



FEMA Research Findings: Awareness to Action



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Individual and Community
Preparedness Division

March 2014

Recent FEMA Research

- **Multi-Year Trend Analysis:**
 - Preparedness in America: 2013
- **National Surveys:**
 - Personal Preparedness in America: 2007, 2009, 2011, 2012
- **Hazard Specific Surveys:**
 - Central States Earthquake Preparedness Survey: 2011

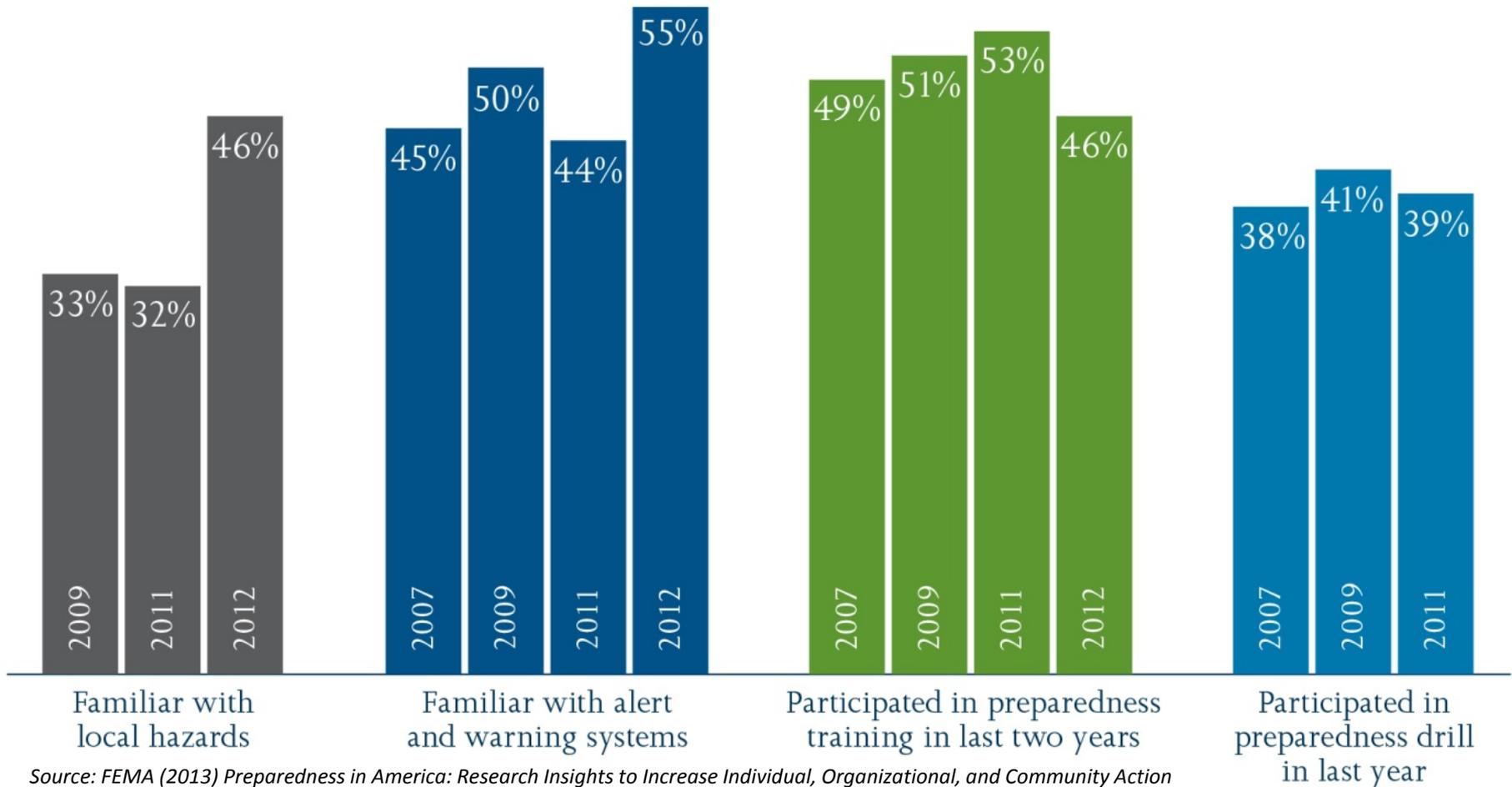


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Snapshot of the Ready Campaign Building Blocks: Be Informed

- The percentage of survey respondents taking recommended preparedness actions remains largely unchanged since 2007.



Source: FEMA (2013) Preparedness in America: Research Insights to Increase Individual, Organizational, and Community Action

Hazard Specific: Be Informed for Earthquakes

- A little more than half of respondents knew to take cover under a big piece of furniture and hold on.
- Almost a third still believe they should get in a doorway.

Protective Actions – Earthquake	Correct Answers	Incorrect Answers	Don't Know
Correctly Stated			
Get down close to the ground	71%	24%	5%
Get under a big piece of furniture or other cover	59%	38%	3%
Hold on to something	55%	40%	5%
Incorrectly Stated			
In an earthquake, you should get in a doorway	32%	64%	3%



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Hazard Specific: Be Informed for Tornadoes

- Most respondents knew which protective actions to take during a tornado, except for what to do when in a vehicle during a tornado.

Protective Actions – Tornado	Correct Answers	Incorrect Answers	Don't Know
Correctly Stated			
If you are indoors during a tornado, you should go to a basement or an interior room on the lowest floor without windows.	99%	1%	<1%
A tornado warning means a tornado has been sighted or indicated by weather radar.	90%	8%	1%
Incorrectly Stated			
If you are indoors during a tornado, you should open the windows to minimize damage.	63%	32%	5%
If you are in a vehicle during a tornado, you should find an overpass and stop underneath until the tornado passes.	25%	72%	3%

