing, except concern for pandemic flu which decreased.

### Concern Levels Toward Disaster



Q5a-d. I'm going to read you a list of some different disasters. For each one, please tell me how concerned you are about them. How concerned are you about **hurricanes, tsunamis, pandemic flus, and flash floods?** (2011: n=418; 2012: n=409)

# Certain segments of the population have greater concerns about different disasters.

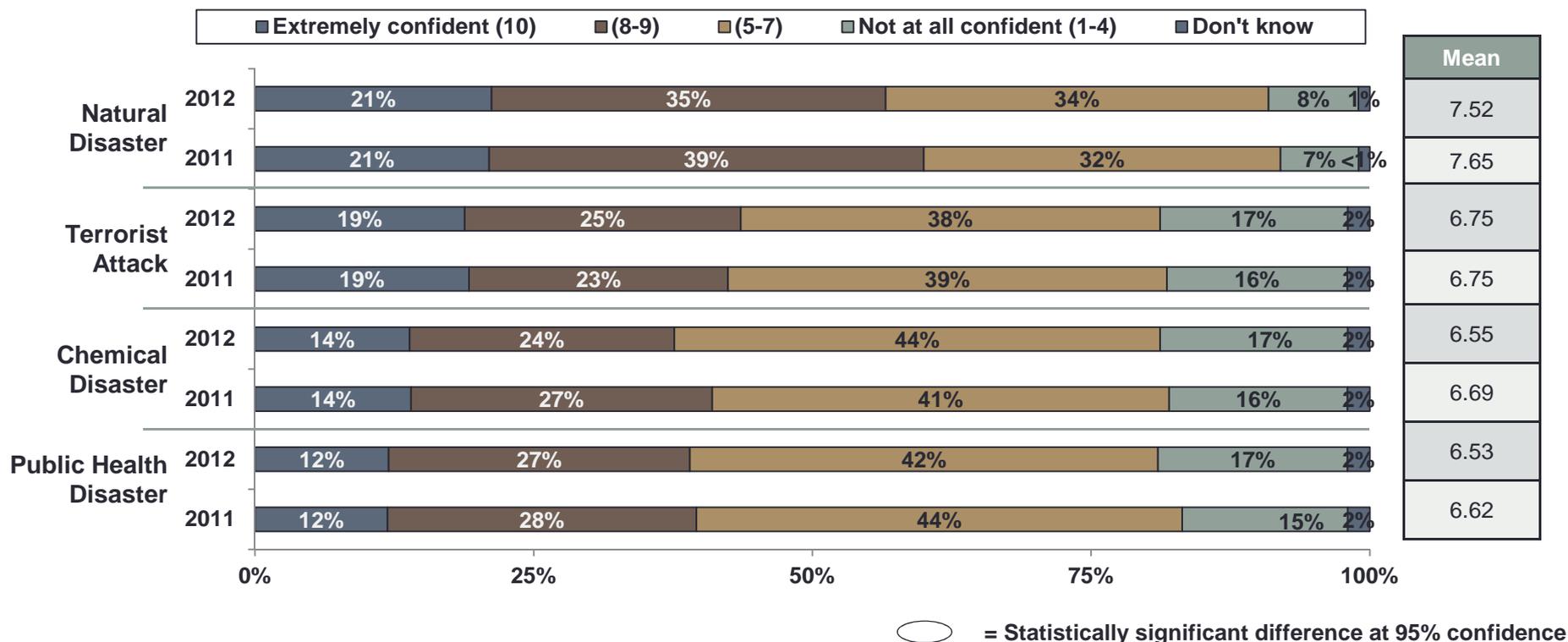
## Segments Relatively More Concerned than Others with Specific Disasters

Hurricanes	Tsunamis	Flash Floods	Pandemic Flu
<ul style="list-style-type: none"><li>• Seen/heard information</li><li>• Lived in Hawaii 10+ years (including those born and raised)</li></ul>	<ul style="list-style-type: none"><li>• Seen/heard information</li><li>• Households with children &lt;18 yrs old</li><li>• &lt;65 year olds</li></ul>	<ul style="list-style-type: none"><li>• &lt;\$35k household income</li><li>• Females</li></ul>	<ul style="list-style-type: none"><li>• 35+ year olds</li><li>• Females</li></ul>

In general, Hawaiians and Filipinos are more concerned with disasters than are Caucasian residents.

Residents continue to feel confident in the State's ability to handle natural disasters, but the least confident with capabilities to handle public health disasters. Overall, confidence levels remain statistically similar to pre-campaign levels.

**Confidence Level in State's Response to Emergencies or Disasters**



Q10. I'm going to read you a list of emergencies or disasters that could occur and I would like you to tell me how confident you are that government agencies in the State of Hawaii would be able to respond effectively on each. Please use a 10-point scale, 10=extremely confident and 1=not at all confident in the State. (2011: n=418; 2012: n=409)

# Certain population segments rated their confidence in the State's effectiveness higher than did others.

Filipino and  
Hawaiian  
Ethnicities

- More likely than Japanese residents to report higher levels of confidence with State effectiveness in handling natural disasters, terrorist attacks, chemical disasters, and public health disasters.

Low Income  
(<\$35,000 HHI)

- Reported greater levels of confidence than higher income households (\$75,000+) with State's ability to handle all four types of mentioned disasters.

Households with  
Children <18 yrs  
old

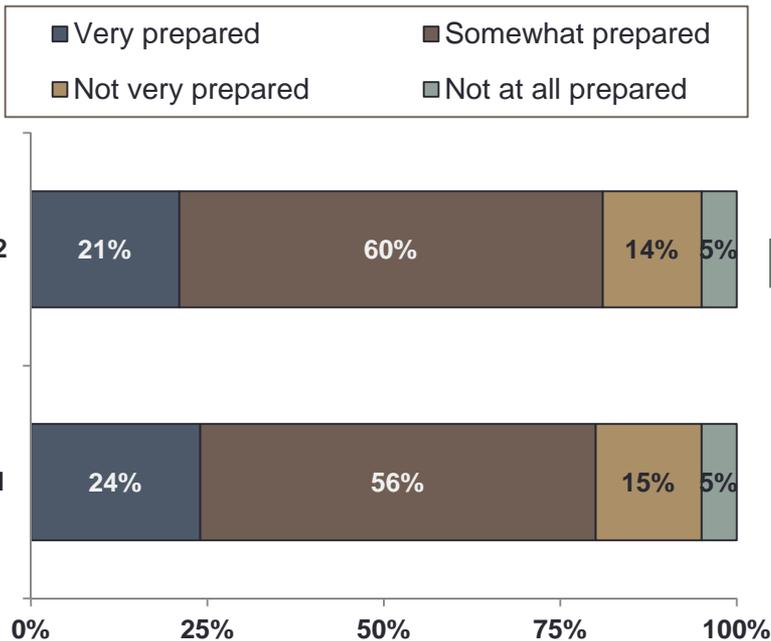
- Rated higher confidence with State's effectiveness in handling natural disasters than did households without children.

# DISASTER PREPARATION

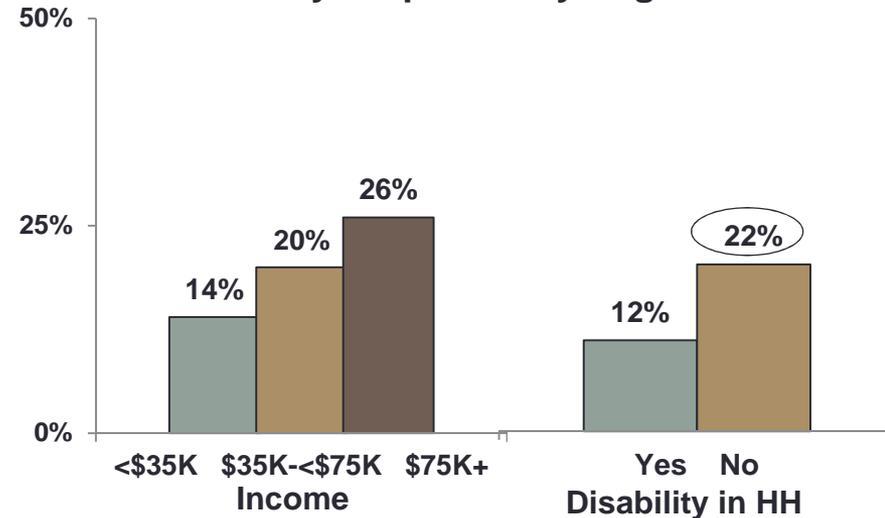
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The majority of residents (81%) reported being “very” or “somewhat” prepared for disaster, with six out of ten (60%) only “somewhat prepared”.

