

Focus Group Guide on Severe Weather Communication

Welcome and thank you for joining us! This focus group is entirely voluntary, and you may decide to leave at any time. We're excited to hear about your experiences. Before we get started, we will briefly introduce ourselves, explain the logistics of the focus group, and allow you all to introduce yourselves.

Paperwork Reduction Act Statement

Public reporting burden for this collection of information is estimated to average 2 hours per person, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Gina Eosco (703-841-1705, gina.eosco@erg.com)

Eastern Research Group will not release your name or information that could identify you as part of this focus group process or in our subsequent reports to NOAA NWS.

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1. Introductions
 - a. Go around the room and have everyone say their name and organization.
 - b. ERG gives background on project
2. Logistics
 - a. Describe focus group format
 - b. Announcements (location of restroom, tornado shelter, etc.).

Part 1. Weather Sources and Information about Severe Weather

Now we'd like to ask some general questions about the weather in your area.

3. Where do you go for information on severe weather, such as thunderstorms and tornadoes?
 - a. How much do you trust these sources, and why?
4. When you are accessing [listening/reading] your preferred weather source, how do you [learn about or differentiate] between a daily forecast and a significant weather event?

- a. What words cue you that “today’s weather is different?”
 - b. Are there other verbal or non-verbal cues that indicate severe weather?
5. When you are accessing [listening/reading] your preferred weather source, how do you [learn about or differentiate] between an “every day storm” versus a potentially high impact storm?
6. When you receive a thunderstorm or tornado warning, what part of it are you paying attention to the most?
- a. What type of information are you looking for?
7. What words or phrases convey levels of storm severity to you?
- a. For example, for a Severe Thunderstorm?
 - b. For example, for Tornadoes?
 - c. What does severity mean to you? In other words, what metric or criteria are you basing severity on?
 - i. Impact area? Confirmed impacts?
 - ii. Confirmed Damage to buildings or potential loss of life?
 - iii. Population density?
 - iv. Physical criteria such as wind strength, hail size?
 - d. What do you do differently knowing there is a higher level of severity compared to an every day storm?
8. What words or phrases convey urgency of action to you?
- a. For example, taking action for a thunderstorm?
 - b. For example, taking action for a tornado?
 - c. What metric are you basing urgency on?
 - i. Intensity of the storm?
 - ii. How close in time and space it is to you?

Part II. An Overview and Discussion about Impact Based Warnings.

Now we’d like to ask some questions about an NWS program called Impact Based Warnings. To make sure we’re all on the same page, we will provide a short power point overview, and then open it up for discussion.

9. By show of hands, are you familiar with the IBW program?
10. Have you experienced a severe thunderstorm or tornado warning that used this program?

NOAA National Weather Service
Impact Based Warnings (IBW) Project
Part A and B DOC/NOAA Customer Survey Clearance
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- a. If yes, could you please share with us how you used this information? (If no, ask the group to read over a tornado warning, and ask how they would use the information]
 - b. What decisions did you make from this information?
 - c. What does it communicate differently to you compared to just a tornado warning, for example?
11. [Show slide for Tags] What are your thoughts on the wording of the tags radar indicated, observed, considerable, and catastrophic?
- a. Do these word choices convey levels of severity to you? Why or why not?
 - b. What do you perceive as the difference between considerable versus catastrophic?
 - c. Do these word choices convey urgency of action to you? Why or why not?
 - d. Do you have alternatives?
12. [Show slide for Impact Statements] What are your thoughts on this wording?
- a. Would you read this during a storm? Is it helpful?
 - b. How would you use it?
 - c. Any suggestions for changing it?
 - d. Is it needed?
13. Do you have any suggestions for improving the IBW program?

Appendix – Power Point Slides on IBW


Overview of IBW (Review for some, new for others!) 9

- ▶ Project Goals
 - ▶ Provide additional **valuable information to media and Emergency Managers**
 - ▶ Facilitate **improved public response** and decision making
 - ▶ Better **meet societal needs** in the most life-threatening weather events



Overview of IBW (Review for some, new for others!) 10

- ▶ Warnings Enhanced by ...
 - ▶ Providing different levels of risk within the same product
 - ▶ Enabling the NWS to express a confidence level of potential impacts
 - ▶ Highlighting storms that are particularly dangerous



Examples

For SVR:
TORNADO...POSSIBLE

**TORNADO
 ...RADAR INDICATED
 ...OBSERVED**

11

* AT 516 PM CDT...A SEVERE THUNDERSTORM WAS LOCATED NEAR WRIGHT CITY...AND MOVING EAST AT 35 MPH.

HAZARD...GOLF BALL SIZE HAIL.

SOURCE...TRAINED WEATHER SPOTTERS.

IMPACT...DAMAGE TO VEHICLES...ROOFS AND WINDOWS.

GOLF BALL SIZE HAIL WAS REPORTED NEAR WRIGHT CITY WITH THIS STORM.

* LOCATIONS IMPACTED INCLUDE...
 WENTZVILLE...LAKE ST. LOUIS...ST. PAUL...DARDENNE PRAIRIE...
 O'FALLON...COTTLEVILLE...WELDON SPRING...ST. PETERS...MOSCOW
 HILLS...NEW BELLE...FORISTELL...FLINT HILL...OLD MONROE AND
 KANPVILLE.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

FOR YOUR PROTECTION MOVE TO AN INTERIOR ROOM ON THE LOWEST FLOOR OF A BUILDING.