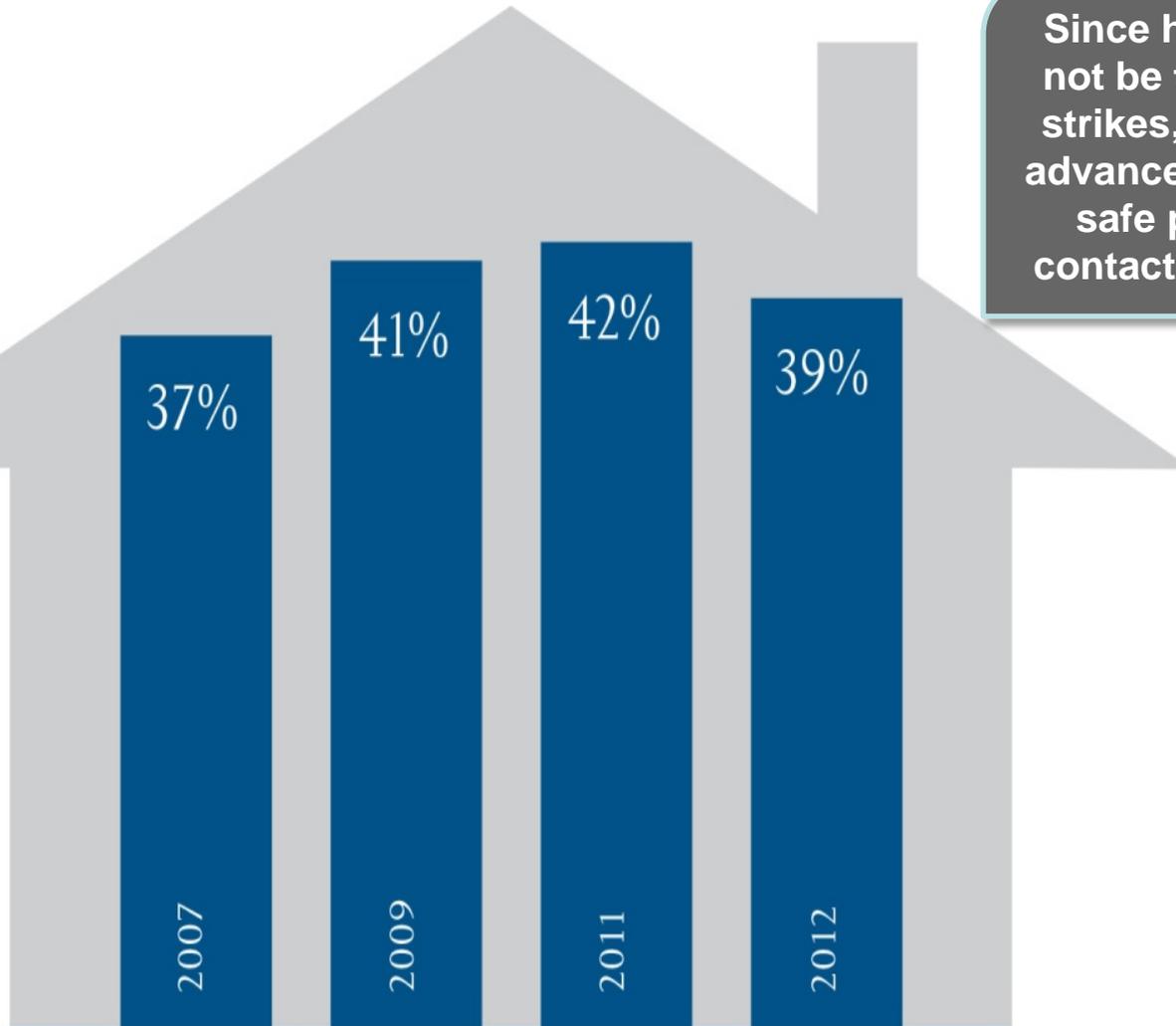


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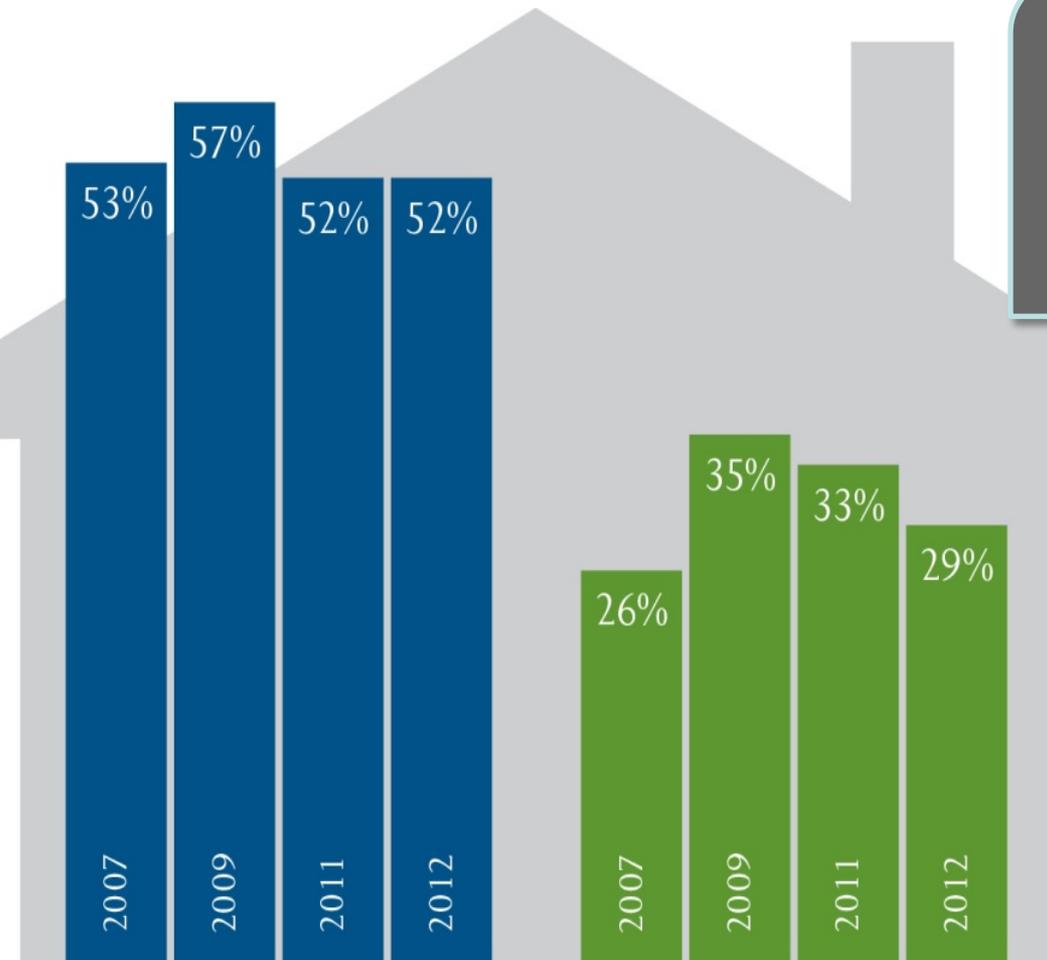
Snapshot of the Ready Campaign Building Blocks: Make a Plan

Since household members may not be together when a disaster strikes, it is important to plan in advance for how they will get to a safe place and how they will contact one another and reunite.



Have plan and have discussed plan with household

Snapshot of the Ready Campaign Building Blocks: Build a Kit



In all survey years, only a subset of those who reported having supplies were able to name 3 or more and report that they update them at least once a year

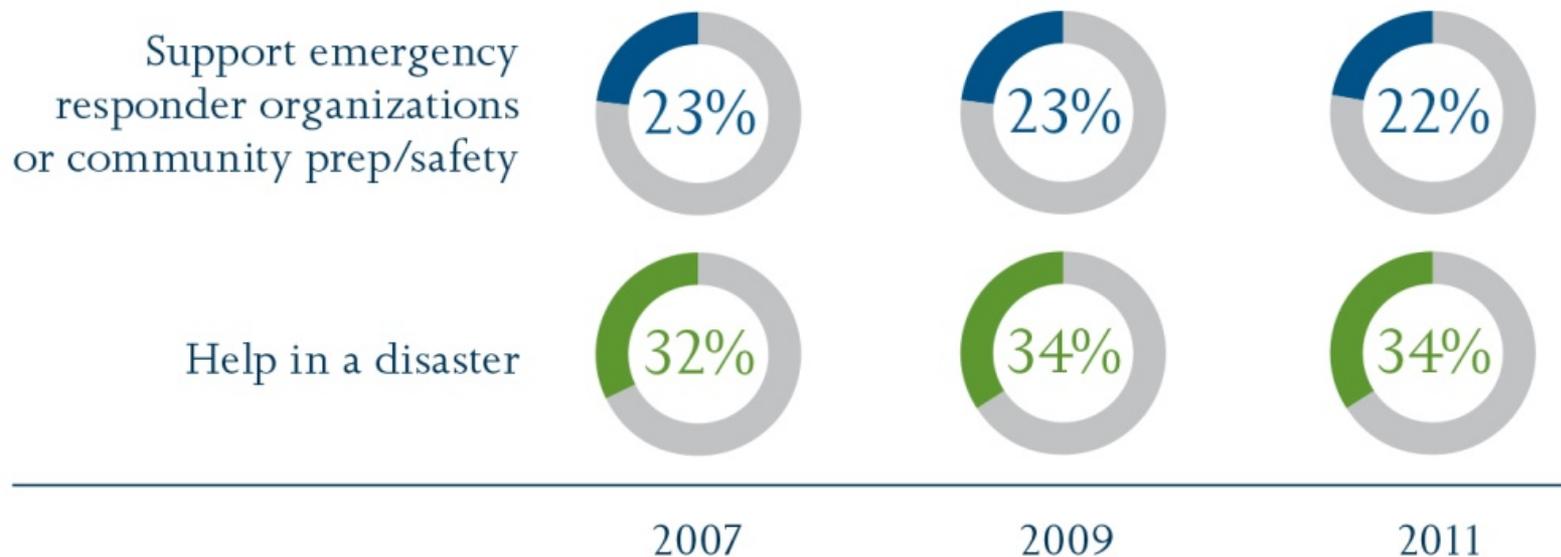
Reported having supplies

Reported having updated supplies
(at least once a year) and
named three or more supplies

Snapshot of the Ready Campaign Building Blocks: Get Involved

- The rates of volunteerism to support emergency response and community preparedness/safety organizations remained unchanged.

Individuals who volunteered to:



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Source: FEMA (2013) *Preparedness in America: Research Insights to Increase Individual, Organizational, and Community Action*



