

NEW
MEDIA
FOR
EMERGENCY
TORNADO
NOTIFICATION



Stephanie Meyers, MA
University of Missouri-Columbia



Executive Summary

This survey was executed to determine if a digital divide still existed, affecting specific groups of people in their ownership of specific communication devices based on socioeconomic factors outside of their control. The survey found out how residents in a specific community received notification of a late-season tornado, and what they did with the information. The purpose of the study was to determine if socioeconomic indicators of income and education, and also demographics including gender and age played a role in how information was received. It is important to note that two geographically dispersed communities were selected for participation in this research.

A survey of this nature was the first for the disaster communication field. The findings of this study were based on online and telephone surveys with 187 residents in Douglas County, IL who were affected by a tornado in November 2013. Overall, the findings suggest that socioeconomic status did not appear to impact the ownership or ability for survey respondents to receive information. Douglas County EMA provides their residents the opportunity to be notified of tornado warnings that affect them. They provide CodeRED Weather Warning technology as an added benefit, even above warnings residents are able to receive through more traditional means including the television and radio. This opportunity is open regardless of income, education, age and gender.

The survey found although there is equal access to receive tornado warning information, the behavior to adopt the technology is not always taken advantage of. If the resident does not see the value in the technology, they may never be more informed of future events that impact their safety.

The findings of this research are being presented to help officials determine what actionable items they can take to ensure their community has access to emergency tornado information, and to strategize on what can be done to improve the way they communicate with the public during an emergency.

The author would like to thank Douglas County EMA for its generous support of this study.

Stephanie Meyers, MA

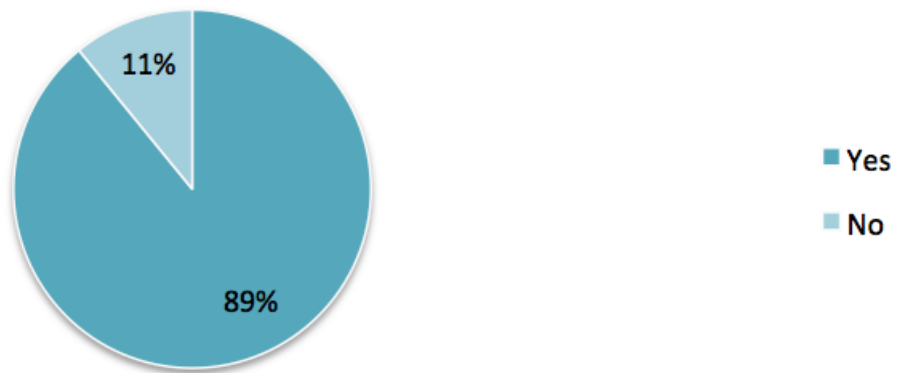
Emergency
Communications
Network

1.

Residents Were Prepared

More than 89% of residents surveyed indicated they knew there was a possibility of tornadoes in Douglas County on November 17, 2013. The higher the income, the higher the likelihood of a resident knowing there was a possibility of storms in their area that day.

Prior Knowledge of Tornadoes
PERCENTAGE OF ALL DOUGLAS COUNTY SURVEY RESPONDENTS



2.

Most Had Enrolled In CodeRED Weather Warning

71% of survey respondents were registered to receive CodeRED Weather Warnings through Douglas County prior to the tornado on November 17, 2013. The older a person, the more likely they were to be signed up to receive tornado warnings through CodeRED. In addition, women were more likely enrolled in CodeRED Weather Warning prior to the tornado than men.

Prior Enrollment in CodeRED Weather Warning

PERCENTAGE OF ALL DOUGLAS COUNTY SURVEY RESPONDENTS



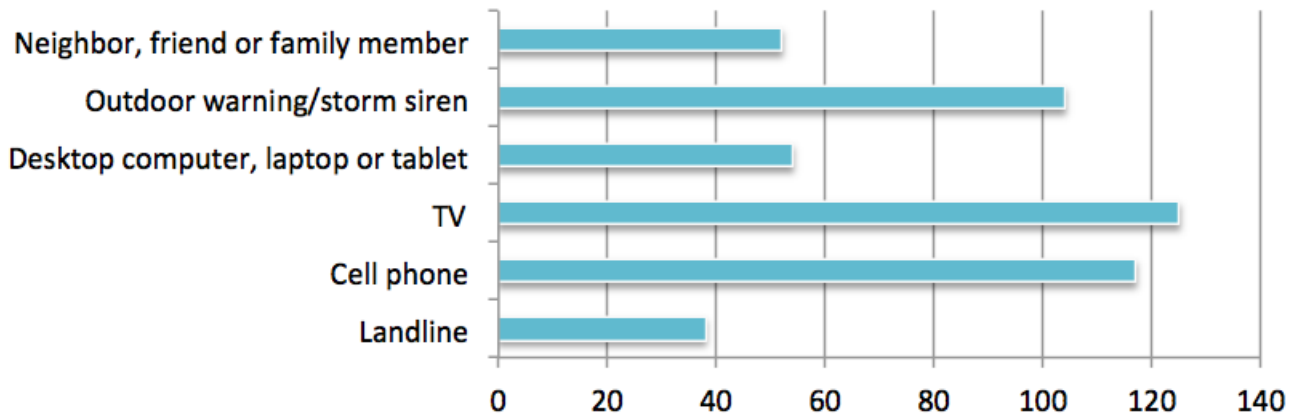
3.