### Preparedness Self-Assessment



### % of “Very Prepared” by Segments



Although not statistically significant, being “very prepared” increases by income.

Households without disabilities were more likely to report being very prepared than were households with disabilities.

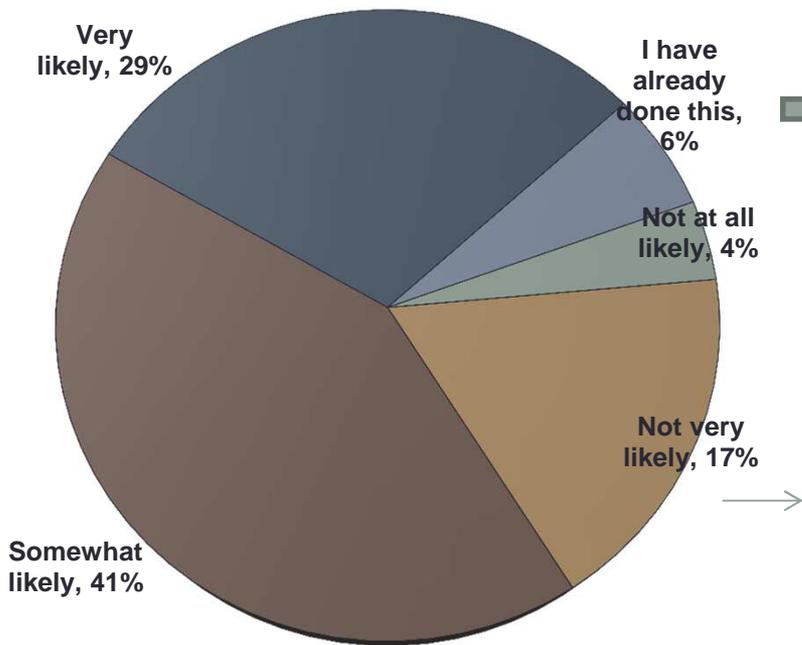
○ = Statistically significant difference at 95% confidence

Q6. Overall, how prepared would you say your household is for disasters like those that I just mentioned?

(2011: n=418; 2012: n=409)

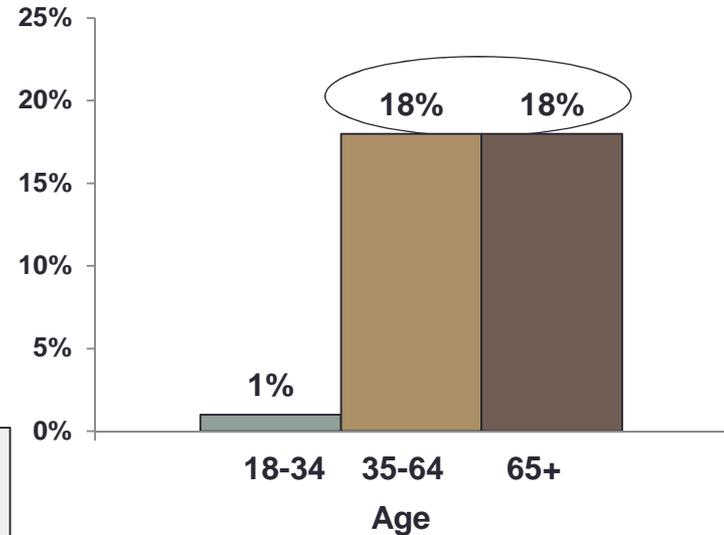
More than one out of three residents (35%) have either already prepared a disaster plan or were very likely to prepare a disaster plan.

**Likelihood to Prepare a Disaster Plan**



Younger residents (18-34) and Japanese residents were more likely to report “not very likely” than were older residents and other ethnicities.

**% of “I have already done this” by Segment**



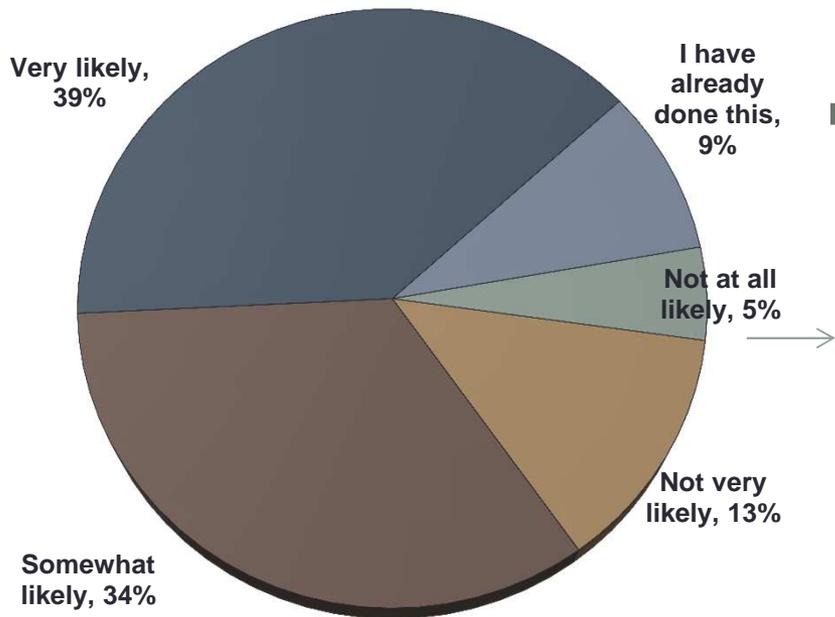
Older residents (35+ years old) were more likely than younger residents to indicate that they already have a disaster plan.

○ = Statistically significant difference at 95% confidence

Q8. Now, how likely is it that you will actually prepare yourself and your household for a public disaster by developing a disaster plan? (n=409)

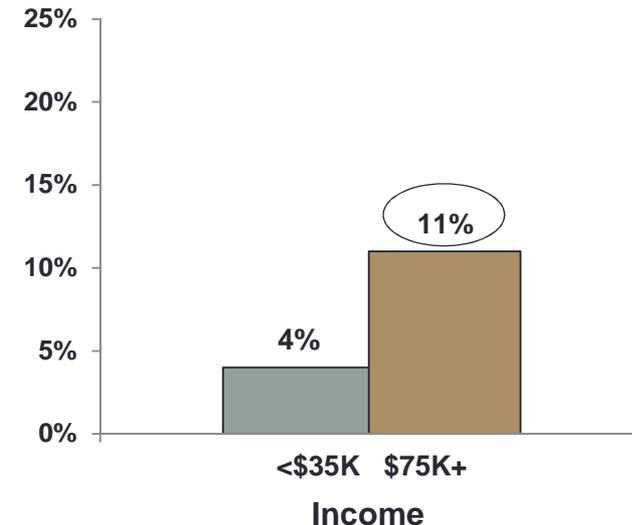
Almost half of respondents (48%) have either already packed a disaster kit or were very likely to prepare a disaster kit.

**Likelihood to Prepare by Packing a Disaster Kit**



Male respondents were more likely than female respondents to report that packing a kit was "not at all likely".