Motivating the Public to Prepare

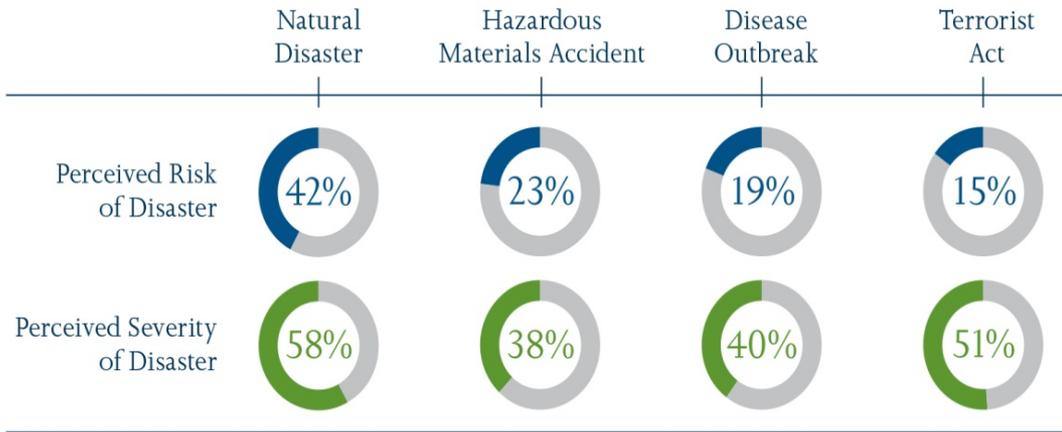


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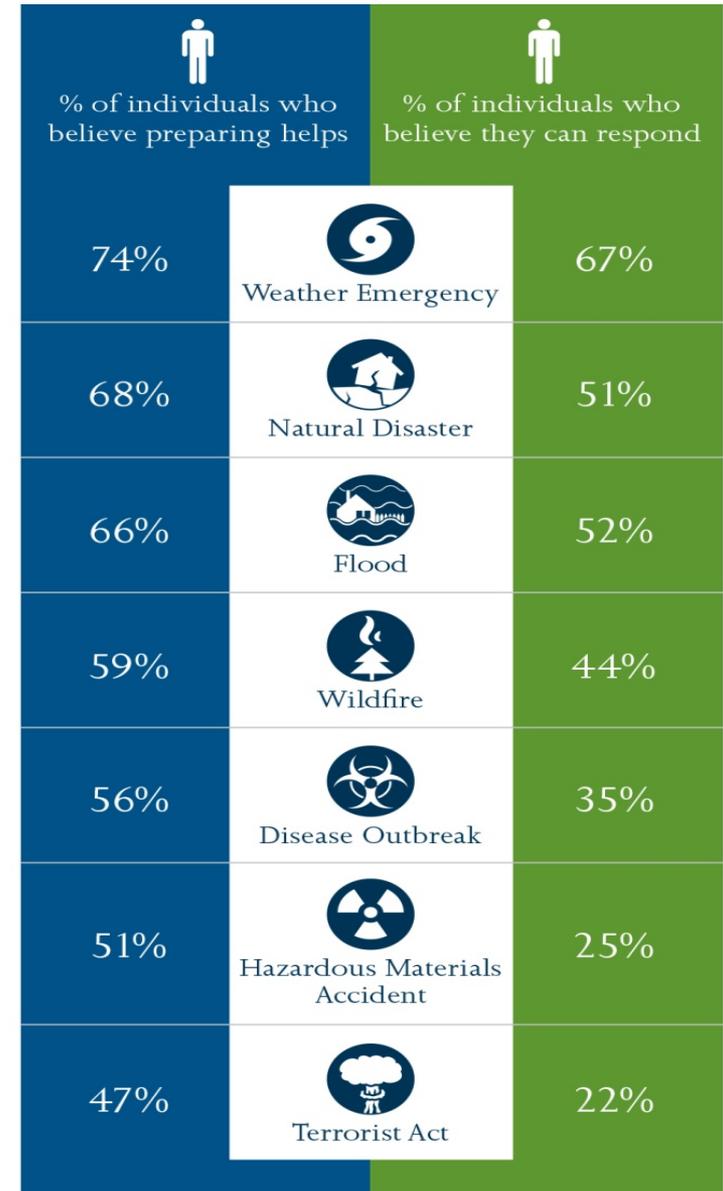
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Beliefs About Risk and Efficacy by Hazard

- Individuals believed they were at risk for natural disasters, and that preparing for them would be helpful.
- Individuals believed terrorist acts, hazmat accidents, and disease outbreaks were less likely, more severe, and that preparedness would not be as helpful.



*Each percentage represents responses "likely"/"very likely" for Perceived Risk and "severe"/"very severe" for Perceived Severity.



Drivers Analysis

- A driver analysis was conducted using a composite of preparedness behaviors to identify possible levers to increase preparedness in two areas:
 - Beliefs about preparedness
 - Personal and social experiences
- The preparedness behaviors composite included the following:
 - Knowing about alerts and warnings systems
 - Having and discussing a plan
 - Having supplies and naming three or more updated supplies
 - Participating in trainings and meetings
 - Participating in drills



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Reading the Quadrant Map

The quadrant map graphs the intersection of the level of agreement with a belief and the strength of the relationship between that belief and preparedness behaviors.

Horizontal Divider

Represents the strength of the beliefs' relationship with preparedness behaviors:

For beliefs **above** the line, we can say with 95% confidence it was linked to actual preparedness behaviors.

Beliefs **below** the line were not shown to have a significant relationship with behaviors.

Enhance

Beliefs have a positive relationship with preparedness behaviors and are not widely held.

Reinforce

Beliefs have a positive relationship with preparedness behaviors and are widely held.

Remove

Beliefs are not widely held and do not have a relationship with preparedness.

Limit

Beliefs are widely held, but do not have a relationship with preparedness.

Vertical Divider

Represents the 50% agreement point: A majority of individuals agreed with the beliefs presented to the **right** of this line, and a minority agreed with the beliefs on the **left**.

Beliefs and Behaviors

Enhance

Reinforce

Confident in Abilities
Terrorism/Hazmat/Disease

Nearly everyone agrees that they are responsible for their family, however, that belief does not have a positive relationship to preparedness behavior.

Confidence in the ability to do something about a terrorist / hazmat / disease event had a significant relationship to taking action while understanding the risk alone did not.

For natural disasters, knowing the risk, being confident in the ability to prepare, and understanding that preparing helps is important.

Confident in Abilities
Natural Disaster
Prep Helps Natural Disaster
Risk Natural Disaster
Severity Natural Disaster

Knows How to Prep
Willing to Consider Prep
Thought about Prep

Risk Terrorism/Hazmat/Disease
Severity Terrorism/Hazmat/Disease

Training Helps
Responsible for Family
Considers Prep Affordable
Has time to Prep
Access to Prep Info

Remove

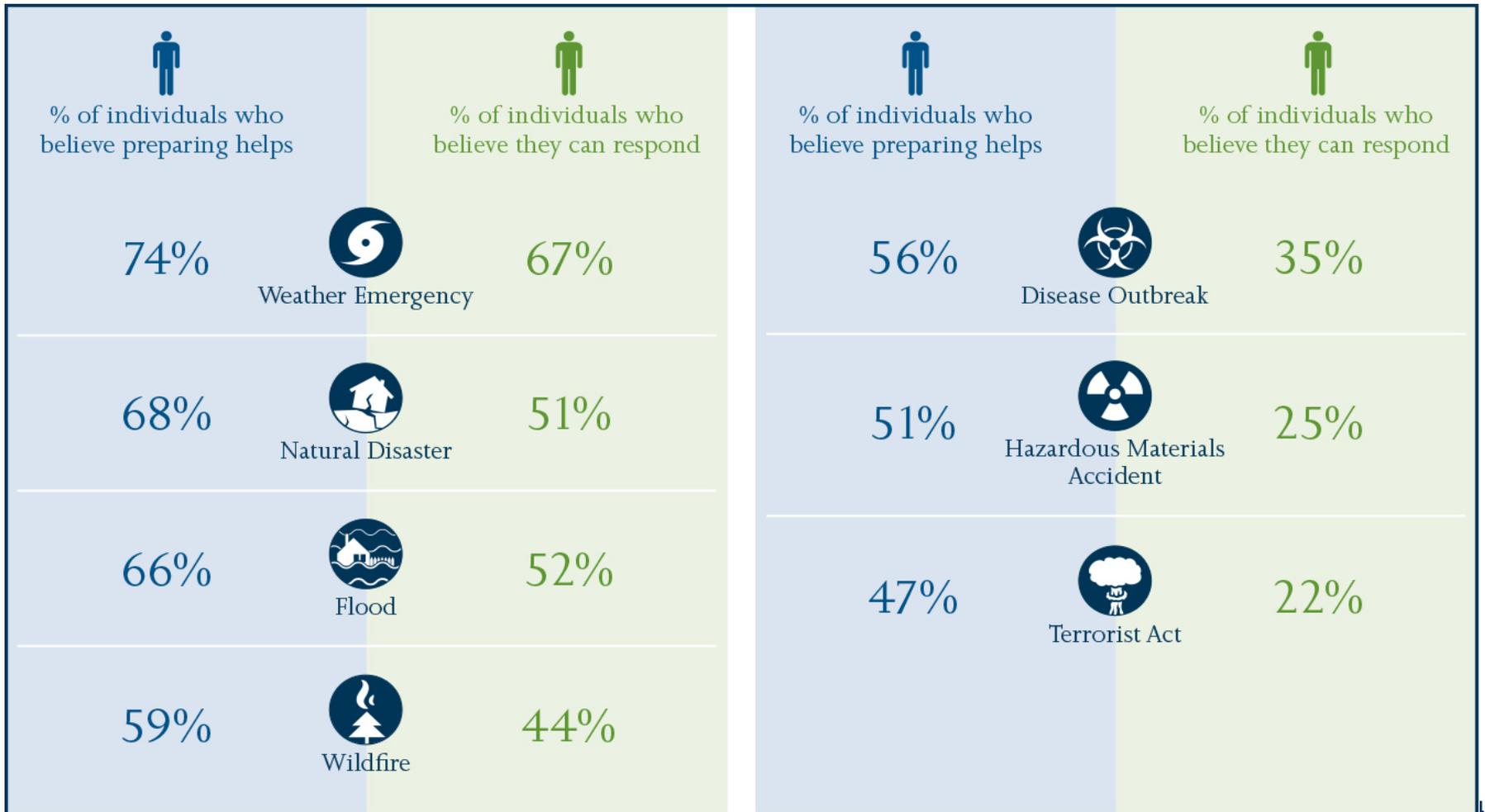
Limit

Prep Helps
Terrorism/Hazmat/
Disease

Agreement (% responding Agree/Strongly Agree)

