

Public Education for Mobile Device Alerts and Warnings: Current Knowledge and Research Needs



**Michele M. Wood, PhD
Community Health Science Department
California State University, Fullerton**

**Public Response to Alerts and Warnings on Mobile Devices:
Current Knowledge and Research Needs NAS Workshop
April 13-14, 2010, National Academy of Sciences, Washington, D.C.**

Much is known about
how to craft effective
warning messages.

Evidence Based Warnings

(Mileti, Kuligowski, Sorensen, & Vogt-Sorensen, 2009)

● MESSAGE IS:

- **CLEAR** (simply worded)
- **SPECIFIC** (precise and non-ambiguous)
- **ACCURATE** (no error)
- **CERTAIN** (authoritative and confident)
- **CONSISTENT** (within and between messages)

● ABOUT:

- **WHAT** (to do)
- **WHEN** (when to do it)
- **WHERE** (who should & shouldn't do it)
- **WHY** (hazard & consequences)
- **WHO** (who's giving the message)

● AND IS CONFIRMED:

- **REPEATED** frequently
- **MULTIPLE COMMUNICATION CHANNELS**

Evidence Based Warnings Message Template

- Message label
- Who's speaking
- Who message is for (location)
- What they should do by when (who shouldn't)
- Why they should do it (risk/consequences)
- Repeat:
 - Who message is for
 - What they should do by when
- End: message label & pending information

How will the public
respond to alerts and
warnings received on
mobile devices with a
90 character constraint?

We also know that
warning response is
situationally
determined.

How can we use public education “prime” the public to respond to mobile device alerts and warnings?

Lessons Learned, #1

- Don't use fear to “engage” people



Lessons Learned, #2

- Provide rich fields of information when educating the public about CMAS
 - Multiple channels, multiple sources, what actions to take, how the actions can cut future losses, consistent message
- Make public education interactive and experiential
- Tell people where to get more info

Lessons Learned, #2

- **Who could provide a credible face for a public education campaign about mobile device alert systems?**

Firefighters are the most credible source for Americans (35%)



Lessons Learned, #2

- 35% is as good as it gets for a single source, so use multiple sources
- Make sure messages are consistent across sources and channels

Lessons Learned, #3

- The most important thing we can do is to get people talking to each other (milling)
- People are engaging in information seeking in new ways using new technology, much of it electronic

eMilling

Research Needs

- **How do people assess the credibility of alert and warning messages received on mobile devices?**
- **How do alert messages transform into spam? What's the threshold? What triggers people to "opt out?" Who opts out? When?**
- **What gets people to opting back in? Can we influence that process?**

Research Needs

- **What's the inter-rater reliability for releasing CMAA warning messages for a given event?**
- **What about intentional reception blockers, liability issues, duty to inform?**
- **Design of local, regional, national mobile device alert and warning drills**
- **Evaluation—formative, process, outcome**

mwood@fullerton.edu