**% of "I have already done this" by Segment**



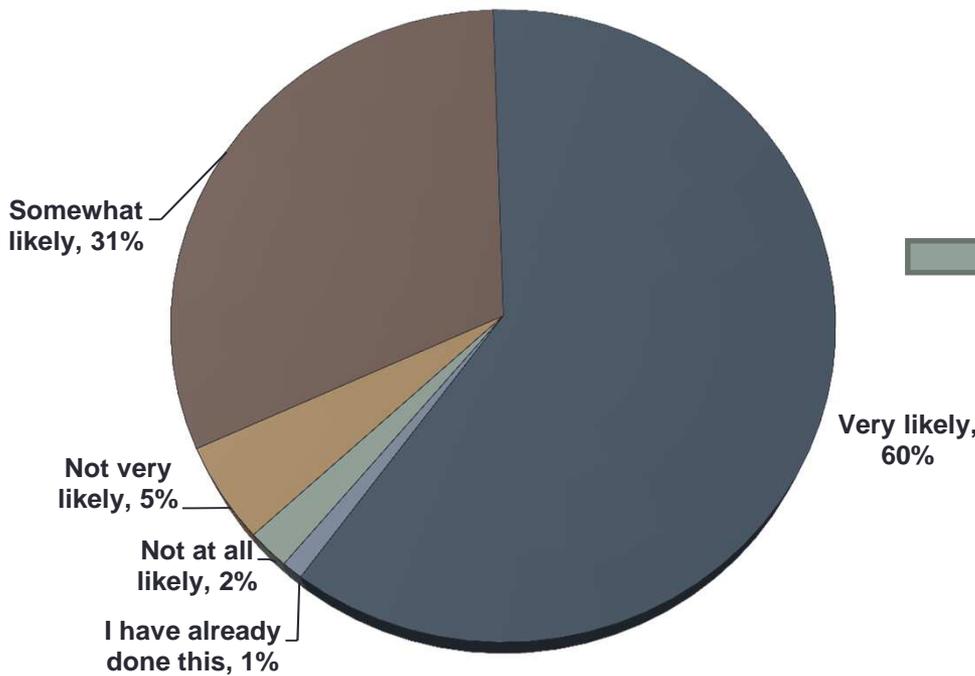
Households with income of \$75K+ were more likely to indicate "I have already done this" than were households earning <\$35K

= Statistically significant difference at 95% confidence

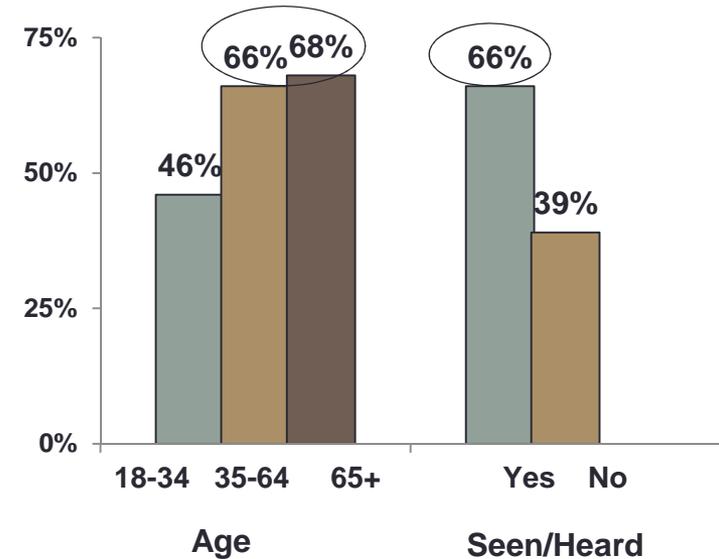
Q8. Now, how likely is it that you will actually prepare yourself and your household for a public disaster by packing a disaster kit that contains all the items mentioned earlier like extra food, water, a first aid kit, wrench or pliers, batteries, dust masks, and things like that? (n=409)

# The majority (60%) of respondents are very likely to stay informed about disaster threats.

Likelihood to Prepare by Staying Informed



% of "Very likely to Prepare" by Segments



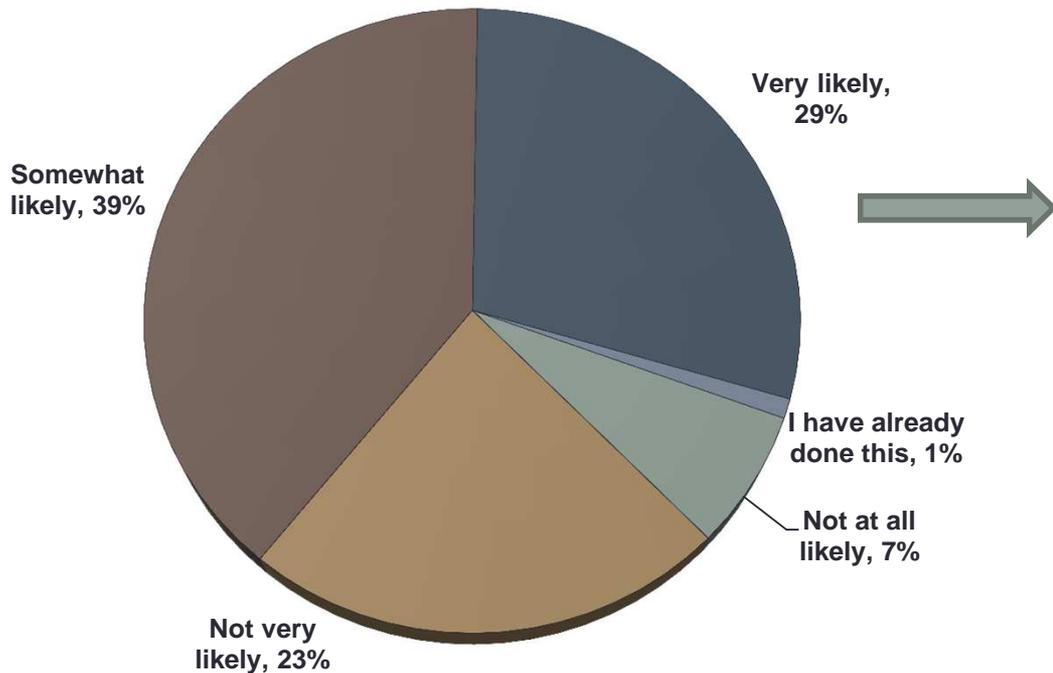
Respondents 35+ years old and those who have reported seeing information were more likely than 18-34 year olds and those who have not seen information to stay informed.

○ = Statistically significant difference at 95% confidence

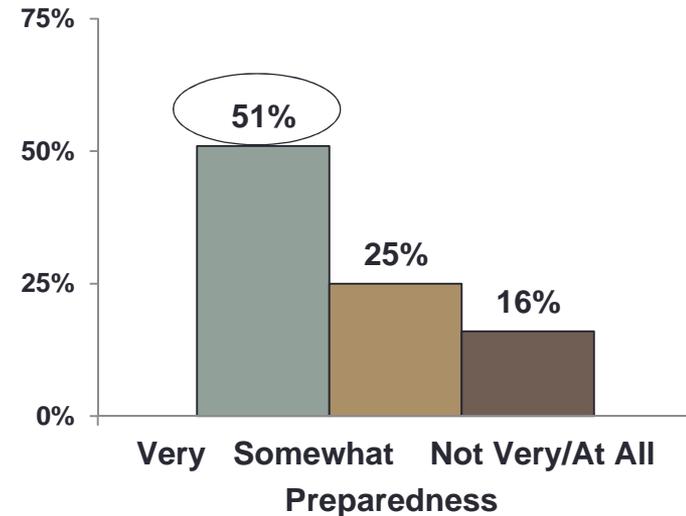
Q8. Now, how likely is it that you will actually prepare yourself and your household for a disaster by staying informed about threats in your area? (n=409)

Almost three out of ten residents (29%) are very likely to help others in the community prepare for disaster.