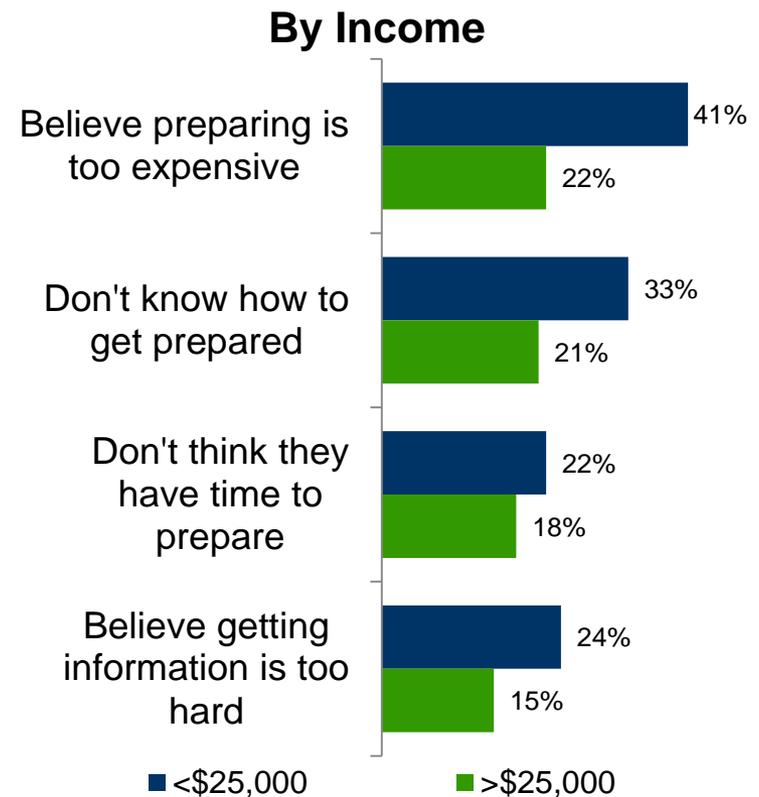
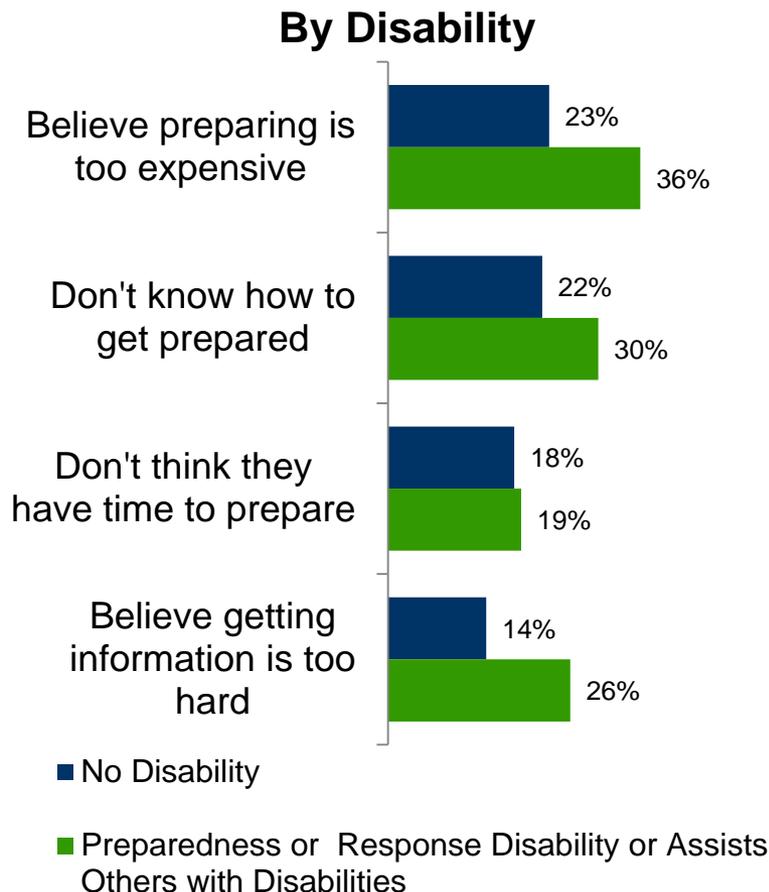
Enhancing Hazard-Specific Knowledge and Confidence in Abilities

- 74% of respondents believe that preparing helps for a weather emergency, while 59% believe it helps for a wildfire. Only 47% believe that preparing helps for a terrorist event.



Understanding that Barriers to Preparedness Differ By Audience

- People with low income or a disability relative to preparedness perceived greater barriers to preparedness in terms of time, money, and access to information



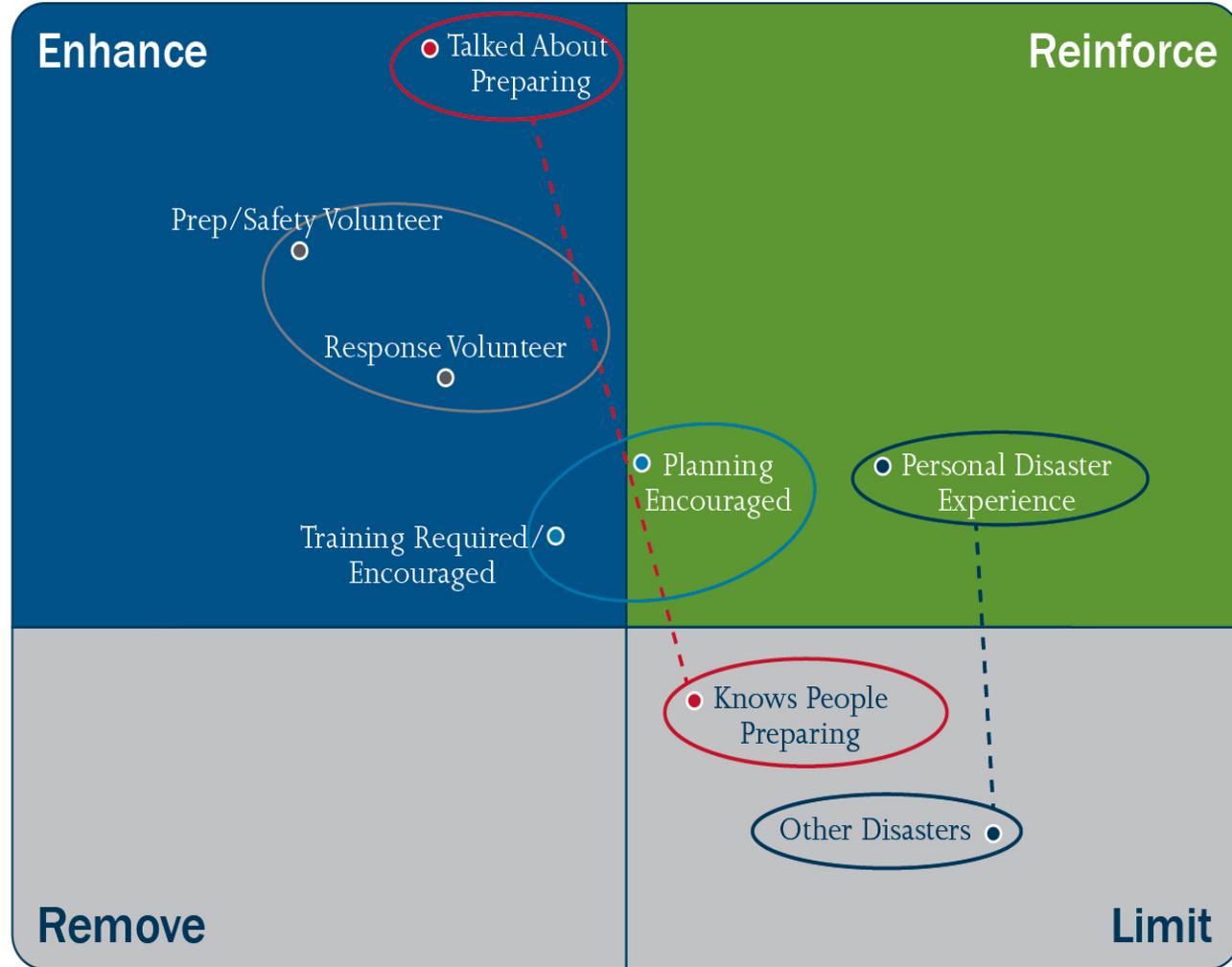
Connecting Preparedness to Community: Workplace, Schools, and Volunteerism

Talking about preparing had the strongest positive relationship with preparedness behavior.

Thinking about personal disaster experience, but not disasters elsewhere, had a strong positive relationship with preparedness behaviors.

Volunteering and being encouraged/required to plan or get training had a positive relationship to preparedness.

Relationship to Preparedness Behaviors



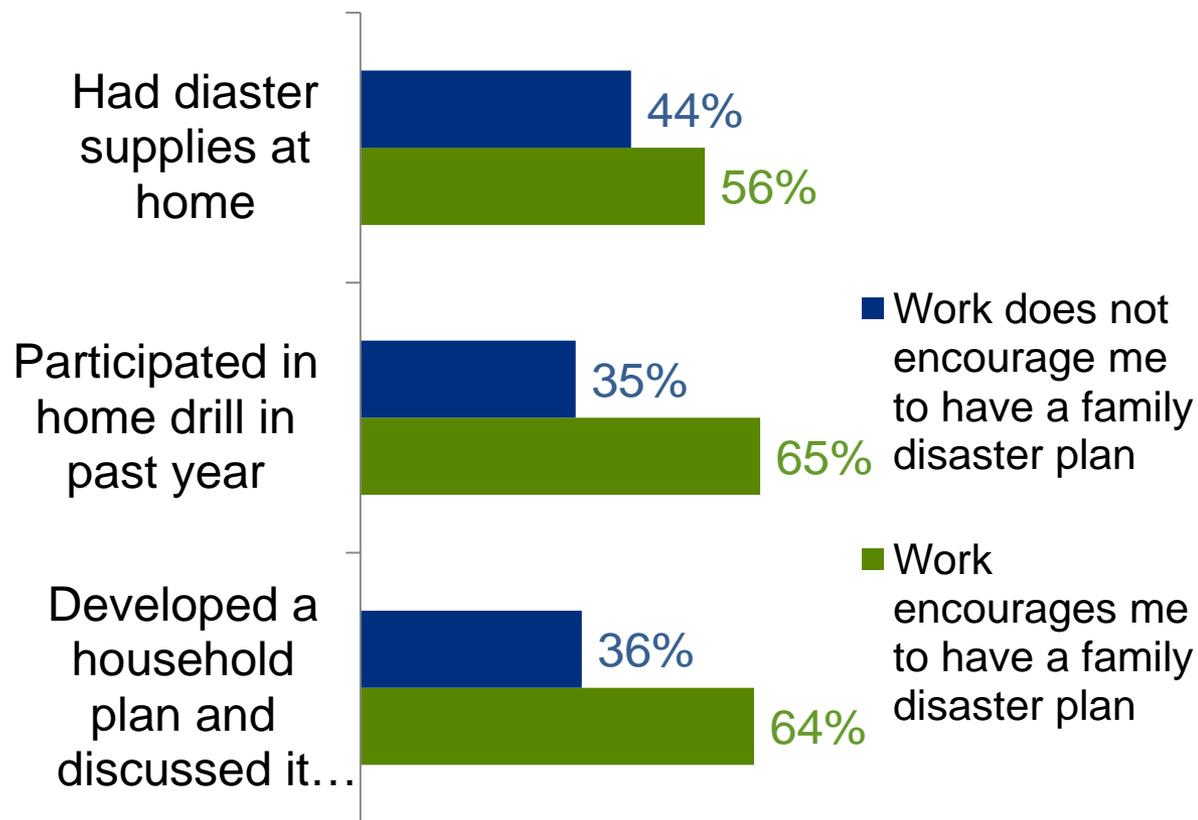
Agreement (% responding Agree/Strongly Agree)



