The Hawaii nuclear alert: how did people respond?

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ABSTRACT

Nuclear tensions between the United States and North Korea have been extensively reported as both sides postured via threats and propaganda and North Korea conducted missile tests. North Korea's leader Kim Jong-Un had promised to decimate the US and was referred to by President Trump as mentally 'deranged'. A story in the New York Times in late 2017 based upon consultations with leading security experts suggested that the chance of war breaking out was between 15 and 50 percent (Kristof, 29/11/2017). Given the threat of an attack, U.S. government officials encouraged residents to be prepared and commenced monthly drills to test warning systems.

Within this environment of heightened geopolitical tensions, a single text message was sent in error to people in Hawaii on the 13th of January at 8.07am, warning of an imminent ballistic missile strike.

The alert presents an opportunity to improve the understanding of how people react to warnings of extreme events. Risk Frontiers researchers conducted an analysis of media interviews with 207 individuals (respondents) who received the warnings to identify people's attitudes and responses after the alert was received. Interview responses were coded, analysed and are reported in this paper.

INTRODUCTION

Nuclear tensions between the United States and North Korea have been extensively reported as both sides postured via threats and propaganda and North Korea conducted missile tests. North Korea's leader Kim Jong-Un had promised to decimate the US and was referred to by President Trump as mentally 'deranged'. A story in the New York Times in late 2017 based upon consultations with leading security experts suggested that the chance of war breaking out was between 15 and 50 percent (Kristof, 29/11/2017). Given the threat of an attack, U.S. government officials encouraged residents to be prepared and commenced monthly drills to test warning systems.

Within this environment of heightened geopolitical tensions, a single text message was sent in error to people in Hawaii on the 13th of January at 8.07am, warning of an imminent ballistic missile strike. The message read:

Emergency Alert. BALLISTIC MISSLE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.

Officials alerted the public to the error via social media 13 minutes later, but it took 38 minutes to send a follow-up text message. In the meantime, the community was left to react as if a real missile was to strike Hawaii within twelve to fifteen minutes. It has been revealed that the delays were the result of local officials believing they required federal approval to cancel the alert.

The alert presents an opportunity to improve the understanding of how people react to warnings of extreme events. Risk Frontiers researchers conducted an analysis of media interviews with 207 individuals (respondents) who received the warnings to identify people's attitudes and responses after the alert was received. The media interviews were sourced from a search of global online media outlets that had reported on the false alarm. Interview responses were coded, analysed and are reported in this paper.

RESULTS

Respondents commonly spoke of where they were when they received the alert. Locations varied, highlighting the importance of considering the many likely locations of people when an alert is issued. Most frequently respondents were in a hotel (n=39) or awake at home (n=38). Others were at home, but in bed (n=11); at work (n=10), in a car (n=10), at the beach (n=7) or in the ocean (n=3).

Most respondents received the alert via the official text message issued by the State (n=89), but a minority were informed by someone else: for example, a family member (n=17). Some respondents, however, spoke of being spared the stress of the false alarm as they did not receive the initial warning (Hawaii News Now, 16/1/2018).

Respondents often spoke about how they had trusted the alert because they had interpreted it in the context of existing North Korea and United States tensions (n=36) and therefore believed the alert to be plausible.

Those that chose to validate the warning did so through a multitude of different channels including social media (n=26), making contact with others (n=15), searching websites (n=16), listening for sirens (n=16), watching TV (n=11) or calling authorities (n=3). Based on interview statements in which residents stated how they had immediately responded to the warning, we estimate that a large number of residents may not have attempted to validate the warning (n=64).

Respondents often spoke about how they felt when they received the alert. Most often people described their emotions as fearful (n=51), concerned (n=23), panicked (n=21), upset (n=13) or calm (n=13).

Most respondents undertook protective actions in response to the warning (n=136), most often stating that they attempted to seek shelter within the building they were located in (n=43); called or texted others to alert them (n=23) or called or texted others to express their emotions (n=22). Other actions included packing emergency items (n=17); gathering family members (n=16); attempting to leave a building to seek shelter elsewhere (n=15) and leaving an open space to seek shelter (n=12). Eighteen respondents stated that they did not know what to do when they received the alert.

Respondents also commented on what they observed other people doing. Most commonly others were observed attempting to seek shelter (n=50), crying (n=26), running (n=25) or calling or messaging others (n=13).

When seeking shelter, respondents most often stated that they had attempted to seek shelter within their home (n=34), frequently within the bathroom (n=18). In addition nineteen respondents spoke about sheltering within their hotel. Some commented that they did not know where to seek shelter (n=18).

A small number of respondents stated that they did not take any action (n=16). Reasons for not responding were that respondents thought that there was nothing that could be done (n=7); the warning was false as sirens did not sound (n=4); the missile would be shot down or would miss (n=2); or the warning was a joke or hoax (n=2).

Those that mentioned how they had discovered the alert was false found this information through social media (n=21) or via a text message from authorities (n=12). On discovering that the alert was a false alarm, respondents described their emotions as relieved (n=23), concerned (n=7) or upset (n=7).

Respondents commented on how the situation was handled or how warnings could be improved in the future. Most often, respondents were concerned about the lack of safeguards to avoid such a false alarm and that it took too long for authorities to notify the public that the alert was false. In some cases, respondents reflected on their own personal disaster preparedness, noting specific actions that they had not undertaken to be prepared.

DISCUSSION AND CONCLUSION

The Hawaii missile false alarm provides numerous insights into how people behave when warned of an extreme event. Practitioners should note the importance of social media as a communications mechanism, particularly for people to validate warnings and share with others.

The case study demonstrates the role of informal networks in both communicating and validating warnings. Hotels were clearly an important node of communication with their guests, and should always be considered an important network in communicating warnings in at-risk areas with large tourist populations.

Interestingly, it would appear that the population had been primed to respond to such an alert by their knowledge or concerns regarding tensions between North Korea and the United States. This demonstrates the importance of communicating long range forecasts to build the community's awareness of a risk so that individuals will recognise and respond to a warning when it occurs.

Given that the official advice as to what to do in the event of a real alert is for "all residents and visitors to immediately seek shelter in a building or other substantial structure", it appears that most respondents reacted appropriately. However, consistent with previous Risk Frontiers research on community responses to warnings, not everyone responded or knew how to respond. This is a further demonstration that even in extreme circumstances, emergency warnings cannot be relied on to achieve full compliance by communities. This finding should be considered when relying on warning systems to justify the permitting of development in high risk locations.

As for improving warning technologies, the Hawaiian Emergency Management Agency has suspended all future drills until a review of the event has been completed; instituted a two-person activation/verification rule for all tests and actual alarms and instigated a cancellation command that can be activated within seconds of a false alarm.

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