Likelihood to Prepare by Helping Others



% of "Very likely to Prepare" by Segments



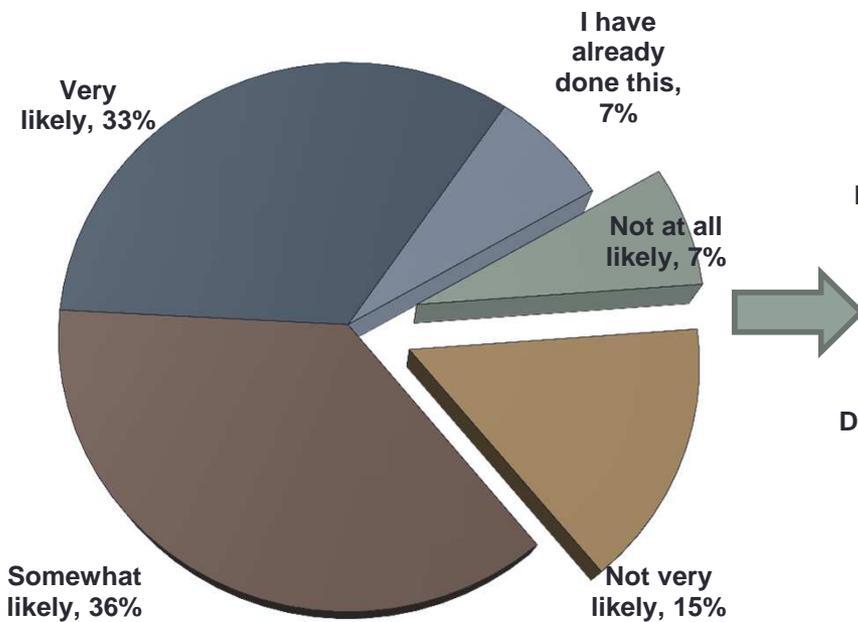
Respondents who reported being very prepared themselves were more likely than respondents who were "not very/at all" prepared to help others prepare for a disaster.

○ = Statistically significant difference at 95% confidence

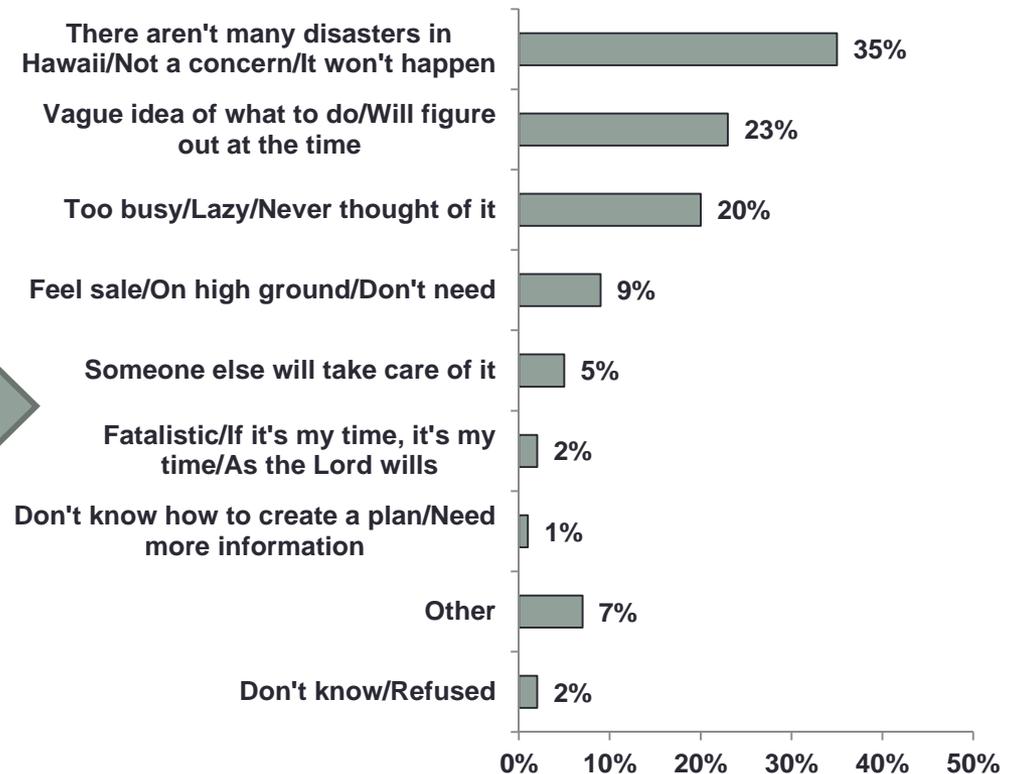
Q8. Now, how likely is it that you will actually prepare yourself and your household for a disaster by helping others in the community prepare for a disaster? (n=409)

Two out of five respondents (40%) have either already developed a disaster plan or are very likely to develop one in the next year.  
 Among residents who reported that they were not likely to develop a disaster plan, over one third (35%) were not concerned by disasters.

### Likelihood to Develop a Disaster Plan in the Next Year



### Reasons for “Not Very Likely” or “Not at all” Responses



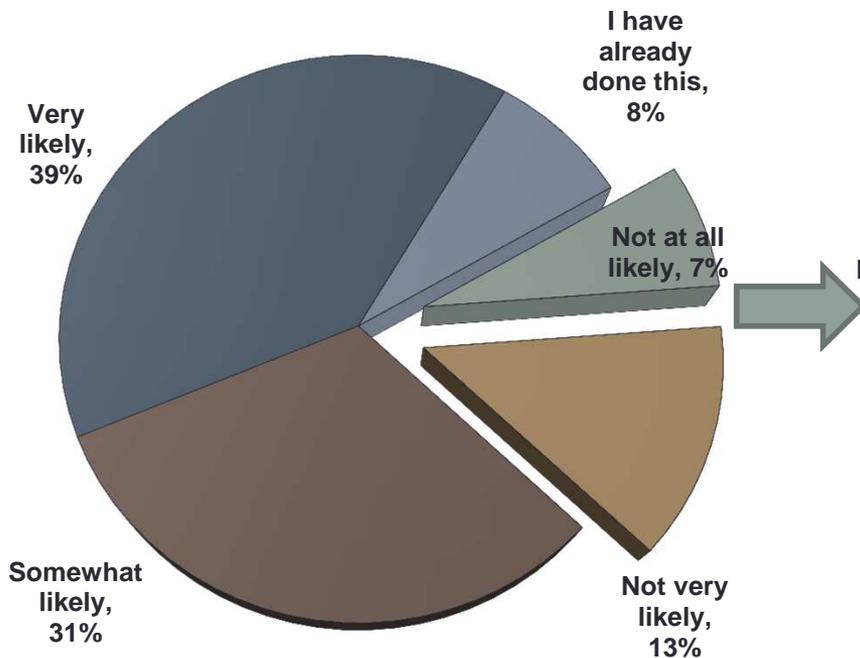
Q9b. How likely are you to develop a disaster plan in the next 12 months?  
 Q9c. Why are you not likely to develop a disaster plan in the next 12 months?