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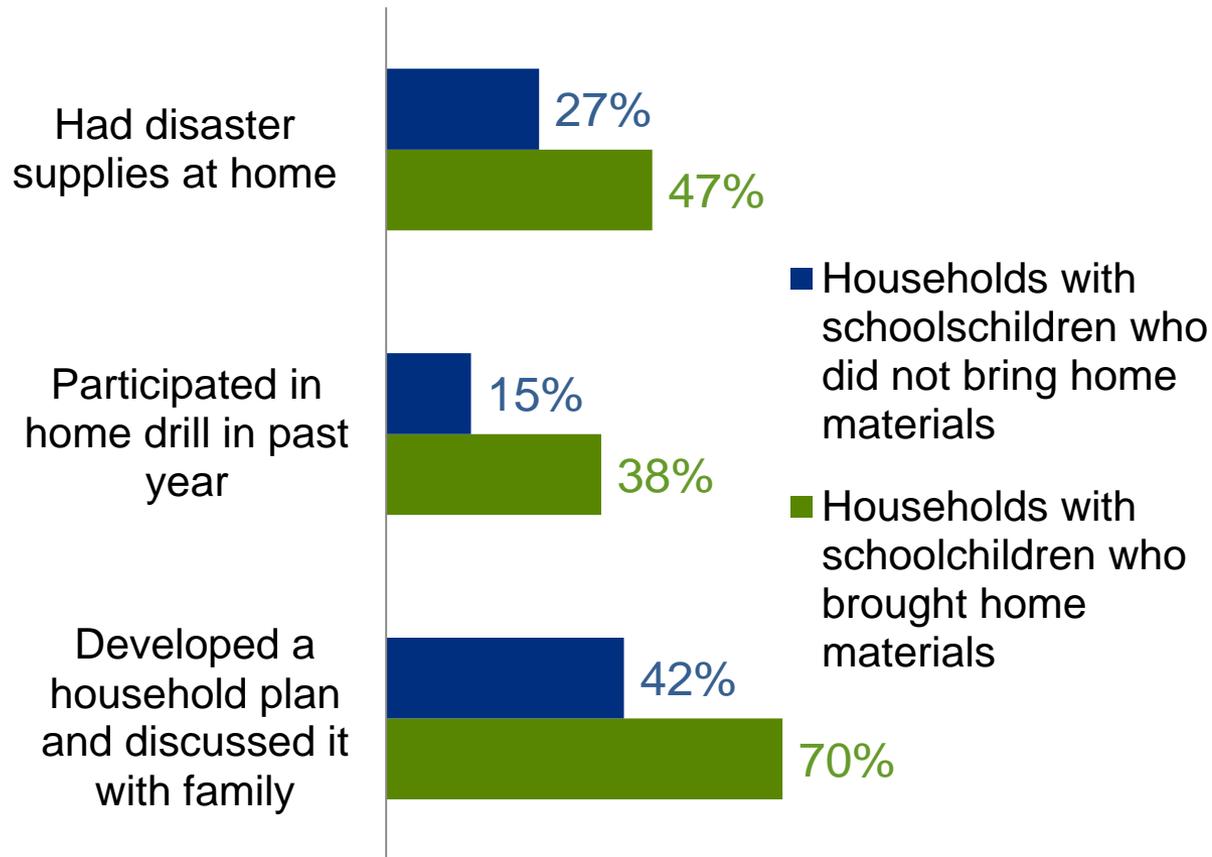
Employers Can Influence Preparedness



Employed respondents who were encouraged by their employer to have a plan or participate in preparedness training were 76% and 86% more likely to take these actions, respectively.

Employers should be encouraged to participate in preparedness activities.

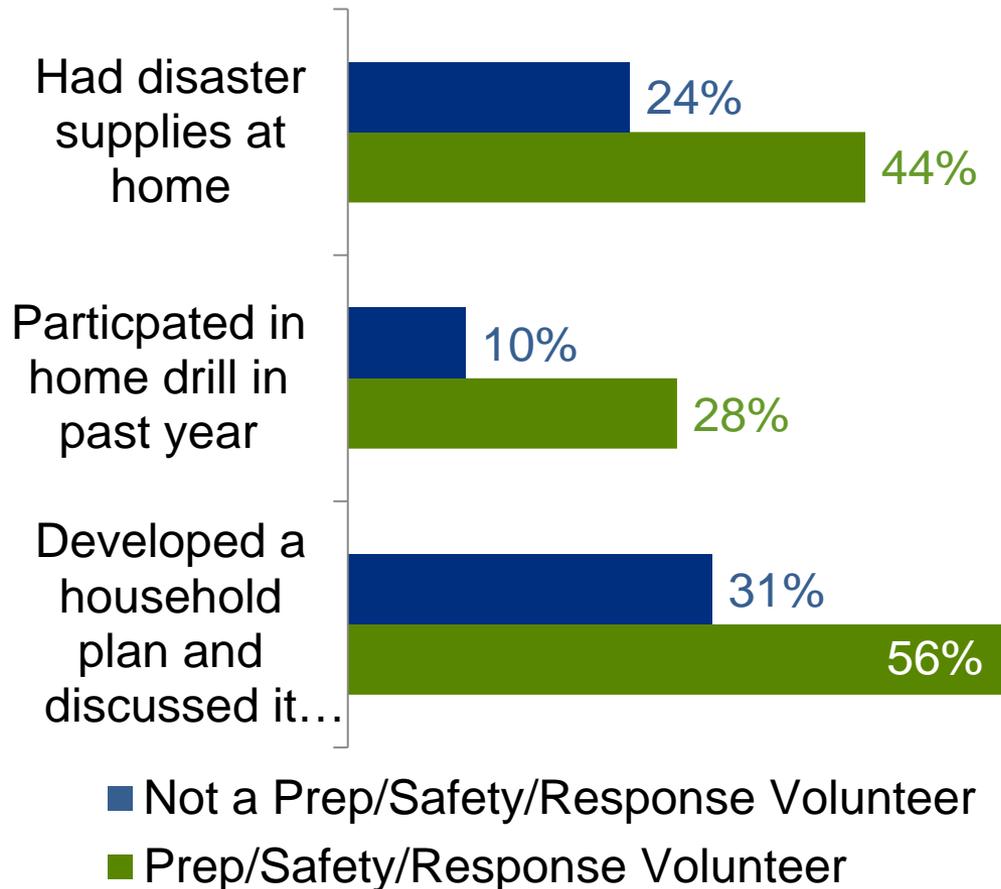
Schools Can Influence Preparedness



Households with school children that brought home materials were 75% more likely to have a household plan.

Reinforce partnerships with schools to increase the % of schools encouraging preparedness.

