



Myths and Misconceptions Surrounding People, Alerts, and Warnings

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What are the “Disaster Myths”

- Looting
- Price Gouging
- Panic
- Psychological Dependency
- Contagion
- Role Abandonment

Where did the “ Disaster Myths” come from?

- Over the last half century many behavioral studies have been conducted on how people respond to disasters in the USA .
- In the process of conducting those studies scientists noticed a number of misconceptions, misinterpretations, and false assumptions about how people respond.
- Researchers have begun to refer to these observations as “disaster myths”.

A Caveat on the Term “Myths”

- Before we talk about “myths” it is important to review a few limitations of the paradigm
 1. These observations are meant to illustrate the broad patterns in response not to say these never happen. The “myth” is that these are common responses it is not a suggestion that these things never happen.
 2. Most were developed looking at “disasters” there is room for reevaluation in catastrophes.
 3. Under “special conditions” some of these broad patterns may not hold true.

So....

- With the proper Caveats given I was asked to discuss some myths of the human behavioral response to alert systems.
- This is not an exhaustive list. It is simply a selection of issues based on historic and recent findings that illustrate a few inconsistencies in expectation and empirical findings.
- More than anything the list is meant to make people think about the assumptions they bring to the creation of any technology.

Myth #1-Alerts Cause “Mass Panic”



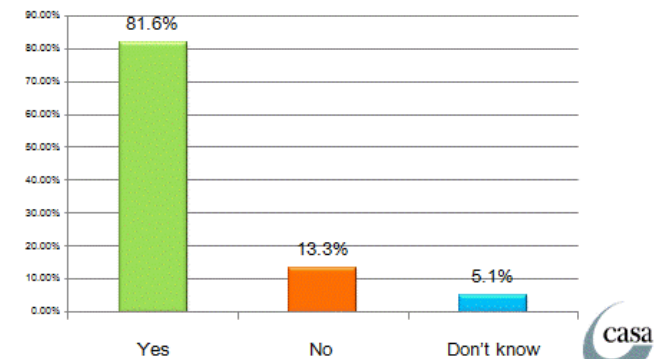
- **Myth:** When disasters occurs victims will panic and engage in any behavior deemed necessary at the moment to facilitate escape.
- **Consequences:** warnings are delayed until deemed absolutely necessary in order to avoid panic
- **Reality:** Extensive studies have shown that the greater issue is fighting what we sociologist call “normalcy bias” think about the last time you heard a fire alarm go off in a building. Did you run for the door? Probably not.

Myth #2- People Who Don't Comply with Alerts are Irrational or “Stupid”

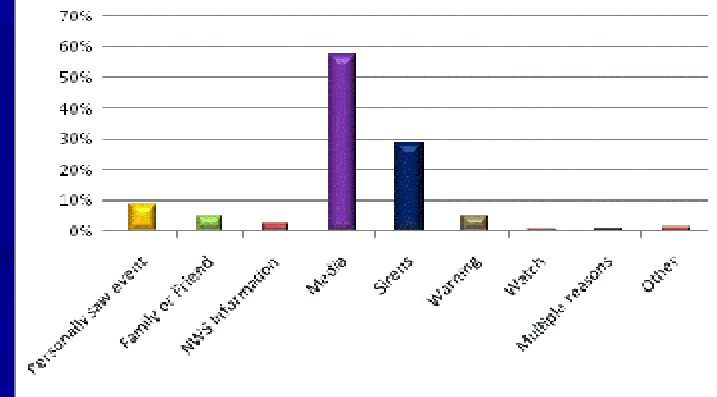
Warning Process (Donner, 2007: Modified version of Mileti and Sorenson):

- ✓ **Receive the Warning**-People must physically receive a warning.
- ✓ **Understand the Warning**-Once people receive a warning they must be able to process the message and understand what it means.
- ✓ **Believe the warning is credible**-People must believe that the source of the warning is reliable and the threat could materialize
- ✓ **Confirm the threat**-People must take steps in order to verify that the threat described in the warning is real.
- ✓ **Personalize the threat**-People must believe that the threat is something that can potentially effect them.
- ✓ **Determine whether or not protective action is needed**-People need to decide if they need to take action.
- ✓ **Determine whether protective action is feasible**-People need to decide if they are able to take action.
- ✓ **Decide if you have the Resources to Take Protective Action**- Finally people need to have the resources to actually do what is required

Were you aware that a tornado or severe storm had been observed in the surrounding area before it got to your town?