(n=409)  
 (n=96)

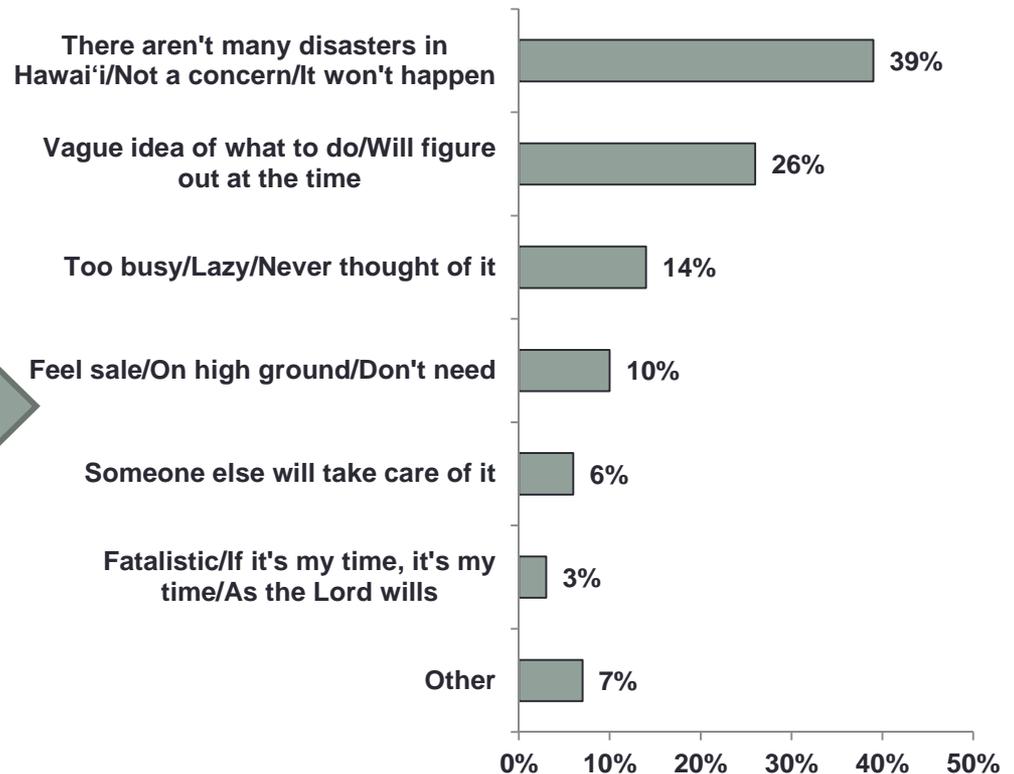
Almost half of the respondents (47%) have either already packed a disaster kit or are very likely to pack one in the next year.

Among the residents who were not very likely to prepare a disaster kit, almost four out of ten (39%) reported not being concerned by disasters.

### Likelihood to Prepare a Disaster Kit in the Next Year



### Reasons for “Not Very Likely” or “Not at all” Responses

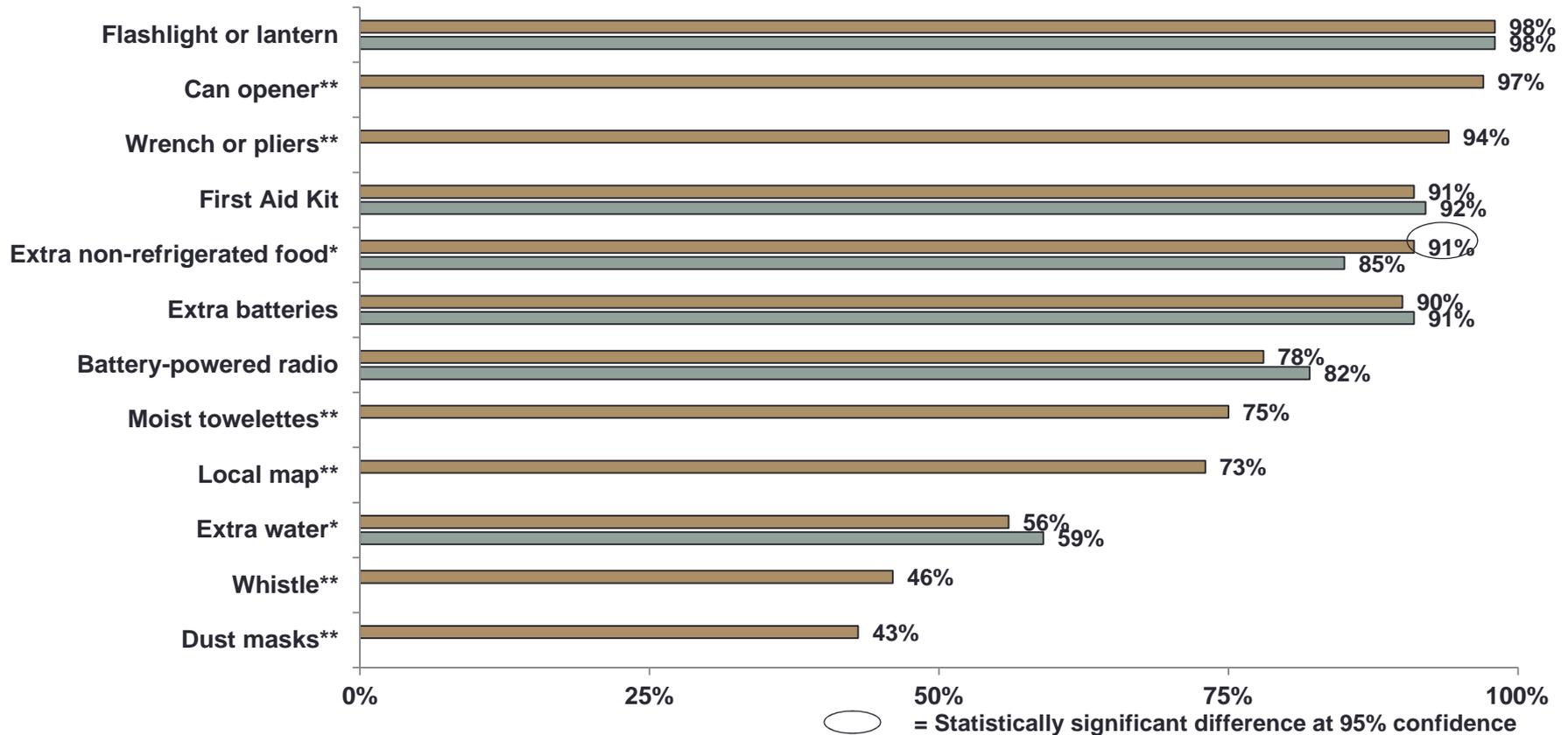


Q9b. How likely are you to develop a disaster kit in the next 12 months?  
 Q9c. Why are you not likely to pack a disaster kit in the next 12 months?

(n=409)  
 (n=88)

# The majority of residents have emergency items currently in place.

What Households Currently Have in Place



Q7a-l. Do you currently have (INSERT ITEM) at home?

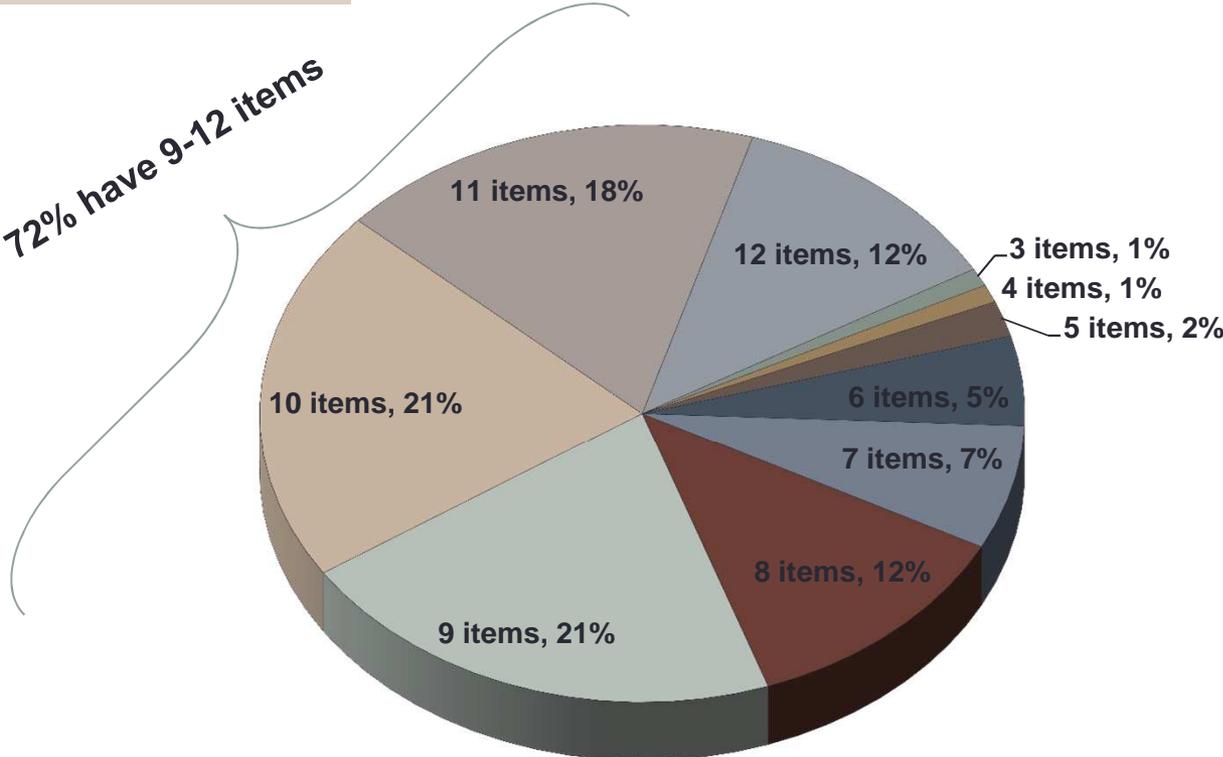
(2011: n=418; 2012: n=409)