66

LAT...LON 3895 9067 3892 9066 3889 9063 3887 9058
 3888 9054 3890 9052 3884 9053 3868 9061
 3889 9064 3885 9071 3875 9117 3901 9112
 TIME...MOT...LOC 22192 280DEG 31KT 3885 9100

TORNADO...POSSIBLE
 HAIL...1.75IN
 WIND...<SO MPH

* AT 422 PM CDT...A SEVERE THUNDERSTORM CAPABLE OF PRODUCING A TORNADO WAS LOCATED NEAR ALLISON...AND MOVING EAST AT 20 MPH.

HAZARD...TORNADO AND QUARTER SIZE HAIL.

SOURCE...RADAR INDICATED ROTATION.

IMPACT...FLYING DEBRIS WILL BE DANGEROUS TO THOSE CAUGHT WITHOUT SHELTER. MOBILE HOMES WILL BE DAMAGED OR DESTROYED. DAMAGE TO ROOFS...WINDOWS AND VEHICLES WILL OCCUR. TREE DAMAGE IS LIKELY.

* LOCATIONS IMPACTED INCLUDE...
 CLARKSVILLE...SHELL ROCK...WAVERLY AND PLAINFIELD.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

TAKE COVER NOW. MOVE TO AN INTERIOR ROOM ON THE LOWEST FLOOR OF A STURDY BUILDING. AVOID WINDOWS. IF IN A MOBILE HOME...A VEHICLE OR OUTDOORS...MOVE TO THE CLOSEST SUBSTANTIAL SHELTER AND PROTECT YOURSELF FROM FLYING DEBRIS.

66

LAT...LON 4284 9240 4264 9250 4265 9255 4275 9288
 4289 9282
 TIME...MOT...LOC 21252 280DEG 17KT 4279 9278

TORNADO...RADAR INDICATED
 HAIL...1.00IN

Examples

**TORNADO DAMAGE
 THREAT
 ...CONSIDERABLE**

**TORNADO DAMAGE
 THREAT
 ...CATASTROPHIC**

12

* AT 616 PM CDT...A CONFIRMED LARGE AND EXTREMELY DANGEROUS TORNADO WAS LOCATED 4 MILES WEST OF HILL CITY...NEAR HIGHWAY 200...AND MOVING SOUTHEAST AT 25 MPH.

THIS IS A PARTICULARLY DANGEROUS SITUATION.

HAZARD...DAMAGING TORNADO.

SOURCE...CONFIRMED TORNADO FROM TRAINED SPOTTERS.

IMPACT...YOU ARE IN A LIFE THREATENING SITUATION. FLYING DEBRIS MAY BE DEADLY TO THOSE CAUGHT WITHOUT SHELTER. MOBILE HOMES WILL BE DESTROYED. CONSIDERABLE DAMAGE TO HOMES...BUSINESSES AND VEHICLES IS LIKELY AND COMPLETE DESTRUCTION IS POSSIBLE.

* LOCATIONS IMPACTED INCLUDE...
 HILL CITY...SWATARA...HAYPOINT AND BAIN.
 HIGHWAY 200 WEST OF HILL CITY.
 HIGHWAY 169 SOUTH OF HILL CITY.
 QUADNA MOUNTAIN RESORT AREA.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

TO REPEAT...A LARGE...EXTREMELY DANGEROUS AND POTENTIALLY DEADLY TORNADO IS ON THE GROUND. TO PROTECT YOUR LIFE...TAKE COVER NOW. MOVE TO AN INTERIOR ROOM ON THE LOWEST FLOOR OF A STURDY BUILDING. AVOID WINDOWS. IF IN A MOBILE HOME...A VEHICLE OR OUTDOORS...MOVE TO THE CLOSEST SUBSTANTIAL SHELTER AND PROTECT YOURSELF FROM FLYING DEBRIS.

THIS STORM HAS A HISTORY OF PRODUCING TORNADOES. TAKE COVER IN A BASEMENT OR STORM SHELTER NOW!

66

LAT...LON 4703 9377 4703 9359 4694 9335 4684 9342
 4677 9361 4696 9386
 TIME...MOT...LOC 23567 310DEG 22KT 4698 9370

TORNADO...OBSERVED
 TORNADO DAMAGE THREAT...CONSIDERABLE
 HAIL...1.75IN

* AT 720 PM CDT...A LARGE AND EXTREMELY DANGEROUS TORNADO WAS LOCATED NEAR WASHTA...AND MOVING NORTHEAST AT 30 MPH.

THIS IS A TORNADO EMERGENCY FOR WASHTA. TAKE COVER NOW. THIS IS A PARTICULARLY DANGEROUS SITUATION.

THIS IS A PARTICULARLY DANGEROUS SITUATION.

HAZARD...DAMAGING TORNADO.

SOURCE...EMERGENCY MANAGEMENT CONFIRMED TORNADO.

IMPACT...YOU ARE IN A LIFE THREATENING SITUATION. FLYING DEBRIS MAY BE DEADLY TO THOSE CAUGHT WITHOUT SHELTER. MOBILE HOMES WILL BE DESTROYED. CONSIDERABLE DAMAGE TO HOMES...BUSINESSES AND VEHICLES IS LIKELY AND COMPLETE DESTRUCTION IS POSSIBLE.

* THE TORNADO WILL BE NEAR...
 QUIMBY AROUND 730 PM CDT.
 CHEROKEE AROUND 745 PM CDT.
 AURELIA AROUND 750 PM CDT.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

HEAVY RAINFALL MAY HIDE THIS TORNADO. DO NOT WAIT TO SEE OR HEAR THE TORNADO. TAKE COVER NOW.

66

LAT...LON 4259 9585 4291 9565 4291 9550 4283 9538
 4269 9539 4256 9569 4256 9577
 TIME...MOT...LOC 00232 225DEG 27KT 4260 9567

TORNADO...OBSERVED
 TORNADO DAMAGE THREAT...CATASTROPHIC
 HAIL...1.50IN