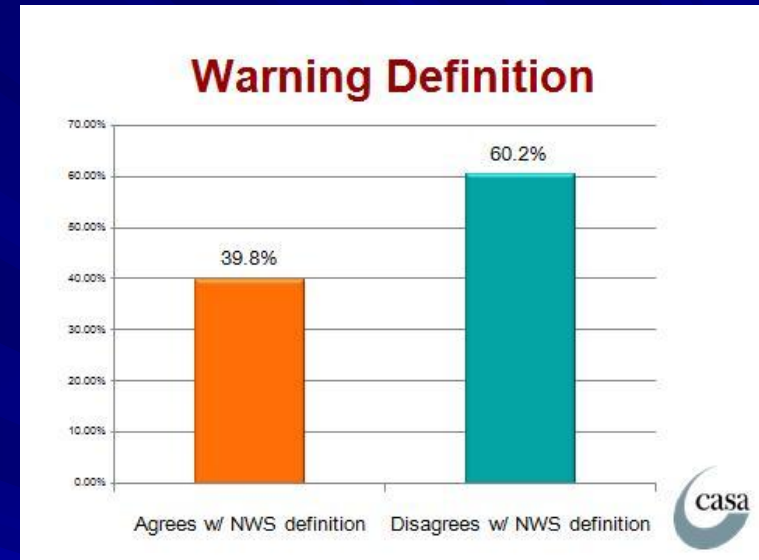
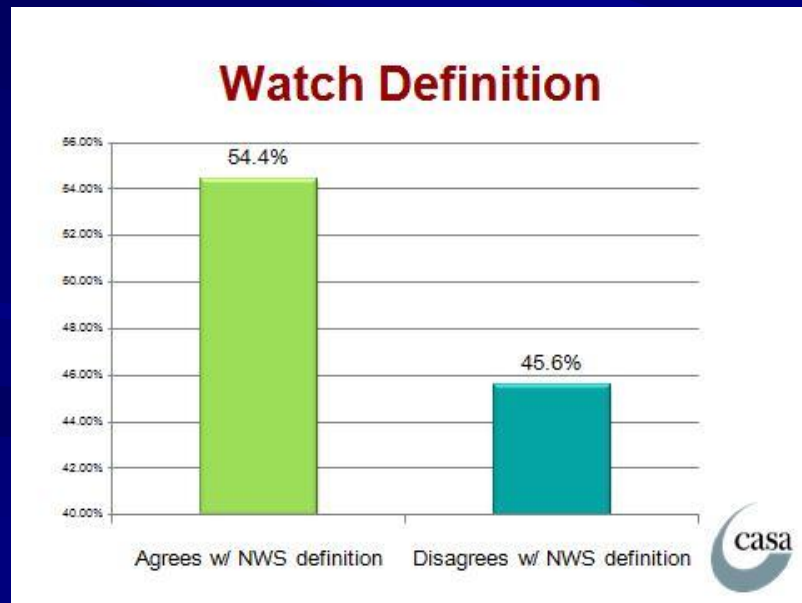
What Information led you to seek Shelter?