Note: \* In 2012, item description changed from "...to last 7 days" to "...to last 3 days". \*\* Newly added in 2012.

Almost three out of four residents (72%) have nine or more recommended items for preparedness.

### Total Items Currently at Home

Average # of Items per Household: 9

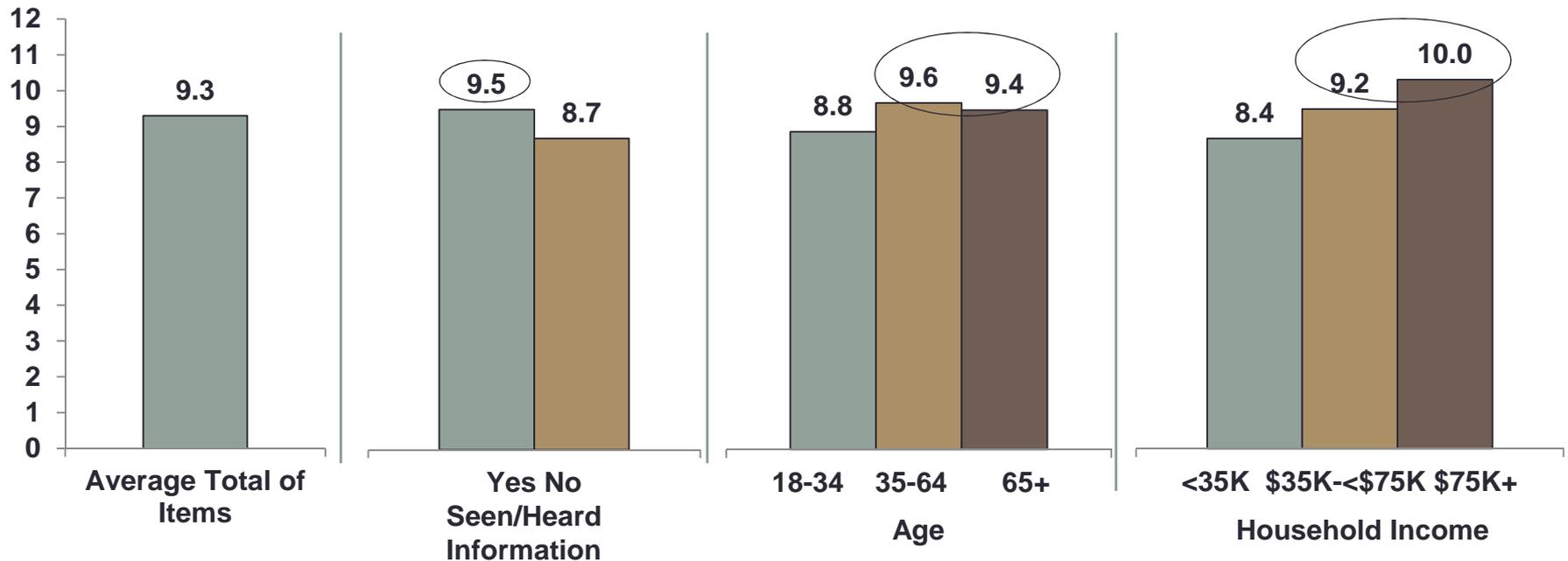


Q7. Total items currently have at home (based on Q7a-Q7l)?

(n=409)

# Certain population segments reported having more items on average.

## Average Number of Emergency Items by Segments



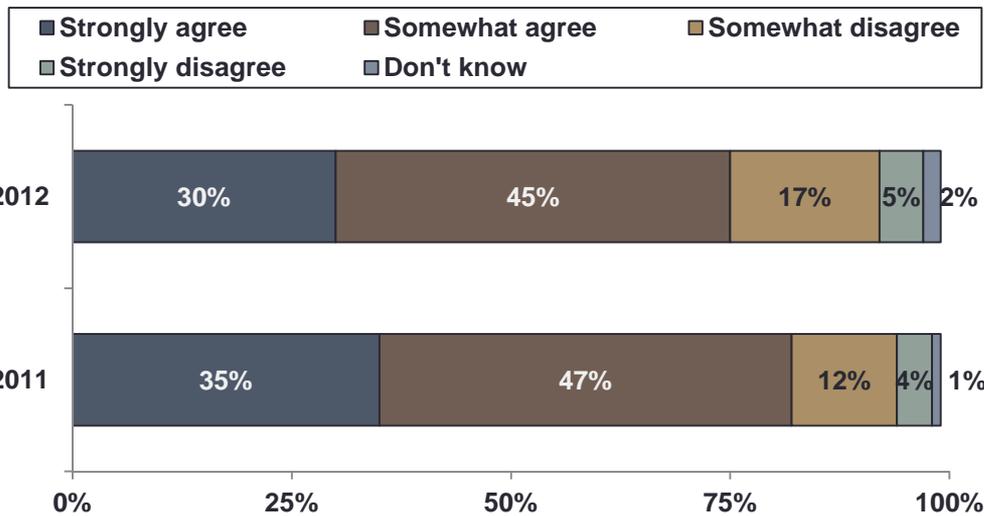
○ = Statistically significant difference at 95% confidence

Q7. Total items currently have at home (based on Q7a-Q7l)?

(n=409)

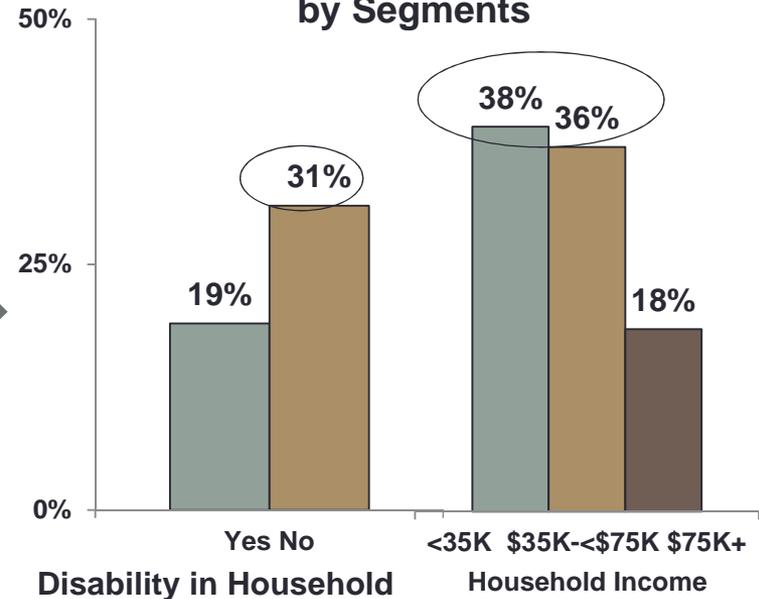
Three out of four respondents (75%) agreed that government and community organizations were responsible for their preparedness. Levels of agreement significantly decreased since the baseline study, where four out of five respondents (82%) had agreed with the statement.