Volunteering Can Influence Preparedness



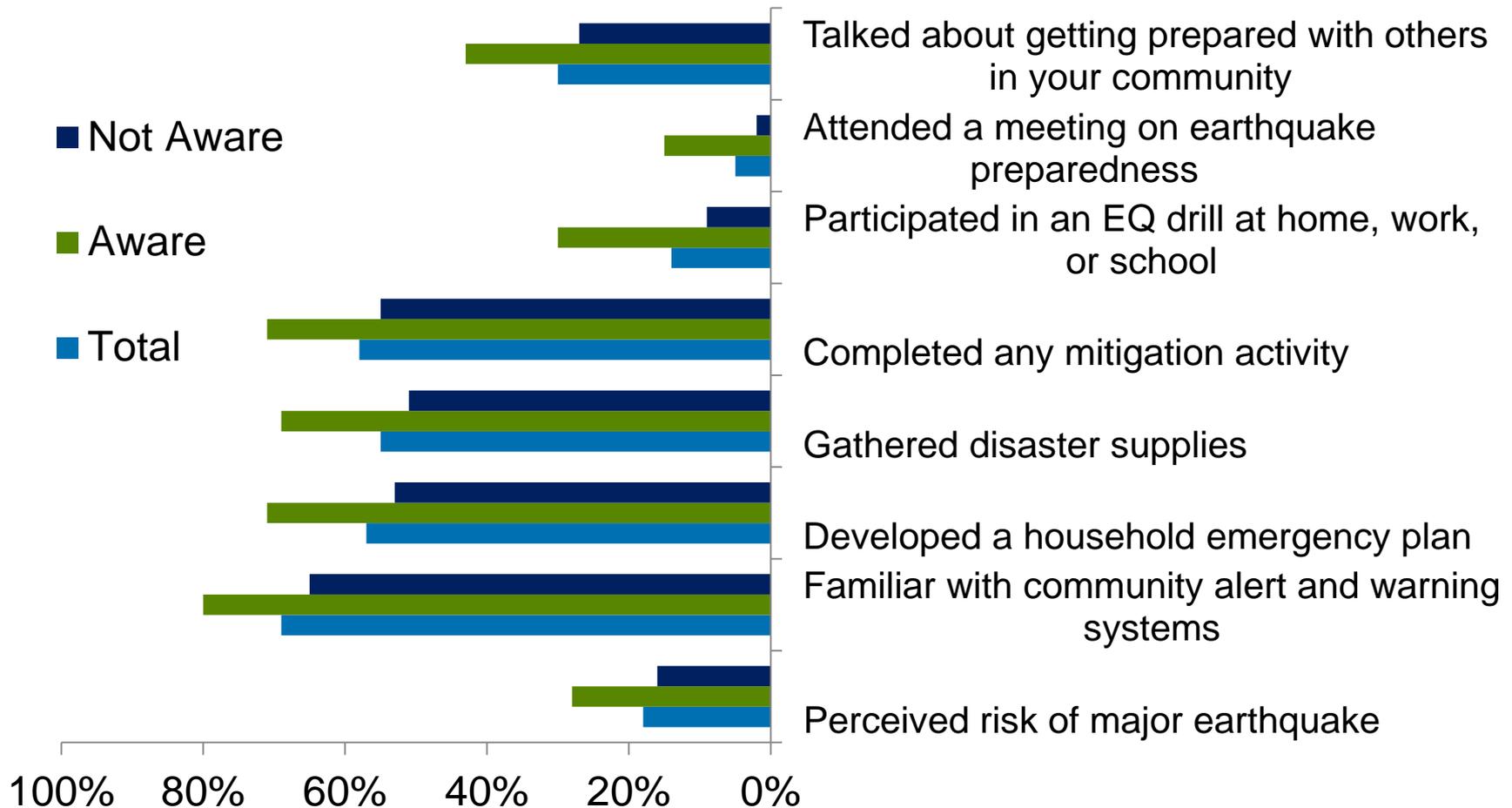
Volunteers reported more confidence in their knowledge of what to do for different disaster types.

Volunteers believed preparing for specific disasters could make a difference in helping them handle a situation.

Communities can encourage residents to become involved in preparing for and responding to disasters.

Communications Can Have an Effect

- Individuals who were “aware” (i.e., had read, seen, or heard information about preparing for earthquakes in the past year) were more likely to complete a number of preparedness actions.



Source: FEMA (2011) Central States Earthquake Preparedness Survey.

Understanding the Public: Beliefs, Experiences, and Socio-Demographics

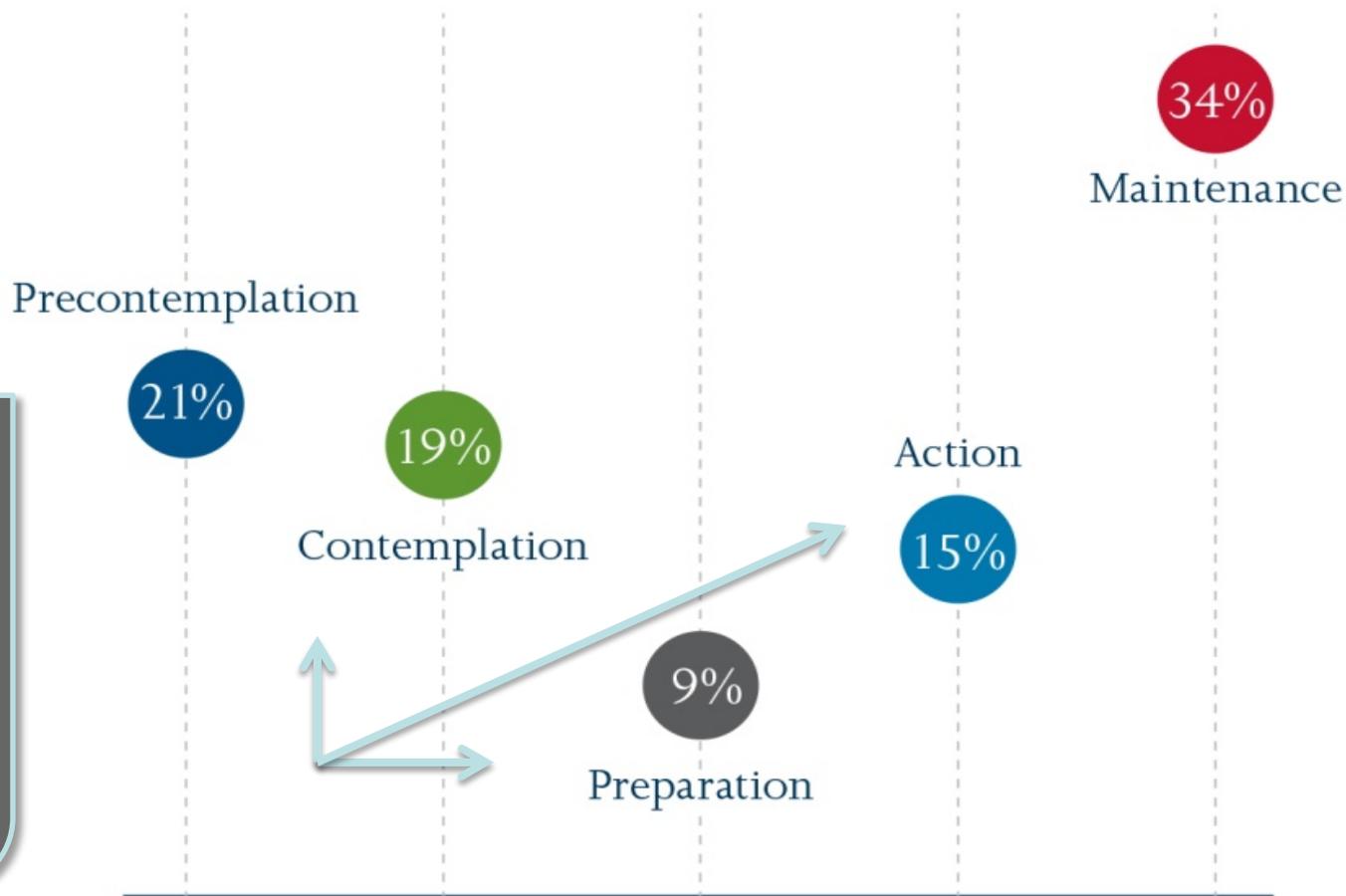


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Have Individuals Taken Steps to Prepare? (2011)

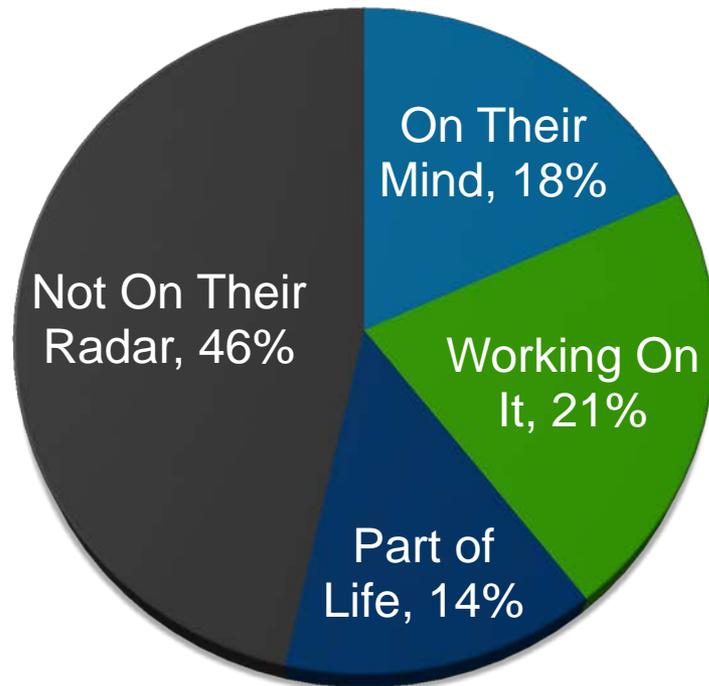
Focusing on individuals in the contemplation, preparation, and action stages for personal preparedness may yield the greatest results.



*Based on Prochaska and DiClemente's Stages of Change Model

Preparedness Profiles

- Analysis grouped people with similar beliefs and experiences related to preparedness



The socio-demographic attributes identified for each Preparedness Profile can be used to identify channels and outreach methods for each profile and to develop tailored messages and outreach.