Myth #3- Technical Terms are Intuitive

■ Tornado Warning

- Imminent Danger
- Seek Shelter Immediately

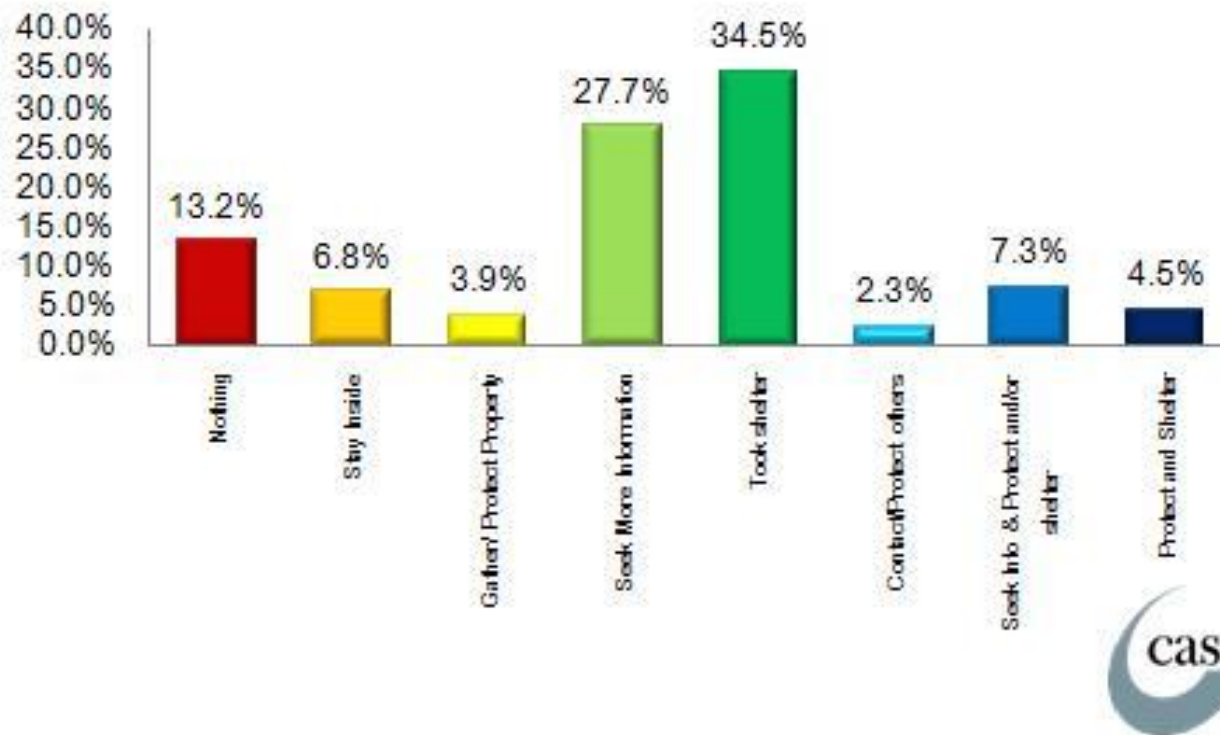


■ Tornado Watch

- Favorable Conditions
- Prepare to seek Shelter

Myth #4- Response to Alerts is Binary (compliance/non-compliance)

After receiving the warning or notification, what did you do?(open)



Myth #5- Single Messages are “The Whole System”