### Agreement with Statement that Local Governments, State Governments, and Community Organizations are Responsible for Preparedness



○ = Statistically significant difference at 95% confidence

### % of Respondents who "Somewhat" or "Strongly" Agree by Segments



Households without disabilities and households with income <\$75K were more likely to agree with the statement than were households with disabilities and households earning more than \$75K.

Q13. Please tell me how much you agree or disagree with this statement: *Local governments, state government and community organizations are most responsible for getting individuals and families prepared for disaster.* Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with this statement? (2011: n=418; 2012: n=409)

# APPENDIX

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## Annex E – Campaign Plan Template

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*[Insert County Name]*  
*[Insert year of campaign]* Disaster  
Preparedness  
Campaign Plan



[Insert County Seal]

Prepared by:

[Insert Civil Defense Agency name]

[Insert Civil Defense Agency address]

For more information contact: [Insert Civil Defense Agency point of contact name]

[Insert Civil Defense Agency point of contact telephone number]

[Insert Civil Defense Agency point of contact email]

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## Purpose of This Plan

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The purpose this plan is to define the conduct of a public disaster preparedness campaign. Individual, family, business, non-profit, and government disaster preparedness is vital to disaster response and community resilience. Disaster preparedness campaigns can significantly decrease potential effects of disaster—saving lives, minimizing loss of property, and reducing damage to the environment and the economy.

The *Final Report of the FY 09 Regional Catastrophic Preparedness Grant – Public Awareness Project* should be used in conjunction with this plan. It describes lessons learned from previous campaigns and recommendations for future campaign planning. More information about this project can be obtained from the City and County of Honolulu, Department of Emergency Management.

## Campaign Goal

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Choose one or more goals for this campaign.

- Provide emergency public information after a disaster event
- Improve general disaster awareness (improve public knowledge)
- Improve awareness of specific disasters (e.g., knowledge about tsunamis)
- Improve general disaster preparedness (improve public behaviors)
- Improve preparedness for specific disasters (e.g., preparedness for earthquake)
- Complement a related project (i.e., statewide exercise) with an awareness and preparedness campaign component
- Provide risk communication (i.e., inform or reassure the public after a disaster that occurred elsewhere)
- Other (please specify)

## Campaign Objectives

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Choose one or more campaign objectives.

- Deliver message to all audiences
- Reach one or more specific audiences
  - Children ( )
  - Adults 18-35 years of age ( )
  - Adults over years of age ( )
  - Elderly ( )
  - People living in poverty ( )
  - People living with access and functional needs ( )
  - People for which English is a second language ( )
  - People with cultural barriers ( )
  - Businesses ( )
  - Non-profit organizations ( )

- Government agencies (    )
- Achieve particular performance metric
  - New individual and family disaster plans created (    )
  - New disaster kits packed (    )
  - Number of www.getreadyhawaii.org website hits (    )
- Engage campaign partners
- Other (please specify)

### Campaign Milestones and Schedule

Choose a start and end date for the campaign.

Campaign Start Date:

Campaign End Date:

	Milestone	Expected Milestone Date
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Milestone notes:

### Campaign Budget

Enter a budget for the campaign.

Budget:

Budget notes:

## Campaign Organization

Define campaign leadership.

Role	Name	Agency	Address	Telephone	Email
Campaign Director					
Campaign Sponsor (funder)					
Public Information Officer (POC) for media					
Procurement Coordinator (contract officer/buyer)					
Campaign Administrator					
Other (please specify)					

Define stakeholders who should have a role in shaping and executing the campaign.

Agency/Organization	Reason for Involvement	Point of Contact	Address	Telephone	Email

## Define campaign vendors

	<b>Agency/Organization</b>	<b>Website</b>
	Associated Press (AP) Honolulu Hawaii	<a href="http://www.ap.com">www.ap.com</a>
	Big Island Weekly	<a href="http://bigislandweekly.com/">http://bigislandweekly.com/</a>
	BYUH Kauai Ke Alakai (university)	<a href="http://uc.byuh.edu/">http://uc.byuh.edu/</a>
	Clear Channel (KDNN, KHJZ, KSSK, KUCD)	<a href="http://www.clearchannel.com/Radio/StationSearch.aspx?RadioSearch=hawaii">http://www.clearchannel.com/Radio/StationSearch.aspx?RadioSearch=hawaii</a>
	Cool Gold 107.9	<a href="http://oldies1079honolulu.com/">http://oldies1079honolulu.com/</a>
	Cox (KRTR, KCCN, KINE, PPHW, KKNE)	<a href="http://www.coxmediagroup.com/honolulu/">http://www.coxmediagroup.com/honolulu/</a>
	East Oahu Sun	<a href="http://www.eastoahusun.com/">http://www.eastoahusun.com/</a>
	ESPN 1420 (Honolulu)	<a href="http://www.espn1420am.com/">http://www.espn1420am.com/</a>
	ESPN 850 and 790 (Hawaii)	<a href="http://www.espnhawaii.com/#">http://www.espnhawaii.com/#</a>
	Essential Kauai Magazine	<a href="http://www.kauaimagazine.com/">http://www.kauaimagazine.com/</a>
	Facebook	<a href="http://www.facebook.com/">http://www.facebook.com/</a>
	Garden Island	<a href="http://thegardenisland.com/">http://thegardenisland.com/</a>
	Hawaii 24/7	<a href="http://www.hawaii247.com/">http://www.hawaii247.com/</a>
	Hawaii Army Weekly	<a href="http://www.hawaiiarmyweekly.com/">http://www.hawaiiarmyweekly.com/</a>
	Hawaii Blog	<a href="http://www.hawaiiweblog.com/">http://www.hawaiiweblog.com/</a>
	Hawaii Business Magazine	<a href="http://www.hawaiibusiness.com/">http://www.hawaiibusiness.com/</a>
	Hawaii Catholic Herald	<a href="http://hawaiicatholicherald.wordpress.com/">http://hawaiicatholicherald.wordpress.com/</a>
	Hawaii Fishing News Magazine	<a href="http://hawaiifishingnews.com/home.cfm?CFID=30725982&amp;CFTOKEN=17963234">http://hawaiifishingnews.com/home.cfm?CFID=30725982&amp;CFTOKEN=17963234</a>
	Hawaii Herald	<a href="http://thehawaiiherald.com/">http://thehawaiiherald.com/</a>
	Hawaii Hispanic News	<a href="http://www.hawaiihispanicnews.org/">http://www.hawaiihispanicnews.org/</a>
	Hawaii Home + Remodeling Magazine	<a href="http://www.hawaiihomeandremodeling.com/">http://www.hawaiihomeandremodeling.com/</a>
	Hawaii Independent	<a href="http://hawaiiindependent.net/">http://hawaiiindependent.net/</a>
	Hawaii Magazine	<a href="http://www.hawaiimagazine.com/">http://www.hawaiimagazine.com/</a>
	Hawaii Reporter	<a href="http://www.hawaiireporter.com/">http://www.hawaiireporter.com/</a>
	Hawaii Skin Diver Magazine	<a href="http://ww.hawaiiiskindiver.com/">http://ww.hawaiiiskindiver.com/</a>