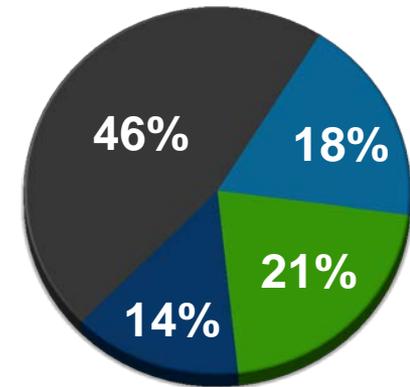


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Attitude and Behavioral Segmentation

■ 46% Not On Their Radar

- 17% conducted 3+ preparedness behaviors
- Not knowledgeable about local risks and plans
- Don't perceive disasters as likely
- Less likely to have talked about preparedness
- Don't believe preparing is affordable or that it helps
- Expects to rely on the government and non-profits
- More likely to be between 18 and 34 years
- Less likely to volunteer for community preparedness/safety or disaster response



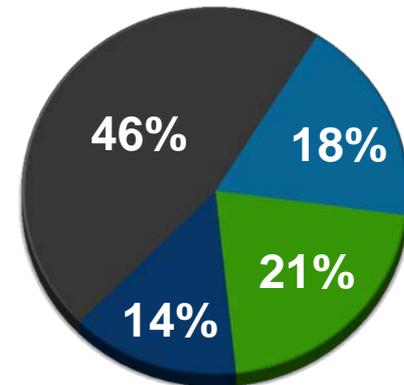
■ 14% Part of Their Life

- 68% conducted 3+ preparedness behaviors
- Confident in abilities to respond
- Informed about local risks – familiar with community plans
- Likely to volunteer for community safety/disaster response
- Likely to have planning encouraged by job or school
- More likely to be male, be between 35 and 64 years, have an income of \$75,000, and have full-time employment

Attitude and Behavioral Segmentation

■ 18% On Their Mind

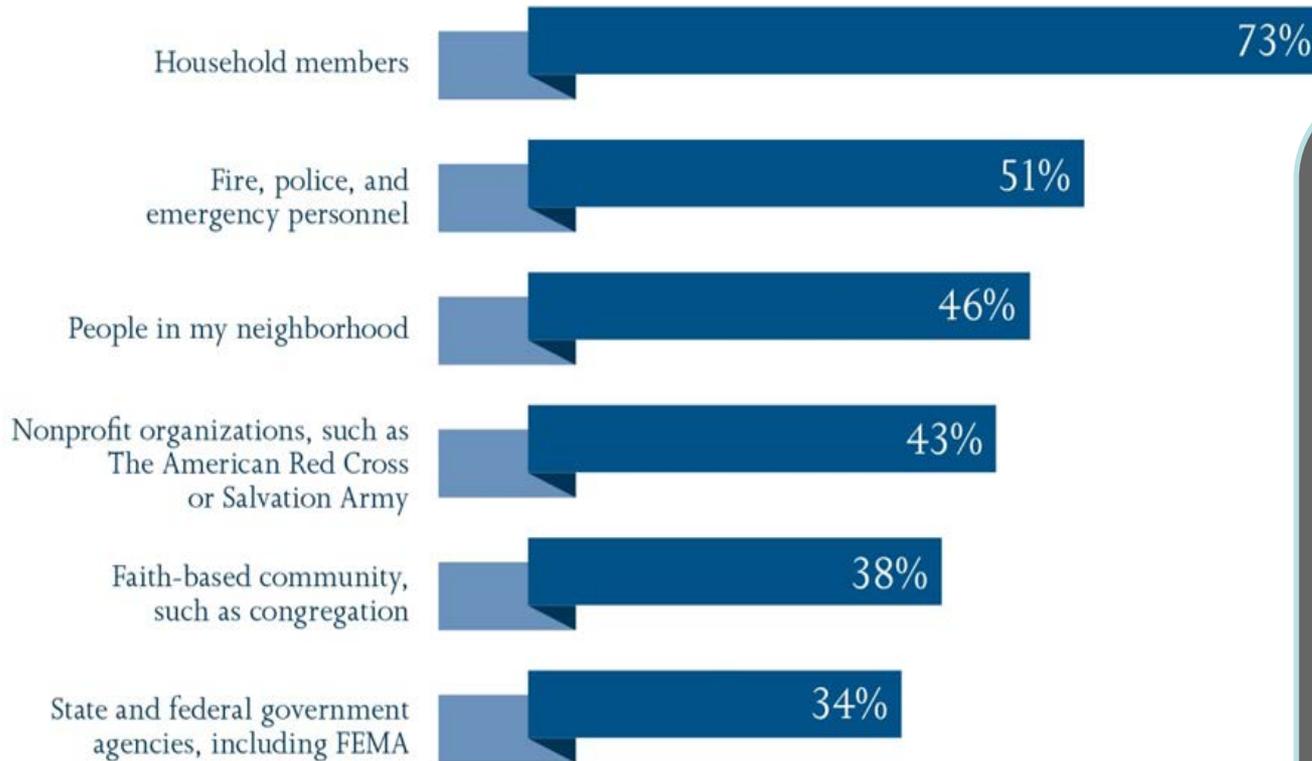
- 30% have conducted 3+ preparedness behaviors
- Perceived terrorism/hazmat/disease disasters as likely and severe, and perceived natural disasters as severe
- Expects to rely on the government and nonprofits
- Not informed about local risks and plans
- More likely to be female, have a household income under \$25,000, have a high school education or less, be between the ages of 35 and 54, be unemployed, have a disability that prevents them from preparing or responding, and assist an individual with a disability



■ 21% Working On It

- 51% have conducted 3+ preparedness behaviors
- Low risk perception/belief that preparedness helps
- Knows how to prepare/less informed about local risks
- Unfamiliar with community plans
- Likely to volunteer for community safety/disaster response
- Less likely to have planning encouraged by job or school
- More likely to own their home and have a bachelor's degree or higher

On Whom Do Individuals Expect to Rely?



Over time, dependence on emergency personnel has decreased, suggesting that messaging about shared responsibility can have an impact.

Faith-based and community-based organizations should recognize that their constituents will look to them for help after a disaster.

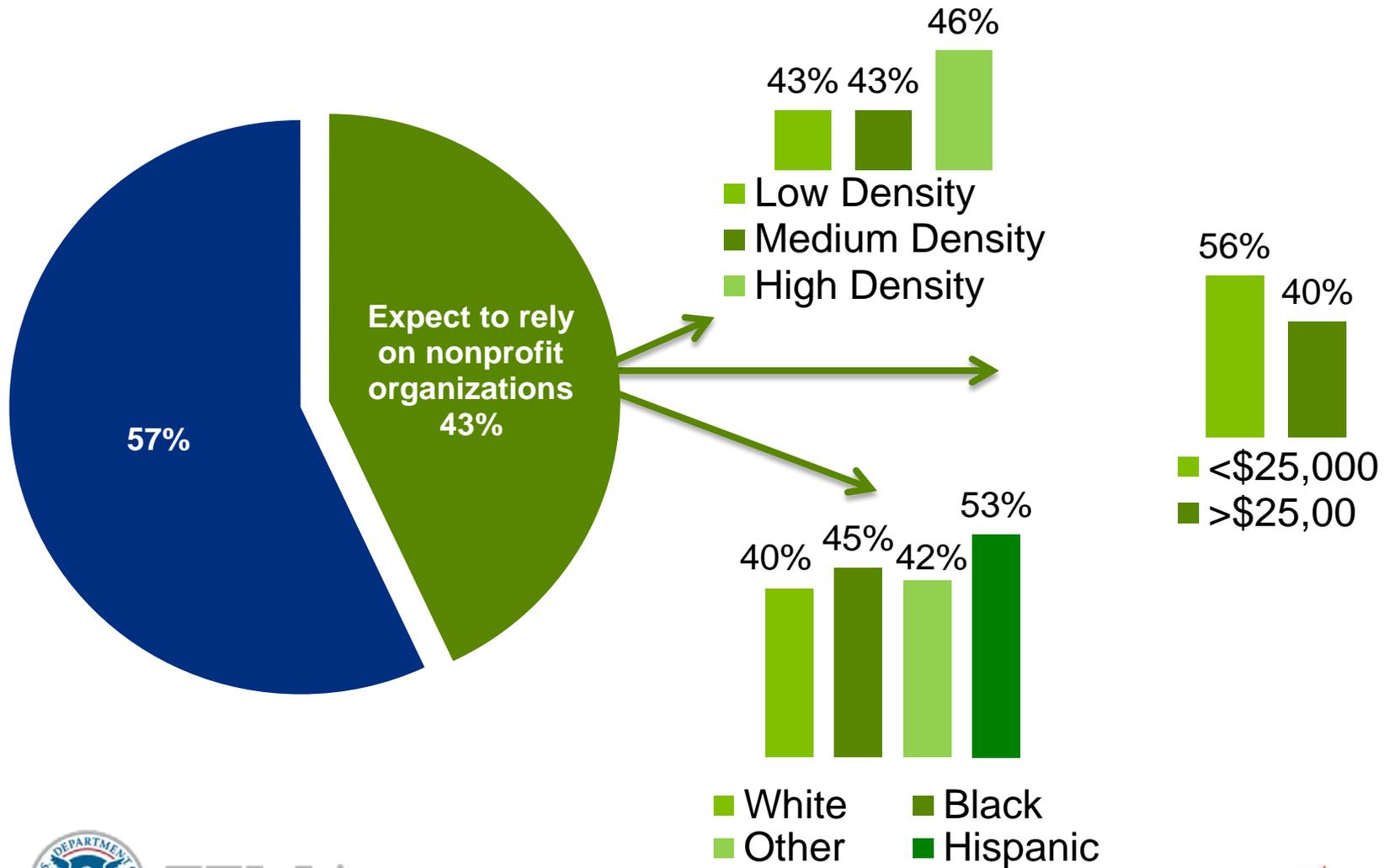


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Source: FEMA (2013) *Preparedness in America: Research Insights to Increase Individual, Organizational, and Community Action*



