HAWAII DISASTER PREPAREDNESS

A Presentation of Key Findings

January 20, 2012
OBJECTIVES AND METHODOLOGY
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.

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

* 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.
DETAILED FINDINGS
PERCEPTIONS AND EXPERIENCES
Residents are most concerned about Hurricanes and Tsunamis.

Disasters Concerned About the Most

- Hurricane: 60%
- Tsunami: 51%
- Earthquake: 21%
- Flood: 11%
- Fire: 6%
- High winds/Storms/Tornadoes: 5%
- Volcanic eruption/Lava flows: 3%
- Terrorism: 2%
- Transportation Accident: 1%
- Natural Disaster (General Mention): 1%
- Other: 6%
- Don’t know/Refused: 8%

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 flus, and flash floods? (n=1027)
Certain segments of the population have greater concerns about different disasters.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaiians</td>
<td>More likely to state high levels of concern with disasters</td>
</tr>
<tr>
<td>Low Income (&lt;$35,000 HHI)</td>
<td>More concerned with Pandemic Flu</td>
</tr>
<tr>
<td>Mid-Low Income (&lt;$75,000 HHI)</td>
<td>More concerned with flash floods</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Emergency Type</th>
<th>Not at all confident (1-4)</th>
<th>(5-7)</th>
<th>(8-9)</th>
<th>Extremely confident (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural disaster (hurricane, tsunami)</td>
<td>8%</td>
<td>30%</td>
<td>38%</td>
<td>23%</td>
</tr>
<tr>
<td>Terrorist attack</td>
<td>19%</td>
<td>37%</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>Chemical disaster (oil spill, gas leak)</td>
<td>17%</td>
<td>40%</td>
<td>27%</td>
<td>14%</td>
</tr>
<tr>
<td>Public health disaster (flu pandemic, disease)</td>
<td>17%</td>
<td>39%</td>
<td>30%</td>
<td>12%</td>
</tr>
</tbody>
</table>

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.

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
TV is the most common source for disaster preparedness information.

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)

- Television: 51%
- Radio: 20%
- Newspaper/Magazine: 16%
- From Employer/At School: 12%
- Internet: 8%
- Telephone Book: 5%
- Church: 3%
- Government agency/entity: 3%
- Website (unspecified): 2%
- Flyer/Pamphlet/Brochure/Poster: 2%
- Have not heard/seen anything: 18%

TV was less likely to reach those with a household income of <$35k or <35 years old or older.

18-34 yr. old residents are more likely than 35+ yr. olds to have seen or heard about disaster preparedness online or from their employer/school.

Those with a household income of <$35k and 18-34 yr. olds were more likely than others to have not seen anything about disaster preparedness in the past three months.
Only 25% of residents report being “very” prepared.

Preparedness Self-Assessment

- Somewhat prepared, 54%
- Not very prepared, 16%
- Not at all prepared, 5%
- Very prepared, 25%

Self-reported preparedness increases with age:
- 20% 18-34 yr. olds are “very prepared”
- 26% 35-64 yr. olds are “very prepared”
- 34% 65+ yr. olds are “very prepared”

Q3. Overall, how prepared would you say your household is for disasters like those that I just mentioned? (n=1027)
Food and water are top-of-mind in terms of disaster preparedness.

Top 10 Items that Should Be in Place to Prepare for a Disaster

- Extra non-refrigerated food: 76%
- Extra water: 67%
- Flashlight: 32%
- Battery-powered radio: 22%
- Extra batteries: 21%
- First Aid Kit: 18%
- Disaster plan: 16%
- Extra medicine: 13%
- Car/Gas for Car: 11%
- Clothing: 10%

Those who said they are “very prepared” are more likely than those who are “not very” or “not at all” prepared to state that a disaster plan should be in place (21% vs. 9%).

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

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)

- 1-6 days, 30%
- 7-10 days, 38%
- 11-20 days, 18%
- 21-30 days, 9%
- 31+ days, 4%
- Don't know, 2%
Residents claim to have an average of 7 out of 9 recommended items.

Those who recall disaster preparedness information in the past 3 months have more items.

Low income residents are generally less prepared.

Older residents are generally more prepared.

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**

- 14% Don't like canned food
- 18% Didn't think of it/No excuse
- 14% Not enough for 7 days
- 13% Don't need/want
- 13% No storage
- 12% Don't shop much
- 10% Canned goods expire
- 6% No money for it
- 2% Will buy
- 3% Other
- 5% Don't know/Refused

**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

- Never thought about it/Won't happen/Lazy: 23%
- Will get when needed: 21%
- We have but not for 7 days: 14%
- Don't drink bottled water: 12%
- Need to replenish: 11%
- No place to store: 9%
- Stored water goes bad: 5%
- Have an alternative (e.g. purifier): 4%
- Planning to buy: 3%
- No storage: 2%
- Other: 3%
- Don't know: 3%

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.

Q5b. Why don't you currently have a first aid kit or components of a kit at home? (n=85)

- Never thought of it/Never bought one: 22%
- Have some supplies: 21%
- Have access to one: 15%
- Don't need/Don't think a disaster will occur: 13%
- Need to buy/replenish one: 11%
- Too expensive: 7%
- Other: 6%
- Don't know/Refused: 12%
Again, a lack of urgency or interest keeps several from preparing a disaster plan.

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

- Too busy/Never thought of it/Lazy: 39%
- Have a vague idea/Will figure it: 28%
- Not a concern/Don’t think it will happen: 9%
- We feel safe/Home is on higher ground: 7%
- Family spread out/Hard to coordinate: 3%
- Don’t know how to create one/Need information: 3%
- Someone else will take care of it: 2%
- If it’s my time, it’s my time/As the Lord wills: 1%
- Other: 2%
- Don’t know/Refused: 9%

Do Not Have a Disaster Plan

(n=499)
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

- Strongly agree, 36%
- Somewhat agree, 46%
- Somewhat disagree, 12%
- Strongly disagree, 5%
- Don't know, 1%

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)
Research Conclusions

- We do not have to convince residents they should be prepared.
  - A majority of residents are concerned about disasters and have seen information on the need to be prepared.
  - 18-34 year olds and low-income residents have lower awareness

- Even though there is general awareness about how to prepare for a disaster, only 25% of residents feel they are well-prepared.
  - Again 18-34 year olds and low-income households feel less prepared

- Nine of ten residents are willing to prepare their household, based on a set of guidelines to follow.
  - Most residents know they should have food and water stored
  - Few residents can cite any other supplies or equipment they should have
Research Conclusions

- Most common reasons for not being prepared include:
  - ‘I didn’t think of it’
  - ‘I will get prepared when the time comes’
  - ‘I don’t like canned food or am concerned about stored items going bad’

- More than 8 of 10 residents feel that government and community organizations are MOST responsible for them prepared.
  - Personal responsibility for preparedness may be low

- Residents are most confident in government agencies’ response to natural disasters, but less confident about response to terrorist attacks, chemical disasters, and public health disasters.
  - Many residents have experienced natural disasters and have seen government agencies’ response.
  - Residents may not have clear expectations about government’s role in other types of disasters.