Warnings Mostly Received by TV, Cell Phones & Sirens

Most Douglas County residents, representing 71.8% of respondents, were warned of the tornado by receiving notification on their television. Survey respondents older than 54 years of age were more likely to receive a tornado warning through the TV than all other age groups surveyed. In addition, respondents who lived in rural parts of Douglas County were more likely to receive a warning through the TV than those

in suburban locations. The higher the income, the more likely a respondent received warning of the tornado through an outdoor warning/storm siren.

How Tornado Warning Was Received



TOTAL OF ALL DOUGLAS COUNTY SURVEY RESPONDENTS

4.

Residents Relocated To Safe Place Inside

When the tornado warning was received, 16.6% of residents took no action, 74.9% took shelter in a safe place indoors and 3.2% of respondents went to a safe place outside. Higher total household income levels and higher education levels increased the likelihood of a resident relocating to a safe place inside once a tornado warning was received.

Action Taken

PERCENTAGE OF ALL DOUGLAS COUNTY SURVEY RESPONDENTS

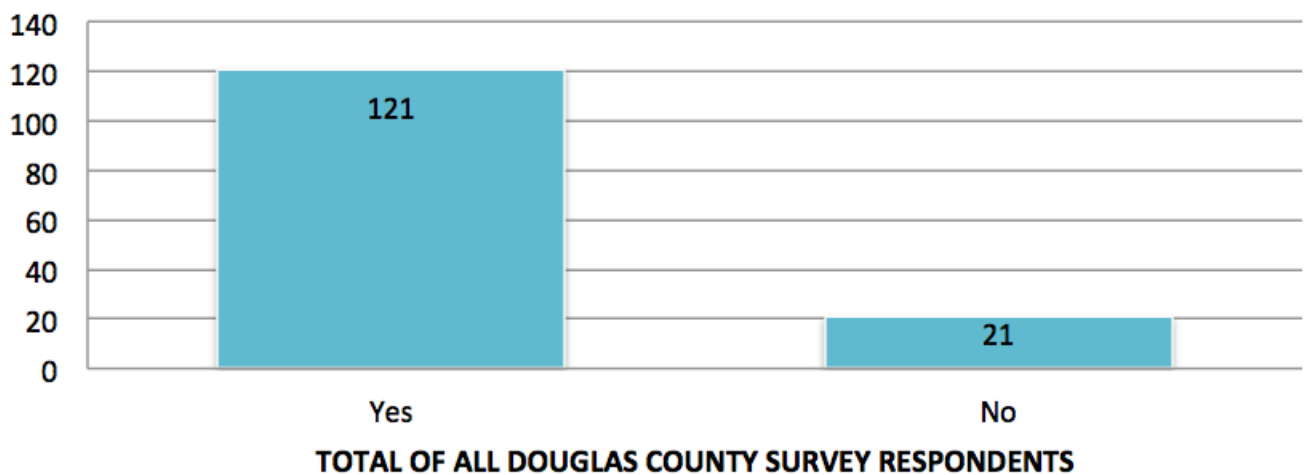


5.

There Was Adequate Warning Of The Tornado

Survey respondents felt adequately warned of the November 17, 2013 tornado, with 85% of those surveyed indicating they had enough warning. In fact, many residents said they were thoroughly impressed with Douglas County EMA notifications and updates before and during the tornado event that made the alerts they received useful and timely.

Adequate Warning



6.

Mobile Phones Are Important For Future Warnings

Douglas County survey respondents indicated that the mobile phone was the most important device to receive future emergency tornado alerts from Douglas County EMA. Mobile telephones were 26% more important than any other communication device, and compared to outdoor warning/storm sirens, weather radios, landline telephones, television and desktop, laptop or tablet devices.

Devices Most Important For Future Tornado Alerts