	<b>Agency/Organization</b>	<b>Website</b>
	Hawaii Tribune Herald	<a href="http://hawaii-tribune-herald.com/">http://hawaii-tribune-herald.com/</a>
	Hawaiian Shell News	<a href="http://wn.com/Hawaiian_Shell_News#/videos">http://wn.com/Hawaiian_Shell_News#/videos</a>
	Hoike Hawaii	<a href="http://hoikehawaii.com/">http://hoikehawaii.com/</a>
	Honolulu Civil Beat	<a href="http://www.civilbeat.com/">http://www.civilbeat.com/</a>
	Honolulu Family	<a href="http://www.honolulufamily.com/">http://www.honolulufamily.com/</a>
	Honolulu Magazine	<a href="http://www.honolulumagazine.com/">http://www.honolulumagazine.com/</a>
	Honolulu Star-Advertiser	<a href="http://www.staradvertiser.com/">http://www.staradvertiser.com/</a>
	Honolulu Weekly	<a href="http://honoluluweekly.com/">http://honoluluweekly.com/</a>
	Ho'okele	<a href="http://www.hookelenews.com/">http://www.hookelenews.com/</a>
	Island Sun Weekly	<a href="http://www.islandsunweekly.com/">http://www.islandsunweekly.com/</a>
	Kauai Magazine	<a href="http://www.kauaimagazine.com/">http://www.kauaimagazine.com/</a>
	KBFD TV 32	<a href="http://kbfd.com/">http://kbfd.com/</a>
	KEAO FM 91.5	<a href="http://manaoradio.com/">http://manaoradio.com/</a>
	KFMN	<a href="http://kfmnradio.com/">http://kfmnradio.com/</a>
	KFVE	<a href="http://www.k5thetimeteam.com/">http://www.k5thetimeteam.com/</a>
	KGMB/KHNL	<a href="http://www.hawaii-newsnow.com/">http://www.hawaii-newsnow.com/</a>
	KGU AM 760	<a href="http://www.760kgu.biz/">http://www.760kgu.biz/</a>
	KHET TV 11 (PBS)/ KMEB TV 10 (PBS)	<a href="http://www.pbshawaii.org/home/index.php">http://www.pbshawaii.org/home/index.php</a>
	KHNR AM 690	<a href="http://www.khnr.com/">http://www.khnr.com/</a>
	KHON TV 2 (Fox)	<a href="http://www.khon2.com/default.aspx">http://www.khon2.com/default.aspx</a>
	KHPR FM 88.1	<a href="http://www.hawaii-public-radio.org/">http://www.hawaii-public-radio.org/</a>
	KHVH AM 830	<a href="http://www.khvhradio.com/main.html">http://www.khvhradio.com/main.html</a>
	KIKI AM 990	<a href="http://www.kikiradio.com/main.html">http://www.kikiradio.com/main.html</a>
	KIKU TV 20	<a href="http://kikutv.com/default.asp">http://kikutv.com/default.asp</a>
	KITV TV 4 (ABC)	<a href="http://www.kitv.com/">http://www.kitv.com/</a>
	KKCR	<a href="http://kkcr.org/">http://kkcr.org/</a>
	KKCR FM 91.9	<a href="http://streema.com/radios/KKCR_91.9_Kilauea">http://streema.com/radios/KKCR_91.9_Kilauea</a>

	Agency/Organization	Website
	KNDI AM 1270	<a href="http://www.kndi.com/">http://www.kndi.com/</a>
	KREA	N/A
	KPHI	<a href="http://kphi.org/kphi.php">http://kphi.org/kphi.php</a>
	KPUA AM 670	<a href="http://www.kpua.net/">http://www.kpua.net/</a>
	KTOH	N/A
	KTUH FM 90.3	<a href="http://ktuh.org/">http://ktuh.org/</a>
	KWAI	<a href="http://kwai1080am.com/">http://kwai1080am.com/</a>
	KWHE TV 14	<a href="http://www.kwhe.com/">http://www.kwhe.com/</a>
	KZOO AM 1210	<a href="http://kzooradio.com/">http://kzooradio.com/</a>
	Lahaina News	<a href="http://lahainanews.com/">http://lahainanews.com/</a>
	Mana Magazine	<a href="http://www.mymanamagazine.com/">http://www.mymanamagazine.com/</a>
	Maui Bulletin	<a href="http://www.mauibulletin.com/admarket/">http://www.mauibulletin.com/admarket/</a>
	Maui News	<a href="http://www.mauiweekly.com/">http://www.mauiweekly.com/</a>
	Maui Weekly	<a href="http://www.mauiweekly.com/">http://www.mauiweekly.com/</a>
	Midweek	<a href="http://www.midweek.com/">http://www.midweek.com/</a>
	Modern Luxury Hawaii Magazine	<a href="http://www.modernluxury.com/modern-luxury-hawaii">http://www.modernluxury.com/modern-luxury-hawaii</a>
	Molokai Dispatch	<a href="http://themolokaidispatch.com/">http://themolokaidispatch.com/</a>
	Nonstop Honolulu	<a href="http://www.nonstophonolulu.com/">http://www.nonstophonolulu.com/</a>
	North Hawaii News	<a href="http://northhawaiiinews.com/">http://northhawaiiinews.com/</a>
	North Shore News	<a href="http://www.nsnews.com/index.html">http://www.nsnews.com/index.html</a>
	Oiwi	<a href="http://www.oiwi.tv/">http://www.oiwi.tv/</a>
	Pacific Business News	<a href="http://www.bizjournals.com/pacific/news/">http://www.bizjournals.com/pacific/news/</a>
	Pacific Radio Group (KPOA, KJMD, KJKS, KLHI, KMVI, KNUI, KAPA, KKBG, KKVS, KHLO)	<a href="http://www.pacificradiogroup.com/">http://www.pacificradiogroup.com/</a>
	The Hawaii Independent	<a href="http://hawaiiindependent.net/">http://hawaiiindependent.net/</a>
	TheBus	<a href="http://thebus.org/">http://thebus.org/</a>
	This Week Hawaii Magazine	<a href="http://thisweekhawaii.com/">http://thisweekhawaii.com/</a>

	Agency/Organization	Website
	UHM Ka Leo O Hawaii (university)	<a href="http://www.kaleo.org/">http://www.kaleo.org/</a>
	Waikiki News	<a href="http://www.waikikinews.com/">http://www.waikikinews.com/</a>
	West Hawaii Today	<a href="http://westhawaiiitoday.com/">http://westhawaiiitoday.com/</a>

## Campaign Strategy

Choose one or more campaign strategies.

- Air Public Service Announcements (PSAs)
- Engage public via social media channels
- Deploy print ads
- Organize disaster preparedness fair
- Conduct disaster preparedness workshop
- Generate earned media
- Engage public through other organizations (e.g. retailers, Community Emergency Response Teams)
- Other (please specify)

## Campaign Message

Choose one or more campaign messages.

- The worst disaster is not being ready
- Plan, Pack, Prepare
- A perfect day to plan for a disaster
- Other (please specify)

## Campaign Assets

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Choose one or more campaign assets.

- Television PSA
- Radio PSA
- Website ([www.getreadyhawaii.org](http://www.getreadyhawaii.org))
- Social media channels
  - Facebook
  - Twitter
  - YouTube
  - Other (please specify)
- Print ad
- Other (please specify)

## Campaign Evaluation

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Choose one or more campaign evaluation strategies.

- Scientific survey
- Website hits
- Page downloads ([www.getreadyhawaii.org](http://www.getreadyhawaii.org))
- Social media site hits or referrals
  - Facebook
  - Twitter
  - YouTube
  - Other (please specify)
- Website registrations
- Campaign report
- Third-party evaluation of campaign
- Other (please specify)

## Campaign Assignments

Describe the assignment of tasks to implement the campaign.

	Task Description	Assigned To	Task Start Date	Task End Date	Budget	Comment
1.						
2.						
3.						
4.						
5.						
6.						
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17.						
18.						
19.						
20.						

## Annex F - Acronyms

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CONOPS	Concept of Operations
DEM	City and County of Honolulu, Department of Emergency Management
FEMA	Federal Emergency Management Agency
RCPG	Hawaii Regional Catastrophic Planning Grant
IPS	Integrated Planning System
JOPES	Joint Operational Planning and Execution System
OPLAN	Operations Plan
PSA	Public Service Announcement
RCPGP	Regional Catastrophic Planning Grant Program
RDD	Random Digit Dialing
ROI	Return on Investment
Tetra Tech	Tetra Tech EM Inc.
VIP	Very important person