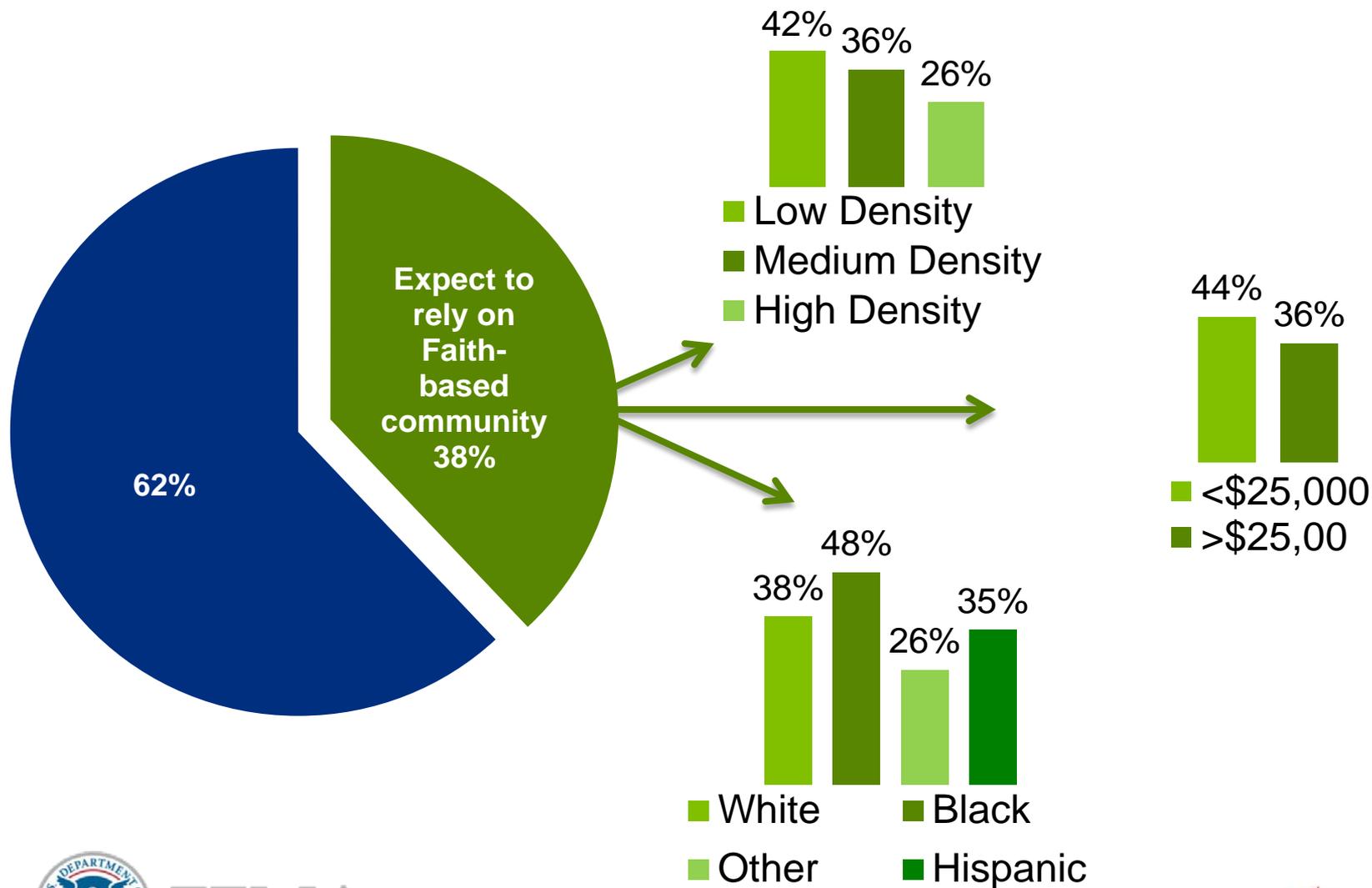
Reliance on Nonprofit Organizations: Socio-Demographic Differences



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Reliance on Faith-based Community: Socio-Demographic Differences

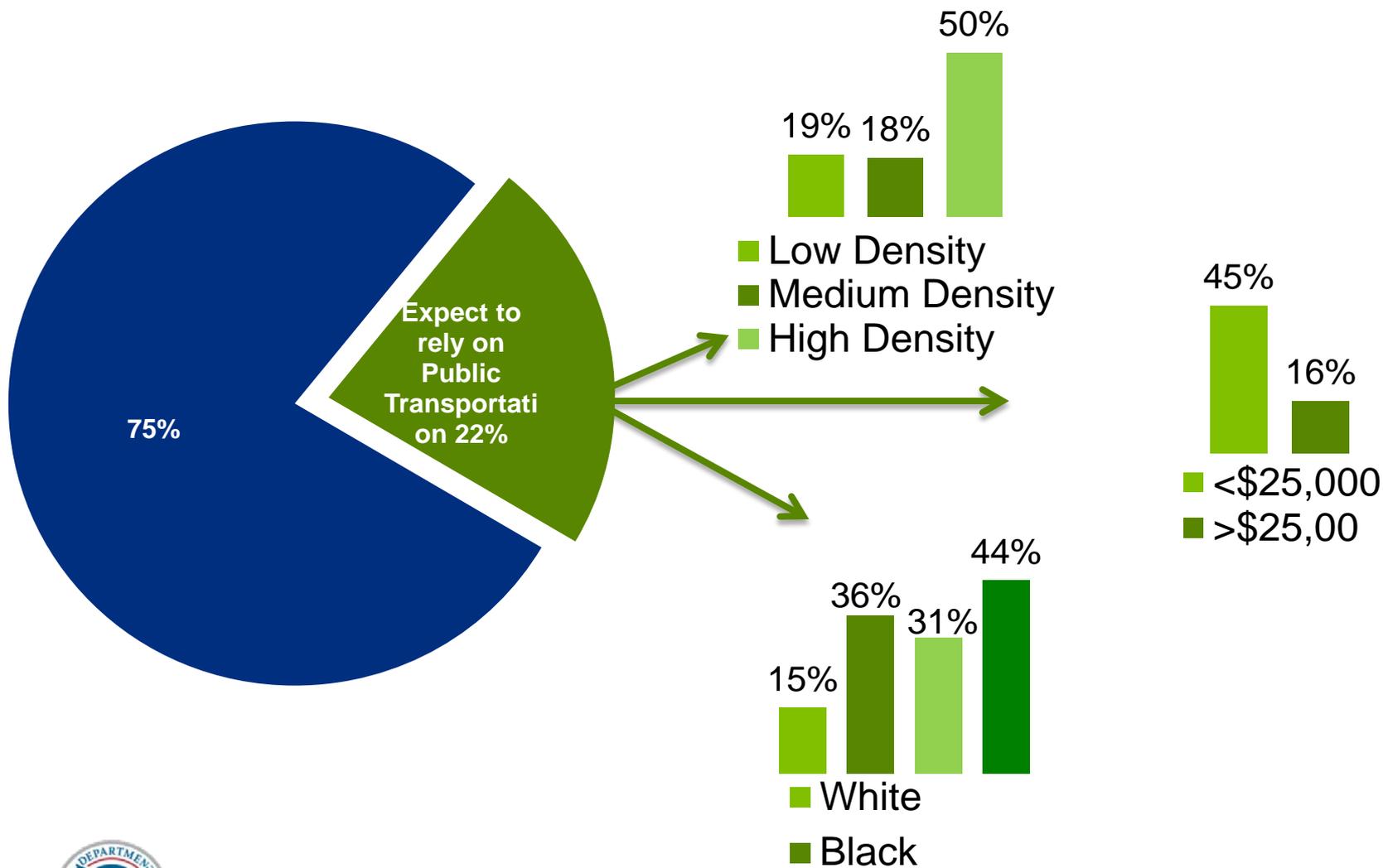


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Source: FEMA (2013) Preparedness in America: Research Insights to Increase Individual, Organizational, and Community Action



Reliance on Public Transportation: Socio-Demographic Differences



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Source: FEMA (2013) Preparedness in America: Research Insights to Increase Individual, Organizational, and Community Action



Translating Research into Action

- **Leverage the beliefs and experiences shown to have a positive relationship with preparedness behaviors.**

- **Beliefs**

- Natural disasters: confidence in one's ability to prepare, perception of risk, belief that preparedness helps, perception of severity
- Terrorism, hazardous materials, disease: confidence in ability to respond
- How to prepare, the importance of willingness to prepare, and thinking about preparing

- **Experiences**

- Talking about preparing
- Personal past experience with disasters
- Encouragement to plan and get trained at work/school
- Volunteer opportunities for preparedness/safety and for disaster response



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Translating Research into Action

- **Increase collaborative efforts with social networks.**
- **Develop outreach efforts for specific populations and be strategic with limited resources.**

- **To increase the power of community connections, organizations should consider engaging in the following activities:**
 - Talking about preparedness.
 - Encouraging their constituents to talk about relevant community hazards and to prepare for them.
 - Creating specific activities to appeal to subgroups of their constituencies.
 - Delivering the message through organization materials and channels.
 - Embracing and modeling the message.



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Future Research

- **Protective Actions Validation**
- **Risk Communication Tool**
- **Disaster Survivor Research**
 - Post-Sandy Focus Groups
 - FEMA Individual Assistance Recipients
- **Qualitative Message Testing**
- **National Surveys: Impact of America's PrepareAthon!**
- **Community Resilience Indicators**



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