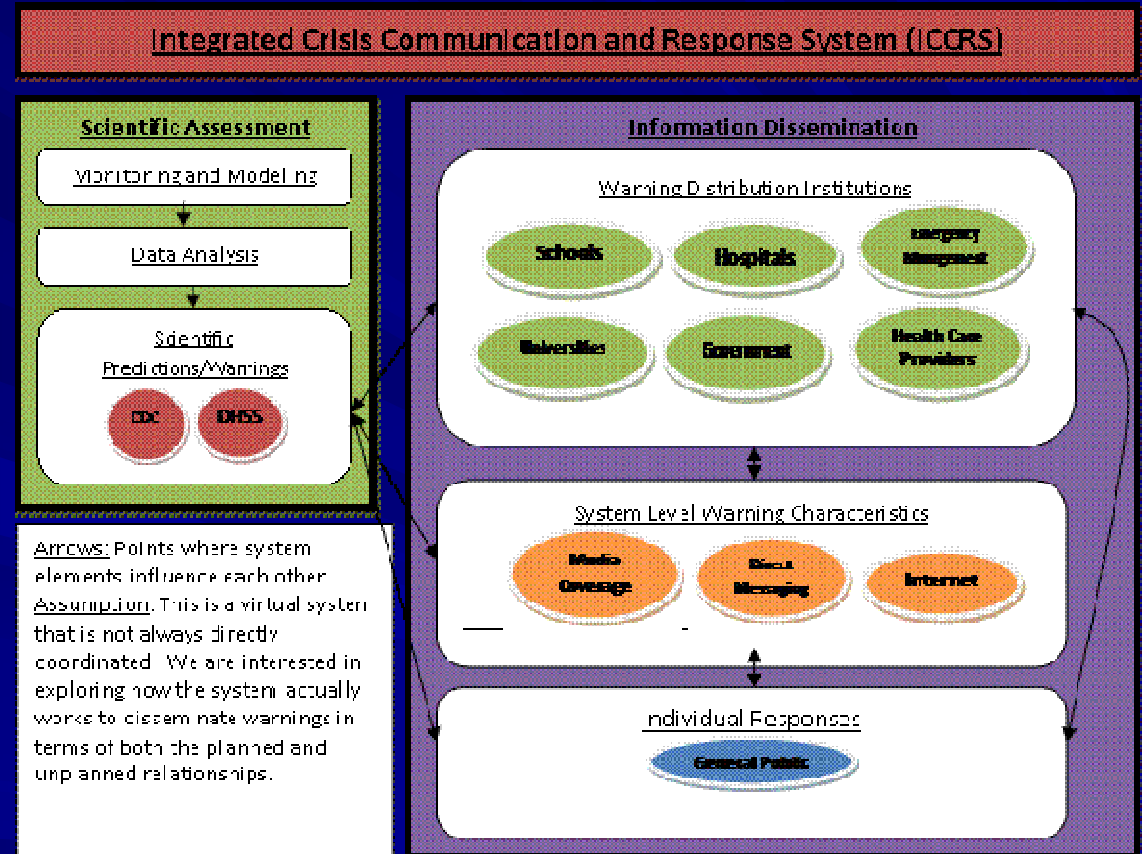
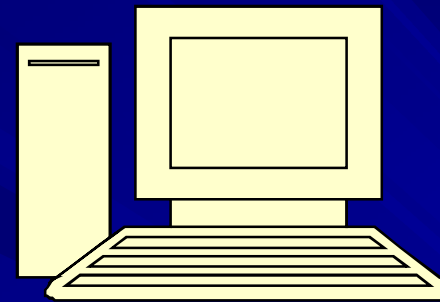
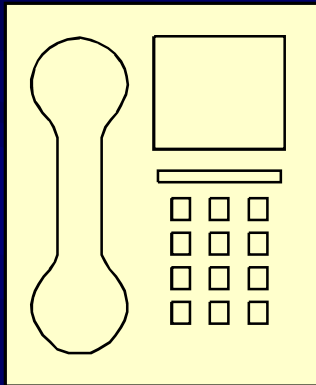


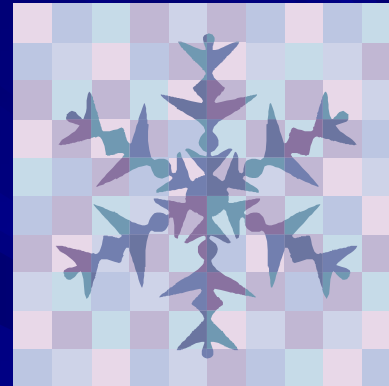
Diagram adapted from Nigg 1995

Myth #6- Technological delivery systems are neutral or value free



Myth #7- The One Size Fits all Solution

- Technology
- Language
- Hazard Types
- Regional subculture



Myth #8 - “Good” Warning Systems are Good Enough

■ Katrina

- % warned
- % unwarned
- % evacuated
- % that did not evacuate

■ Were Katrina warning, evacuation, and response systems a success or a failure?